




VERIFICATION AUDIT Report

Control Union Certification B.V. P.O. Box 161, 8000 AD / Meeuwenlaan 4-6, 8011 BZ ZWOLLE The Netherlands	
Project Name	CO2OL Tropical Mix
Project ID Province and Country Project size	2940 Street: Jacinto Palacios Cobo, edificio 223, Piso 4, oficina 302 – Parque Ciudad del Saber, Panama City, Panama. Project location: Panama, Darien, Veraguas, Chiriqui and Bocas del Toro. Project area: 13,242 ha
Project developer	ForestFinest Consulting GmbH CO2OL Tropical Mix Project Panama City, Panama represented by Mr Andreas Schnall Phone : +49 228 969 119 0 schnall@forestfinest-consulting.com
Assessment Team Leader	Mr. Gerben Stegeman
Internal Report ID	CUC2019CO2OL001_V1_FG
Gold standard Version Type of Certification	0.9 Road test Performance Certification / New Area Certification
Date of issuance: Performance Verification Report Date of issuance Certificate Certificate valid until	22.12.2019 22.12.2019 06.08.2024
Total CO₂-certificates	- Ex-ante Gross = 4 224 025 tCO₂ - Ex-ante NET = 3,379,220 tCO₂ - Ex-post Gross = 2 639.385 tCO₂ - Ex-post NET = 2 111,508 tCO₂

About the certification body

<p>Assessment Team Leader</p>	<p>Mr. Gerben Stegeman Tel: +31 (0)38 4260100 gstegeman@controlunion.com</p> <p>Short summary on the CV from Mr. Gerben Stegeman: Tropical Forestry Engineer with 28 years of worldwide forest management experience, of which 12 year experience in forest management certification as auditor, certifier and program manager.</p> <p>Signature:</p> 	<p>In shorts GS</p>
<p>Assessment Team Member</p>	<p>Mr. Flavio Guiera Tel: +55 41 992020103 flavio@rbgconhecimento.com.br</p> <p>Forest Engineer, Advisor of certification for quality and socio-environmental management systems. Qualified lead auditor IRCA. Fifteen years experienced in FSC® Forest Management and Chain of Custody certification in Brazil, Latin America and Southeast Asia. CUC Lead Auditor since 2009. Specialist in risk assessments and sustainability in the forest products supply chain. Worked for forest companies in the private sector, NGOs and governmental bodies.</p> <p>Signature:</p> 	<p>In short FG</p>

History of this document	
1. Draft sent to project developer	02-August-2019
2. Feedback	05-August-2019
3. Responses sent to project developer	06-August-2019
4. Draft sent by project developer to GS	07-August-2019
5. Feedback	XX-August 2019
6. Request revision peer reviewer by GS	XX-August 2019
7. Revision peer reviewer GS	01-September 2019
8. Report sent to GS, including response to comments peer reviewer GS	27-September 2019
9. Performance completed; CARs closed	22-December 2019
GS4GG transition process:	
10. Revision peer reviewer GS on GS4GG transition	XX-February 2020
11. Final report sent to GS, including response to comments peer reviewer GS	03-March 2020
12. Revision GS finalized and responses to comments peer reviewer accepted	21 March 2020
13. Date of issuance: Final Report	10 April 2020

1. INTRODUCTION

Objective

The objectives of the verification are the following:

- Assessment of FARs from previous verification stage;
- Assessment of compliance of project implementation and operation with the registered design;
- Assessment of compliance of the registered monitoring plan with the methodology including applicable tools and standardized baselines;
- Assessment of compliance of monitoring activities with the registered monitoring plan;
- Assessment of data and calculation of emission net removals;
- Assessment of reported sustainable development co-benefits and safeguards
- Assessment of Internal Quality Control.

Scope

The CO2OL Tropical Mix project extends across five departments within the tropical regions of Panamá covered by Chiriqui, Veraguas, Darien, Panamá and Bocas del Toro.

The total project area is **13,242 hectares** being 8,450.14 ha of afforestation/reforestation. Technical description for each of project member and planted area is found at Forest Finest Consulting: <http://www.forestfinestconsulting.com> and CO2OL Tropical Mix: <https://www.co2ol.de/en/co2ol-tropical-mix/>

CO2OL Tropical Mix Project aims to enable its certificates from previous versions of the Standard to the transition of the Gold Standard for the Global Goals (GS4GG).

As required under 3.8 of the document - 101.5-GS4GG-Transition-requirements-v1.1, VVBs shall prepare the Verification Report as per the version of Gold Standard applicable to the Project pre-transition. In this sense Control Union Certifications has assessed the project through the requirements of the standard:

- **Gold Standard Afforestation/Reforestation (A/R) Requirements (V0.9 of August 2013).**

Level of assurance

The verification was carried out in order to provide a reasonable level of assurance of conformance against the defined Gold Standard Requirements and materiality thresholds within the audit scope. Based on the findings of this verification, a positive statement assures that the project's GHG assertion is materially correct and fairly represents the GHG data and information.

Materiality

Unless otherwise stated by the Gold Standard requirements all GHG sinks, sources and/or reservoirs (SSR's) and GHG emissions are equal to or greater than 5% of the total GHG assertion.

Means of Verification

The following steps were taken in order to verify the project performance under the scope as mentioned above:

a) Desk review

During the assessment Control Union reviewed the following elements of the project and verified against the Gold Standard A/R Requirements V0.9, based on information provided by CO2OL Tropical Mix Project:

- Key project information, Project Design Document (PDD);
- Shape files of the project (verification based on existing satellite images);
- Verification of the Do-No-Harm Assessment;
- Verification of the project Sustainability Requirements;
- Verification of the Methodology (including Conversion procedure and calculation of the CO2-certificates).

Deliverables: Deliverable 1

- Overview of verification points on the Sustainability requirements for the site visit and audit plan.

b) Site visit

Sampling Method has considered the document - **CDM-EB50-A30-STAN** - Sampling and surveys for CDM project activities and programme of activities (version 04.0 - 26 July 2013)

Given item 2. Scope and Applicability of this standard, PoA's of Afforestation/Reforestation projects are excluded from this version. In this sense, sampling was defined using own professional judgement. To determine sampling specifically for CO2OL Tropical Mix Project, it was taken into account the regionalities (visiting 4 of 5 departments), the risks of double counting, the social condition of householders (indigenous, communities, individual, familiar), representability of PoA stage (thinning, PPMs recent review, pruning etc) and the pool of species, ages, silviculture/agrosilviculture implemented.

During the site visit the following elements were verified:

- Field verification of the general overview of the project;
- Field verification of the Shape files;
- Field verification of the Do-No-Harm-Assessment;
- Field verification on the implementation of the Local Stakeholder Consultation, including the Sustainable Development Assessment;
- Field verification on the implementation of the Input & Grievance Mechanism;
- Field verification on the implementation of the Sustainability Monitoring Plan;
- Field verification of the legal rights;
- Field verification on the Risk Register;
- Field verification of the inventory method and data on which the CO2-certificates calculation is based;
- Field verification on the internal quality control
- Field verification of evidences proposed for FAR's closure.

Deliverables: Deliverable 2

- Verification Audit Report, including findings, CARs, FARs and OBSs.

c) Internal Process Review of Control Union

After the field verification and the issuance of the draft version of verification report, a complete review process is performed by the Assessment Team Leader of Control Union, in order to ensure that Verification Requirements for VVBs are met. The following aspects are reviewed:

- compliance with the requirements of the applicable standard for audit and reporting;
- assessment of reporting consistence;
- any grievances, allegations or complaints concerning individuals or audit process are addressed or solved.

Project description

Represented by ForestFinest Consulting GmbH, CO2OL Tropical Mix Project is part of the implementation and forest management of a carbon reforestation project with the aim of contributing to the mitigation of climate change and social risks in developing countries.

Degraded land, originally forest land, later used for extensive cattle ranching, is reforested with mostly native tree species and gradually converted into mixed forests. The project provides for sustainable timber production and cocoa cultivation; it protects biodiversity and restores a healthy forest ecosystem.

Sustainable forest management and cocoa production offer employment opportunities, therefore improve the economic and social situation of rural communities and families. Moreover, the project helps to promote mutual learning and knowledge transfer.

CO2OL Tropical Mix has been one of the first in line to be successfully certified under the renowned Gold Standard for land use and forestry projects; the cocoa production areas have been the first agroforestry systems to be certified under the Gold Standard.

The CO2OL Tropical Mix Project together with local forest plantations companies promotes rural and productive development through reforestation activities with mixed, mainly native tree species, sustainable forestry plantation management and the provision of environmental services. Specific silvicultural and forest management tasks are defined between the participants. The application of a poly-cyclic harvesting system aims to ensure a relatively high average carbon storing capacity in the plantations.

Before the project activity started, the baseline of the project area was a mix of grassland and pioneer shrubs. All these areas were evaluated and classified as applicable planting areas for reforestation and agroforestry activities. Other small patches of forest left were classified and nowadays managed as conservation areas. Other areas (previously planted or due to the project activity) located in the border of a river or other watersheds are also classified as conservation areas. The project main goal is to create forests and some farms are already one. This will stay during the crediting period

The implementation as well as the maintenance activities necessary to ensure tree development within plantations are carried out by the individual companies, through their own personal employees, as follows:- Eco Cebaco S.A.- Forest Finance S.A.- Sustainable Timbers S.A.

The objective of the project is producing high-quality hardwoods at the same time as sequestering a high amount of carbon while stabilizing and restoring fragile and degraded areas in an economically, socially, and ecologically viable way.

In contrast to common reforestation schemes, the project concept is a concept that makes use also of native tree species in a mix with a round of non-native species, mostly Teak (*Tectona grandis*) of approx. 50-60%, to create sustainable and species-rich forests with the use of high-quality hardwoods and the creation of an additional income from carbon credits. These carbon offset credits can be traded on international carbon markets will be certified according to high-quality carbon standards Overall, the project-specific objectives are the establishment of profitable production- and conservation systems, enabling the enterprises to work in a beneficial way through the creation of investment opportunities, which are economical, ecologically and socially sound.

Creating year-round work opportunities in the areas of activity that allow the development of a stable work environment for women and men, helps the development of these regions.

List of species planted:

1. *Anacardium excelsium*
2. *Astronium graveolens*
3. *Bombacopsis quinata*
4. *Cedrela odorata*
5. *Dalbergia retusa*
6. *Dipterix panamensis*
7. *Hyeronima alchorneoides*
8. *Swetenia macrophylla*
9. *Tabebuia guayacan*

10. *Khaya senegalensis*
11. *Tabebuia rosea*
11. *Terminalia Amazonia*
12. *Tectona grandis*.

Review of Documentation

The project provided the following documents for revision during verification process:

ID	Date of publication	Title	Place, Author
1	Apr-2019	TMIX19_RESUMEN PÚBLICO	Panamá, Forest Finance
2	Feb-2018	TMIX19_12Tree-Panama-Boca del Monte- DRAFT Social impact assessment 2018_02_21	Panamá, Forest Finance
2	Dec-2018	TMIX19_Seminario de tala dirigida y uso de CU para las talas	Las Lajas, Forest Finance
3	2018-2019	Registros de Capacitación: Capacitación en poda correcta Capacitación Trazabilidad y cadena de custodia Capacitación en limpieza y manejo desechos en campamento Capacitación en Seguridad Personal Capacitacion en transporte acuático	Panamá, Forest Finance
4	Dec-2017	Social impact evaluation & Strategic recommendations for impact optimization	Chiriquí, Forest Finance
5	Aug-2012	TMIX19_Management plan ForestFinance	Panamá, Forest Finance
6	May-2019	TMIX19_Resumen de comentarios de los Skateholders 2019	Panamá, Forest Finance
7	Jan-2019	Manejo y uso de agroquímicos en plantaciones forestales de FOREST FINANCE PANAMÁ S.A. 2017-2018	Panamá, Forest Finance
8	2019	Biodiversity Progress report ForestFinance 2017 / 2018 - Regarding the leadership declaration of the 'Biodiversity in Good Company' initiative	Panamá, Forest Finance
9	2019	TMIX19_FF_Forestry_Report_Panama_2017-2018	Panamá, Forest Finance
10	2017-2018	Registros de Capacitación: Capacitación en manejo de hidrocarburos Capacitación reglamento interno Capacitación manual de trabajo, FSC® Capacitación en Uso y Manejo de Agroquímicos Capacitacion en Manejo seguro de sierras Capacitación en primeros auxilios Capacitación en manual de cosecha, seg. laboral	Darién, Sustainable Timbers S.A
11	Dec-2012	Plan de Prevencion de Riesgos Laborales	Darién, Sustainable Timbers S.A

12	Jun-2019	Informe de cierre de hallazgos de la auditoria Gold Standard a Sustainable Timbers S.A.	Darién, Sustainable Timbers S.A
13	2018	Plan de Capacitacion PRS 2018-2019	Panamá, Sustainable Timbers S.A./ Panama Reforestation Services S.A.
14	Sep-2016	TMIX19_references_wood densities	Panamá, Forest Finance Panamá S.A.
15	Jun-2019	TMIX_19 Carbon model	Panamá, Forest Finance Panamá S.A.
16	2015	CO2OL Tropical Mix-Terminos y Condiciones, Principios y criterios	Panamá, Forest Finance Panamá S.A./ Sust. Timbers S.A / Eco Cebaco S.A.
17	2019	Datos de Monitoreo - parcelas permanentes mediciones de campo Chiriqui, Darien, Panama, Veraguas -	Panamá, Forest Finance Panamá S.A.
18	2019	Datos de Monitoreo - parcelas permanentes mediciones de campo Isla Cebaco	Veraguas, Eco Cebaco S.A.
19	2019	Informe sobre las mediciones de altura de los árboles en PPM de isla Cebaco	Veraguas, Eco Cebaco S.A.
20	2019	Datos de Monitoreo - parcelas permanentes mediciones de campo - CAOBONITO Y CHITOLA, CARRETERA , CHANATI, SIERPE, Tanque.	Darién, Sustainable Timbers S.A
21	2019	Shapefiles (fincas, Landuse and PPMs)	Panamá, Forest Finance Panamá S.A./ Sust. Timbers S.A / Eco Cebaco S.A.

22	2016	<p>PDD Annexes (GS templates)</p> <p>TMIX16-3.5 - Template -Sustainability Monitoring Plan</p> <p>TMIX16-4.1 - Template - AR CDM Additionality Tool</p> <p>TMIX16-6.1 - Template - Carbon Performance</p> <p>TMIX16-2.1 - Template - Key Project Information</p> <p>TMIX16-3.1 - Template - Do-No-Harm Assessment</p> <p>TMIX16-3.2 - Template - Local Stakeholder Consultation</p> <p>TMIX16-3.3 - Template - List of Inputs and Grievances</p> <p>TMIX16-3.5 - Template - Project Participants and Secured Titles</p> <p>TMIX16-3.6 - Template - Risk Register</p> <p>TMIX16-4.1 - Template - Additionality</p> <p>TMIX16-5.1 - Template - Applicability</p> <p>TMIX16-5.4 - Template - Other Emissions</p> <p>TMIX16-5.5 - Template - Baseline</p> <p>TMIX16-5.6 - Template - Leakage</p> <p>TMIX16-5.7 - Template - CO2-Fixation</p> <p>TMIX16-SHP1-shapefiles</p>	<p>Panamá, Forest Finance</p> <p>Panamá S.A./ Sust.</p> <p>Timbers S.A / Eco</p> <p>Cebaco S.A.</p>
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List of Interviewees			
Date	Person	Time spent	auditor
04 to 09-Jun-2019	Andreas Schnall - Project Officer Forest Finest Consulting	56 hours	Flavio Guiera
07 and 08-Jun 2019	Miguel Villarino - Project Manager Sust. Timbers	16 hours	Flavio Guiera
07 and 08-Jun 2019	Paul Mong - Forest Supervisor - Sust. Timbers	16 hours	Flavio Guiera
08-Jun 2019	Arturo Abrega - Capataz Chanati - Sust. Timbers S.A.	8 hours	Flavio Guiera
08 Jun-2019	Vanessa Edith Marin Sanches - Certification Analyst - Sust. Timbers	2 hours	Flavio Guiera
07-Jun-2019	Jorge Queiroz - Forest supervisor - Sust Timbers	8 hours	Flavio Guiera
06-Jun-2019	Hessel van Straten - Project Manager - Eco Cebaco S.A	8 hours	Flavio Guiera
04 and 05-jun-2019	Yaels Camacho - Project officer - Forest Finance Panama S.A.	8 hours	Flavio Guiera
04 and 05-jun-2019	Pedro Garay - Forest supervisor - Forest Finance Pamana S.A.	8 hours	Flavio Guiera
04-Jun-2019	Eneida Palma - Jefe Dep. Forestal ANARP Chiriqui.	30 min	Flavio Guiera
Itinerary			
Date	Location	Time spend	Auditor
04-Jun-2019	Chiriqui (Las Lajas)	4 hours	Flavio Guiera
<ul style="list-style-type: none"> - Opening Meeting - Planification of field visit - Stakeholders Consultation - Field Visit to Permanent Sample Plots : Finca Santa Cruz 2 			
05-Jun-2019	Chiriqui (Las Lajas)	4 hours	Flavio Guiera
- Field Visit to Permanent Sample Plots : Los Aromos, Jala, Madera Fina, La Luna 2,			
06-Jun-2019	Veraguas (Isla Cebaco)	8 hours	Flavio Guiera
- Field Visit to Permanent Sample Plots: P13, P5, P11, P19, P20.			
07-Jun-2019	Darién (Santa Fé)	6 hours	Flavio Guiera

- Field Visit to Permanent Sample Plots: S108, HB3,			
08-Jun-2019	Darién (Chanati)	6 hours	Flavio Guiera
- Field Visit to Permanent Sample Plots: G1, IR12. - Interview with workers Sust. Timbers - Documentation review			
09-Jun-2019	Panama City	2 hours	Flavio Guiera
- Closing meeting			

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2. SUMMARY OF ASSESSMENT

A non-conformance is defined as a deficiency, discrepancy or misrepresentation that in all probability materially affects carbon credit claims.

Corrective Action Request (CAR) – With a CAR, Control Union Certifications or Gold Standard Secretariat requests appropriate action be taken to show compliance with a requirement.

In order to achieve a successful certification, all CARs shall be formally closed.

CARs can be converted to FARs.

Forward Action Request (FAR) - With a FAR, Control Union Certifications or The Gold Standard Secretariat requests appropriate action be taken to become fully compliant with a requirement. A FAR will be issued where the impact of the infraction is:(a) not material within the current certification, AND

(b) unusual or non-systematic, AND

(c) correctable in a specific timeframe less than 5 years.

Observation (OBS) – With an OBS, Control Union Certifications or The Gold Standard Secretariat provides an observation on possible future non-compliance with a requirement.

Unlike CARs and FARs, observations are warnings and do not need to be formally corrected. They are given special attention during the next certification.

Overview of OBS/FAR/CAR					
<i>Number</i>	<i>Date found</i>	<i>Reference</i>	<i>Status</i>	<i>Remarks</i>	<i>Date closed</i>
CUC-CAR-01	20/06/2016	2.1 – 1.(i)	Closed	Documentation sent 12th July.2016	13 th July. 2016
CUC-OBS-01	20/06/2016	3.1 – (7)		To be verified during next performance audit	
CUC-OBS-02	20/06/2016	3.1 – (12)	Closed	Performance Audit	07th June 2019
CUC-OBS-03	20/06/2016	3.1 – (15.b & c)		To be verified next performance audit	
CUC-OBS-04	20/06/2016	3.1 – (15.e)		To be verified next performance Audit	
CUC-FAR-01	20/06/2016	3.1 – (34)		To be verified next performance Audit	
CUC-CAR-02	26/09/2019	3.1 – (34)	Closed	Performance audit and desk review 29-11-2019	

3. DESCRIPTION OF CAR'S, FAR'S AND OBS' RAISED

Below is presented a history of all CAR's, FAR's and OBS' raised since the verification audit took place under the GS A/R version 0.9.

It is highlighted that in the course of present performance audit there was only one non-conformity raised, which has resulted in the CUC-CAR-02 (26-sept—2019), after the peer review of Gold Standard

Nº NC: CUC-CAR-01	Reference : 2.1 – 1.(i)	Category : CAR
Date found: 20/06/2016	Deadline for correction: Prior to report finalization	
<p>Description of indicator: 2.1 - Key Project Information - 1. A general description shall be provided which includes all of the following items: (i) Number of predicted CO2--certificates</p>		
<p>Description of non-conformity: Data provided from the MUs modeling (TMIX16-FIX1 – Sheet MUs Modeling) regarding total CO2 certificates showing 1,291,536 t is different from that demonstrated in TMIX2.1- Template – Key Project information, which shows 1,241,536 t.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closure:</p> <p>The project developer updated the documents with the correct calculation of eligible CO2 certificates. It now matches with the Key Project Information showed at TMIX2.1- Template – Key Project information.</p> <p>Documents Reviewed: TMIX2.1 - Template – Key Project information. Vs “Saved on July 12, 2016” TMIX16 – FIX1 – Carbon Model. Vs “Saved on July 12, 2016”</p>		
Status: CLOSED		

Nº NC: CUC-OBS-01	Reference : 3.1 – (7)	Category : OBSERVATION
Date found: 20/06/2016	Deadline for correction: N/A	
<p>Description of indicator: 3.1 Do-No-Harm-Assessment – Working Conditions (7). Workers and labour organizations shall be generally satisfied with their working agreements.</p>		
<p>Description of non-conformity: It was detected that some commitments and agreements established by Sustainable Timber were not fully implemented for its workers which are in a longer term engaged with the company. Once the workers are not organized and are not represented by a labour organization, despite there are no barriers for that, the Company should maintain a closer communication with its employees to detect aspects that could be nursing an eventual grievance.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closureU (OBS closure was verified during the actual audit (07/06/2019). Sustainable Timber maintains a close communication with its employees, providing training and a fair working environment. Although the workers did not mention new grievances or insufficient commitments, no mechanism could be presented about where the employees can address their complaints or suggestions, such a suggestion box, toll free number, or other private way of communication.</p>		
<p>Evidences observed still insufficient to close the OBS, so it remains <u>OPEN</u>.</p>		
<p>Documents reviewed Plan de Capacitación 2018-2019 (PRS) <i>Registros de Asistencia: FSC y manejo de desecho (12/11/2018); Manual de trabajo Sust. Timbers (09/11/2018), Manejo de desecho sólidos y hidrocarburos y FSC (12/11/2018);</i></p>		
<p>Status: OPEN</p>		

Nº NC: CUC-OBS-02	Reference : 3.1 – (12)	Category : OBSERVATION
Date found: 20/06/2016	Deadline for correction: N/A	
<p>Description of indicator: 3.1 Do-No-Harm-Assessment – Working Conditions (12) Copies of the 8 ILO Fundamental Conventions shall be available for workers.</p>		
<p>Description of non-conformity: All project members keep copies of ILO Fundamental Conventions clearly visible in their camps and offices. It was detected that many of the employees are not literate and no further lecture or training session took over the theme. Even those literate did not show any knowledge surrounding ILO Fundamental Conventions. Project members could spend more efforts to promote ILO Fundamental Conventions awareness between labours and be effectively understood by their workers.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closure: (<i>OBS closure was verified during the actual audit (07/06/2019).</i>) The project developer has provided a training session for the subject related to ILO Fundamental Conventions and Labour regulations of Panamá that ratifies those international conventions. Interview with workers revealed that they are aware and understand the importance of implementation of those regulations by the employer.</p>		
<p>Evidences observed are sufficient to <u>CLOSE</u> this observation.</p>		
<p>Documents reviewed Legislación Laboral de la Republica de Panamá Y la Organización Internacional del Trabajo (2018 - Panamá Reforestation Services S.A) <i>Registro de Asistencia: OIT y FSC (11/05/2018).</i></p>		
<p>Status: CLOSED</p>		

Nº NC: CUC-OBS-03	Reference : 3.1 – (15.b & c)	Category : OBSERVATION
Date found: 20/06/2016	Deadline for correction: N/A	
<p>Description of indicator: 3.1 Do-No-Harm-Assessment – SOCIAL - Occupational Health and Safety</p> <p>(15). There shall be a ‘Health&SafetyPolicy’ that is documented, implemented and regularly updated. This policy shall include at a minimum:</p> <p>(b) provisions for the safe transport of workers, AND;</p> <p>(c) provisions for timely evacuation of workers to an adequately equipped medical facility in case of serious accident.</p>		
<p>Description of non-conformity:</p> <p>It was observed some difficult slopes in the main road of the project in Isla Cebacos. It was stated that those points close when is wet. Although there is no records of accidents which deserved evacuation and that the Company keeps the road maintained, should be healthy and more safe to evaluate alternative routes for a case of emergency and also to avoid accidents when transporting people into the projects.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closure:<i>(OBS closure was verified during the actual audit (07/06/2019).</i></p> <p>No further actions were taken by CO2OL TMIX project to address this Observation</p> <p>Evidences observed still insufficient to close the OBS, so it remains <u>OPEN</u>.</p> <p>Documents reviewed</p> <p>No documents were provided for review.</p>		
<p>Status: OPEN</p>		

Nº NC: CUC-OBS-04	Reference : 3.1 – (15.e)	Category : OBSERVATION
Date found: 20/06/2016	Deadline for correction: N/A	
<p>Description of indicator: 3.1 Do-No-Harm-Assessment – SOCIAL - Occupational Health and Safety</p> <p>(15). There shall be a ‘Health&SafetyPolicy’ that is documented, implemented and regularly updated. This policy shall include at a minimum:</p> <p>(e) if workers stay in camps for a longer period of time, measures shall to provided to ensure that conditions for accommodation and nutrition comply at least with those specified in the ILO Code of Practice on Safety & Health in Forestry.;</p>		
<p>Description of non-conformity:</p> <p>Although there is no complaint about food and water from the workers, Project members should ensure that food nutrition and water consumption is adequate for the daily labours’ necessities. It was observed workers with a single PET bottle of water (around 2 liters, at 32°C) for a whole working day. It was also detected that some workers comply with 6-7 hours in a shift without any meal in between. Though workers declared that it is their own option, Companies could be implement measures for good feeding and hydration habits between the workers.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closure:<i>(OBS closure was verified during the actual audit (07/06/2019).</i></p> <p>No further actions were taken by CO2OL TMIX project to address this Observation</p> <p>Evidences observed still insufficient to close the OBS, so it remains <u>OPEN</u>.</p> <p>Documents reviewed</p> <p>No documents were provided for review.</p>		
<p>Status: OPEN</p>		

Nº NC: CUC-FAR-01	Reference : 3.1 – (34)	Category : FAR
Date found: 20/06/2016	Deadline for correction: within 5 years from closing meeting	
<p>Description of indicator: 3.1 Do-No-Harm-Assessment – ENVIRONMENTAL - Water Resources</p> <p>(34). On both sides of permanent or temporary <i>water bodies</i> (lakes, streams, rivers, wetlands, etc.) riparian buffer zones of 15 meters shall be implemented on each site. In these riparian buffer zones:</p> <ul style="list-style-type: none"> (a) only <i>native tree species</i> may be <u>planted</u>, AND (b) <i>invasive species</i> shall be removed, AND (c) all existing vegetation shall be kept, AND (d) no timber harvesting activities shall take place, AND (e) no use of fertilizer or chemical pesticides. 		
<p>Description of non-conformity:</p> <p>The project maps presented for all project members do not show temporary water bodies, which shall be considered for the purpose of compliance with the 15m buffer zone and enforcement of (a) to (e).</p> <p>In general, permanent and relevant temporary water courses are well buffered and no disturbance are detected in these areas.</p> <p>Project members shall demonstrate in maps all riparian and hydrographic elements herein mentioned as “water bodies” and their buffer zones established or planned to be reformed in it.</p>		
<p>Evidence received, and analysis of corrections and corrective actions provided for NC closure: (<i>OBS closure was verified during the actual audit 07/06/2019</i>).</p> <p>Maps presented by the PD to demonstrate riparian and hydrographic elements for temporary water bodies are incomplete and do not provide evidences that the buffer zones of this type of water bodies are free from commercial or exotic species.</p> <p>Evidences observed still insufficient to close the FAR, so it remains <u>OPEN</u>.</p> <p>Documents reviewed</p> <p>Shapefiles of projects, Sustainable Timbers S.A./Eco CebacoS.A/Forest Finance S.A (07 June-2019)</p> <p>Draws of land use of projects with terrain drainage (partial).</p>		
Status: OPEN		

Nº NC: CUC-CAR-02	Reference: 2.1 3.1/3.2/3.4 /3.5/3.6/5.3/5.6/5.7/6.1	Category : CAR
Date found: 26/09/2019	Deadline for correction: Before report closure	

Description of indicator:

2.1 For the Performance Certification the project owner shall provide any updates to the existing filled-in template 'Key Project Information'. The most recent version of the template shall be used.

3.1 For the Performance Certification, the project owner shall update the existing filled-in template 'Do-No-Harm Assessment'. The most recent version of the template shall be used. For the New Area Certification, the project owner shall update the existing filled-in template 'Do-No-Harm Assessment' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

3.2 For the Performance Certification chapter '3.2 Local Stakeholder Consultation' does not apply. The continuous dialogue is ensured through the requirements of chapter '3.3 Input & Grievance Mechanism' and the yearly reporting and regular certifications that include feedback from The *Gold Standard NGO Supporters*. For the New Area Certification the project owner shall identify the stakeholders that are *new* to the projects due to its expansion. With these *new* stakeholders a LSC shall be conducted. For the documentation, the project owner shall use an empty template 'Local Stakeholder Consultation'.

3.4 For the Performance Certification the project owner shall use an empty template 'Sustainability Monitoring Plan'. To complete the template, copy *remaining* parameters that have not yet reached their target and add *new* parameters from the update of the chapter '3.1 Do-No-Harm Assessment' or '3.3 Input & Grievance Mechanism'. For the New Area Certification the project owner shall update the existing filled-in template 'Sustainability Monitoring Plan' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

3.5 For the Performance Certification the project owner shall update the existing filled-in template 'Project Participants & Secured Titles'. The most recent version of the template shall be used. For the New Area Certification the project owner shall update the existing filled-in template 'Project Participants & Secured Titles' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

3.6 For the Performance Certification the project owner shall update the existing filled-in template 'Risk Register'. The most recent version of the template shall be used. For the New Area Certification the project owner shall update the existing filled-in template 'Risk Register' with the information from the new areas added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

4.1 For the New Area Certification the project owner can select between the following 3 options:

a) Identify *key elements* of the project's existing additionally test and provide evidence that these *key elements* are not changed due to the *new areas*. *Key elements* shall include barriers (in case of the barrier analysis), the economic assumptions (in case of the investment analysis), or elements of 'Option 2 - Positive List' (in case this was selected). The most recent version of the 'Additionality - New areas' template shall be used.

b) Repeat the process for the Initial Certification, but only with regard to the *new areas*, not the entire project. The most recent version of the 'Additionality' template shall be used.

5.1 For the New Area Certification the project owner shall update the existing filled-in template 'Applicability' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

5.2 For the New Area Certification the project owner shall update the existing filled-in templates (see Initial Certification) with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used.

5.3 For the Performance Certification the project owner shall meet the requirements by updating the numbers from the chapters '5.4 Other Emissions' and '5.7 CO₂-Fixation' and in its Climate Projects account. The system will create a 'MU Report' that the project owner shall submit to The Gold Standard Registry. For New Area Certification See Initial Certification. To enter the numbers of the new areas into the Climate Projects system the project owner has to create a new 'Modelling Units Cluster'.

5.5 For the New Area Certification the project owner shall update the existing filled-in template 'Baseline' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used. The resulting figures of this documentation shall be submitted to the projects *Climate Projects* account.

5.6. For the New Area Certification the project owner shall update the existing filled-in template 'Leakage' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used. The resulting figures of this documentation shall be submitted to the projects *ClimateProjects* account.

5.7 For the Performance Certification the project owner shall update the existing filled-in template 'CO₂-Fixation' based on the information of the 'Forest Inventory'. The most recent version of the template shall be used. The resulting figures of this documentation shall be used to update the projects *ClimateProjects* account. For the New Area Certification the project owner shall update the existing filled-in template 'CO₂-Fixation' with the information from the *new areas* added. The new information shall be clearly distinguishable by the use of a different colour. The existing version of the template shall be used. The resulting figures of this documentation shall be submitted to the projects *ClimateProjects* account.

6.1 For the Performance Certification the project owner shall provide documentation using the template 'Carbon Performance'. The most recent version of the template shall be used.

Description of non-conformity:

The templates related to AR requirements 0.9 are not up to date for the New Areas Certification

Evidence received, and analysis of corrections and corrective actions provided for NC closure:

The PD provided additional documentation and submitted the methodology relevant templates in an updated format.

Documents reviewed

- Sustainability Monitoring Plan_Final_29/11/2019
- Additionality Requirements for Afforestation/Reforestation Projects) (Vs 1.0 - 04/11/2019)
- Applicability for Afforestation and Reforestation Projects (Vs 1.0 - 04/09/2019)
- Baseline for Afforestation and Reforestation Projects(Vs 1.0 - 04/09/2019)
- Carbon Performance for Afforestation/Reforestation Projects (Vs 1.0 - 04/09/2019)
- CO2-Fixation for Afforestation and Reforestation Projects (Vs 1.0 - 04/09/2019)
- Leakage for Afforestation and Reforestation Projects (Vs 1.0 - 04/09/2019)
- Other Emissions for Afforestation and Reforestation Projects (Vs 1.0 - 04/09/2019)
- Update of "Additionality assessment for the new area 2016 of the project CO2OL Tropical Mix" for performance and new area certification 2019 (04/09/2019)

Status: CLOSED

4. SUMMARY OF FINDINGS

4.1 Project implementation and operation

Sufficient and consistent information about the project implementation and operation has been reported through annual summary documents.

The templates related to AR requirements 0.9 are not up to date for the New Areas Certification **(CUC-CAR-02 – closed in November 2019)**

Financial planning and protocols are in place with respect to the mid-term, annual and monthly planning. An accounting system is used to monitor and evaluate revenues and expenditures in relation to the planning. Those numbers are checked annually through external audits.

Forest Finance and Sustainable Timbers' Forest Management Plans are both FSC® certified and their performance stated by the external audit report is excellent.

Proper and timely inventory of assets, including biological assets (increasing tree value) makes it possible to comply with the requirements of long-term investors.

Relevant stakeholders, such as ANARP (La Asociación Nacional de Reforestadores de Panamá), agree with the project and mention the contribution and support of the project to the Forest Plantation Sector in the country, its improvements and important outputs.

Silviculture and technical support adapted to tropical species are established, and planned activities for the plantation development and growth are in place.

Project Developer is also stimulating annual cropping through agroforestry with cacao.

Practices of Reduced-Impact-Logging (RIL) as directional felling are observed, which confirms the effectiveness of capacity building.

4.2 Monitoring Plan and Activities

CO2OL TMIX project has its monitoring system with guidelines for every indicator on operational, social and biodiversity issues. Indicators are generally linked to a potential risk or a real impact mapped by the Project Developer in the risk register.

The document "Biodiversity Progress report ForestFinance 2017 / 2018 - Regarding the leadership declaration of the 'Biodiversity in Good Company' initiative" describes the activities to be monitored, and under which criteria.

Monitoring data are recorded in paper files or handheld notebooks and afterwards uploaded in the data base. Those are related to, amongst others: service quality, silvicultural management, tree growth for each specie, loss of plants through fire or cattle grazing, quantities of machine oil purchased and returned, inputs and grievances, capacity building and growth information system (database of PPMs).

Forest management plan and activities are managed and adjusted periodically in line with evaluations of the plantations by project staff. Specific silvicultural and forest management tasks are set in discussions particularly with the workers and project members.

4.3 Data and Calculation of net removals

CO2OL TMIX project is sourcing its calculation of net removals of carbon through the approved methodology by UNFCCC (AR-AMS0001/version 05).

It is presented through a complete growth model with recent updated measurement results recorded from the PPMs (permanent sample plots). Field check in this audit revealed that data are accurate and are easily available. Frequency of sampling is 1/25ha.

Results showed that the quantity of the validated and verified CO₂-certificates with respect to the project is less than or equal to the project's expected carbon stocks (validated CO₂-certificates) and actual carbon stocks (verified CO₂-certificates). Adjustments are constantly made to the growth model for each species, given the update of growing results for the species.

CO₂OL TMIX project has increased its area and the sites were visited during this performance audit. Plantations included were established from 2008 to 2013 and are owned by Sustainable Timbers S.A. Those areas are part of the general management plan of teak plantations and receive the same silvicultural treatment as all other areas within the project.

Calculations and data were verified and are matching with the results of the modelling units.

4.4. Co-benefits and Do-No-Harm Assessment (Safeguards)

The local population is benefiting from new jobs created through the project or benefit from cost savings as a result of access to affordable goods and services.

The communication with local communities comprises the Project's approach to issues like hiring, recruitment, retentions (taxes and tributes), sustainable forestry and other related issues as silvicultural practices for tropical species.

CO₂OL TMIX carries training to improve knowledge on different technical topics related to sustainable management that is left for the workers and their families.

Support to local infrastructure, schools and communitarian events are some of the activities the project has been engaged since the beginning.

Scientific and/or technological cooperation agreements, research and projects with both Panama and German parties are led by CO₂OL TMIX.

Local markets are benefited with the wood harvested, timber mobilized within the province area and external trade of wood products in Panama.

The project does not apply the rational use of hazardous chemicals and/or materials. Standard procedure is followed at site during operation and maintenance, as well as FSC guidelines and regulations, as well personal involved is strictly trained for the activities of use, handling and transporting those products.

Pesticides are minimized and used only selectively in areas with specific problems. The project follows the national legislation on pesticides and FSC Pesticides Policy. Also, a specific fertilization plan is set up for the agroforestry (cocoa) areas.

In the forest areas, fertilizers are used during planting and during the first 5 years.

Mixed-species planting are expected to maintain soil fertility, increase soil carbon and nitrogen pools, producing more ecological and economic benefits.

The project protects areas with secondary forest, giving shelter to native flora and fauna.

Conservation areas through natural regeneration will create an organic layer that will improve the conditions from the soil year after year.

Occupational health and safety regulations are an important part of capacity building, given that local farmers and rural workers are not used to implement such regulations during their daily activities.

Annual reports with relevant results of project implementation data are shared with the stakeholders (forest authorities, project partners and members, reforestation association, Municipalities and local communities) with subjects treated such as state of the plantations, report on conflicts, grievance, input for Sustainable Development Goals of the project, planning of activities for the coming period.

The Project is well recognized by the implementation of silvicultural practices using mainly native trees species rather than exotic ones. Teak (*Tecnona grandis*) is planted as an exotic tree species, which is known for its adaptive behaviour in the regions where it is established. Investigations so far revealed that there are no significant negative effects to the natural ecosystems in the project area as result of the teak plantation.

The design of plantations fosters the connection between habitats, and in general results in a mosaic of ages, species and silviculture. Corridors of fauna and flora are abundant all over the project.

No Genetically Modified Organisms (GMOs) are found nor are being investigated by the project members.

No ploughing is recorded. Soils, in general, are being restructured and fertilized by the biomass that is left by leaves in combination with microbiological activity under the canopy.

It could be observed that neighbours and workers are aware of the waste problem and welcome the reduction in the spread of waste on the field. The Project developer is still working on the waste management procedures and policies, as well as on training and education for workers in order to reduce the waste production, especially on how to deal with those considered toxic or hazardous for people and environment.

4.5. Internal Quality Control

CO2OL TMIX implements its quality control through monitoring performance of all its activities. Tasks planned between project members and staff are noted.

On-site capacity building for workers is implemented by the project members in order to assure accomplishment according to certain minimal technical standards and safeguards. Monitoring plan is applied after establishment of the planned activities to check the performance of the field tasks.

Furthermore, quality control considers social and environmental monitoring indicators. The project's monitors are in charge of the review and data collection verification, and issues periodical reports, which are analysed by the Project Manager and furthermore the Project Developer. This quality assurance process guarantees coherence of the forms and the data base.

Plantations' growth is annually measured, ensuring on time the detections of deviations or abnormal behaviour of forests dynamics. This provides inputs for a quick adaptation of strategies, if necessary. In this way the quality and accuracy of the data shared with investors and clients (carbon or environmental services, donators) can be assured since performance statistics are reported as soon as the data used meet the quality standards as established in the project's standard operational procedures and management plan.

Around 90% of the forests under the scope of GoldStandard certification is followed by an FSC certificate, giving more credibility for the responsible forest management implemented by project members.

5. VERIFICATION OPINION

Based on the evidences collected during the present verification audit, in the opinion of the lead auditor Flavio Guiera, **CO2OL Tropical Mix needs to close the non-conformity CUC-CAR-02** to comply with the certification requirements according the standard: Gold Standard, Afforestation/Reforestation (A/R) Requirmentes (V0.9 of August, 2013).

6. CERTIFICATION STATEMENT

The forest management system, procedures, and techniques of **CO2OL Tropical Mix** have been assessed by CUC according to the standards the Gold Standard – A/R (v0.9) and certificate should be maintained, provided that open CAR is closed.