



# VERIFICATION REPORT


## MANOA REDD+ PROJECT



Document Prepared by Earthood Services Private Limited

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### Summary:

The MANOA REDD+ PROJECT, registered under the VCS Project ID 1571<sup>1</sup> and Climate, Community and Biodiversity Standards (CCB Standards)<sup>2</sup>, is a project-scale that began on January 1, 2013 with a duration of 30 years and a project area of 72,843 hectares in the municipality of Cujubim, State of Rondônia – Brazil. The project was validated according to the VCS and CCB standards but verified only according to the VCS standard. The current verification was also performed only according to the criteria of the VCS standard. The activities aim to mitigate climate change and reduce greenhouse gas emissions caused by deforestation and forest degradation. This was verified for the monitoring period from 01/Jan/2017 to 07/Aug/2020.

MANOA REDD+ PROJECT belongs to the Agriculture, Forestry and Other Land Uses (AFOLU) sector in the category of Reducing Emissions from Deforestation and Forest Degradation (REDD) avoiding Unplanned Deforestation / Degradation (AUDD). The project reduces emissions and implements activities that benefit the climate at Manoa Farm in the state of Rondônia - Brazil.

Activities during this monitoring period include: 1. Monitoring deforestation through satellite imagery; 2. Monitoring of facilities by the security team to prevent deforestation and encroachment; 3. Implementation of FSC certified, low-impact forest management; 4. Technical training in low-impact forest management and environmental education by Manoa Sustentável, Exploração e Serviços Florestais.

Earthood Services Private Limited (hereinafter ESPL), as part of the list of available validation and verification bodies has been contracted by Biofíllica Ambipar Environmental Investments S.A. and Manoa Sustentável, Exploração e Serviços Florestais LTDA. to carry out the verification process of the project activities in accordance with the VCS standard, with an assurance level of 95% and 5% materiality.

The purpose of this second verification is to verify the implementation of the project activities during the monitoring period from 01/Jan/2017 to 07/Aug/2020. This includes document and Monitoring Report review, site visit, interviews and consultation with secondary sources of information, findings, feedback with the project owner and preparation of the final report in accordance with the monitoring report, validated Project Description, methodology (VM0015 v1.1), applicable local environmental laws, and other applicable references. As a result, 03 Forward Action Requests (FAR) were submitted pending of the first verification process, 05 request for clarifications (CL) and 01 corrective action requests (CAR) which were addressed by the initiative proponent.

The document review, interviews, and site visit allowed ESPL to gather sufficient evidence to fully evaluate the verification criteria and determine that the project is being implemented in accordance with the Monitoring Report. The reductions were correctly calculated, based on the applied

<sup>1</sup> <https://registry.verra.org/app/projectDetail/VCS/1571>

<sup>2</sup> <https://www.climate-standards.org/?s=manoa>

methodology. In summary, “MANOA REDD+ PROJECT”, as described in the Monitoring Report Version 03 dated 10/02/2022, meets all relevant requirements for VCS verification methodology VM0015 v1.1 has been correctly applied. The project generates a net GHG emissions reduction of 1,046,092 tCO<sub>2</sub>e and 941,485 tCO<sub>2</sub>e tradable credits (VCUs) applying a VCS credit buffer (VBC) of 10%, for the monitoring period from 01/Jan/2017 to 07/Aug/2020.

<b>1</b>	<b>Introduction</b>	<b>6</b>
1.1	Objective .....	6
1.2	Scope and Criteria .....	6
1.3	Level of Assurance.....	7
1.4	Summary Description of the Project .....	7
<b>2</b>	<b>Verification Process</b>	<b>8</b>
2.1	Method and Criteria.....	8
2.2	Document Review .....	10
2.3	Interviews .....	11
2.4	Site Inspections.....	12
2.5	Resolution of Findings .....	19
2.5.1	Forward Action Requests	19
2.6	Eligibility for Validation Activities .....	20
<b>3</b>	<b>Validation Findings</b>	<b>20</b>
3.1	Participation under Other GHG Programs .....	20
3.2	Methodology Deviations.....	20
3.3	Project Description Deviations.....	20
3.4	Grouped Project .....	21
<b>4</b>	<b>Verification Findings</b>	<b>21</b>
4.1	Project Implementation Status .....	21
4.2	Safeguards .....	23
4.2.1	No Net Harm	23
4.2.2	Local Stakeholder Consultation	23
4.3	AFOLU-Specific Safeguards .....	24
4.4	Accuracy of GHG Emission Reduction and Removal Calculations .....	25
4.5	Quality of Evidence to Determine GHG Emission Reductions and Removals .....	28
4.6	Non-Permanence Risk Analysis.....	28
<b>5</b>	<b>Verification conclusion</b>	<b>30</b>
	<b>APPENDIX 1: DOCUMENTATION PROVIDED BY THE PROJECT</b>	<b>32</b>
	<b>APPENDIX 2: FINDINGS</b>	<b>37</b>

# 1 INTRODUCTION

Earthood Services Private Limited, as the conformity assessment body, performed the independent 2nd verification of MANOA REDD+ PROJECT, in Brazil, on behalf of Biofílica Ambipar Environmental Investments S.A. and Manoa Sustentável, Exploração e Serviços Florestais LTDA. The third party assessment was conducted in an objective, neutral and consistent manner, in accordance with the requirements of the VCS Standard and Rules and the approved methodological procedures.

## 1.1 Objective

Explain the purpose of the verification.

Verification is carried out as a systematic, independent, and documented process for the evaluation as follows:

- The project activity was implemented in accordance with the validated project description document.
- The monitoring was carried out in compliance with what was described in the validated monitoring plan.
- GHG emission reductions were calculated free of errors, omissions, and misrepresentations.
- The quantification of GHG emission reductions reported in the monitoring report is materially accurate.

## 1.2 Scope and Criteria

The scope of the verification is to determine that:

- The project activity has been implemented in accordance with the validated Project Description Document and results of GHG emission reductions.
- The Monitoring Report and other documentation provided is complete, current, and verifiable in light of applicable requirements, standards, evaluation criteria, and conditions of the certification program.
- Actual monitoring systems and procedures are consistent with those described in the validated monitoring plan, including the approved methodology and applicable tools.
- Data are recorded and stored according to the monitoring methodology and calculations are appropriate and consistent.
- GHG emission reductions identified in this verification process will only be considered for the monitoring period specified by the project.

Evaluation criteria:

- Verified Carbon Standard Program Guide 2019 v. 4.0. At: <https://verra.org/project/vcs-program/rules-and-requirements/>
- Verified Carbon Standard 2021 v. 4.1. At: <https://verra.org/project/vcs-program/rules-and-requirements/>
- Verified Carbon Standard AFOLU Non-Permanence Risk Tool 2019 v.4.0.
- VM0015. Avoided Unplanned Deforestation. Version 1.1, December 3, 2012.
- Verified Carbon Standard AFOLU Non-Permanence Risk Tool 2019 v.4.0.
- VCS tool VT0001 – for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, version 3.0  
Registration and Issuance Process 2019 v4.0.

### 1.3 Level of Assurance

The level of confidence is 95% of the issued verification statement, agreed with the project proponent, and the manner and timing of gathering evidence or proof to achieve a reasonable level of confidence, consistent with the provisions of the applicable requirements. Similarly, the materiality threshold is less than 5% for the project.

ESPL ensures project compliance with the VCS Program by considering a materiality threshold of less than 5% in terms of total errors, omissions, and misrepresentations relative to total reported GHG emission reductions.

### 1.4 Summary Description of the Project

**Table 1 Summary of the project**

Project name	MANOA REDD+ PROJECT
Sectoral scope	14. Land-use, land-use change and forestry
AFOLU Project category	Reducing Emissions caused by Deforestation and Forest Degradation (REDD). Avoiding Unplanned Deforestation and/or Degradation (AUDD).
Project Proponent	Biofílica Ambipar Environmental Investments S.A. and Manoa Sustentável, Exploração e Serviços Florestais LTDA.
Baseline and monitoring methodology	VM0015. Avoided Unplanned Deforestation. Version 1.1, of December 3, 2012

Location of the project activity	The municipality of Cujubim, State of Rondônia – Brazil.
Project scale	Project scale
Area	The project has an area of 72,843 hectares
Project crediting period	30 years, from 01/Jan/2013 until 31/Dec/2042
Monitoring period	01/Jan/2017 to 07/Aug/2020
Verified emission reductions in the above monitoring period	1,046,092 tCO <sub>2</sub> e

The MANOA REDD+ PROJECT is located in the municipality of Cujubim, in the northeast of state of Rondônia in Brazil. The project activities aim to create climate benefits and promote the reduction of emissions caused by unplanned deforestation in the project area.

For this verification from 01/Jan/2017 to 07/Aug/2020, the project includes 72,843 hectares of forest that generated a net reduction in GHG emissions of 1,046,092 tCO<sub>2</sub>e and 941,485 tCO<sub>2</sub>e<sup>3</sup> of tradable credits (VCUs) applying a buffer of 10%.

## 2 VERIFICATION PROCESS

The verification of this monitoring period according to the VCS standard was requested from ESPL by Biofíllica Ambipar Environmental Investments S.A. and Manoa Sustentável, Exploração e Serviços Florestais LTDA. The verification of the Monitoring Report, supporting documentation, site visit, and interviews, provided evidence for this VVB that all applicable criteria for the project have been met with reasonable assurance. Project activities are intended to benefit the climate and promote the reduction of greenhouse gas emissions.

### 2.1 Method and Criteria

The verification process consisted of the following four phases: i) desk review, investigation of secondary sources of applicable information and identified outstanding pending FARs ii) on-site assessment iii) resolution of findings, and iv) issuance of the final verification report with conclusion. The verification process is conducted in accordance with the criteria established in the VCS standard. The verification process included the following:

<sup>3</sup> The VCU result is presented by rounding off figures in the annual discrimination of the calculations. The foregoing justifies the difference of a couple of units when the buffer of 10% is applied directly to the net emission reduction.



- Contract with project proponent for the scope and appointment of verification team and technical review team.
- Completeness check of Project Description and Monitoring Report.
- Desk review of conformance to VCS rules, Project Description and Monitoring Report by the verification team and planning of onsite audit (site inspection to confirm project boundaries, check project activities and interviews with stakeholders).
- Project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology.
- Physical on-site inspection by the audit team (site inspection to confirm project boundaries, check project activities and confirm stable forest area).
- Follow up activities e.g., interviews.
- Reporting and closure of findings (CARs/CLs/FARs) and preparation of draft verification report.
- Independent technical review of the draft verification report and final/revised documentation.
- Reporting and closure of comments/findings (CARs/CLs/FARs) and final approval for the decision made.
- Reports, calculation checks, QA/QC and resolution of findings.
- Issuance of the draft of verification report.
- Independent technical review of project documentation to confirm that internal procedures established and implemented by ESPL have been properly followed and that said opinion or conclusion has been prepared objectively and in accordance with the applicable rules and requirements. The independent technical reviewer may approve the report as submitted by the lead auditor or return it with comments or findings to be resolved by the verification team.
- Issuance of the final verification report.

The sampling plan included reviewing of 100% of the project documents, spreadsheets, cartographic information, and all documents provided as support for the second monitoring period. Additionally, on-site inspections and interviews with relevant stakeholders, were planned.

The Monitoring Report and non-permanence risk analysis were reviewed for compliance with the criteria described in sections 1.2 and 1.3 of this report. The audit team identified potential risks of errors, omissions, and misstatements related to the audit criteria. Based on the approach taken, the audit team believes the sample design selected is sufficient to make a determination on the analysis of the project and its compliance with applicable requirements.

#### **Table 2 Audit team**

Name	Role
Bibiana Duarte	Lead Auditor/Technical expert
Ricardo Lopes	Auditor and local expert

Bibiana Duarte: Senior Lead Auditor. Forest engineer, qualified under ISO 14064 and 14065 to lead validation and verification processes of Carbon Emission Reduction projects for CCB & VCS standards and others. More than 10 years of work and relevant experience with environmental, biodiversity and social aspects in forestry projects. Principal auditor since 2017, has successfully audited more than 20 AFOLU carbon projects in Brazil, Colombia and Perú.

Ricardo Lopes: native Brazilian, and therefore a native Portuguese speaker, understands the local culture and is familiar with local legislation. He holds a post-graduation diploma in international management with technical education in data processing.

He has a wide professional experience in Latin America, having participated in over a hundred audits of GHG projects (CDM/VCS/GS, Social Carbon, etc.) across the region, from Mexico to Argentina, in several sectors, such as renewables, waste, fuel switch, energy efficiency, forestry, etc.

**Table 3 Technical reviewer.**

Name	Role
Pablo Rodríguez	Technical reviewer and technical expert

Pablo Rodríguez Ramírez: forestry engineer specialized in Environmental Planning and Comprehensive Management of Natural Resources, with more than 24 years of professional experience in the AFOLU sector, and auditor of GHG mitigation projects since 2018.

The criteria allow the verification guidance provided by VCS Standard and the rules related to applicability of methodology used for the development of the project: VM0015 Methodology for Avoided Unplanned Deforestation, version 1.1. Similarly, the requirements of the following tools were considered:

- Non-Permanence\_Risk\_Tool\_v4.0 VCS
- VCS tool VT0001 – for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, version 3.0, February 1, 2012.

## 2.2 Document Review

The documentary review was performed on November 16-19, 2021, based on the information provided by the Project Proponent before the on-site visit. The auditor detailed all project documentation and ensured consistency with and identified any deviation from VCS program requirements. Desk review

included an examination of the project details, data and parameters, and quantification of GHG reductions. The verification team carried out a desk review that included:

- A review of the Monitoring Report, details of the information, monitored data, appropriate use of factors, equations and results obtained.
- A review of the data and information submitted to verify its integrity.
- Monitoring the implementation of project activities.
- An evaluation of compliance with the applicable regulations to verify the regularity of the activity.
- An evaluation of documents proving the land tenure and/or carbon rights of the project.
- An evaluation of the controls envisaged to guarantee the quality of the information and the documentary control of the project.
- Other supporting documents (cartography, spreadsheets, etc.).

As part of the desk review, an office audit (lead auditor and audited team) was conducted on key project issues requiring attention. The revised documentation provided by the project is described in Appendix 1.

## 2.3 Interviews

During the on-site inspections, some interviews that were considered relevant for compliance with the legal requirements and technical aspects of the project were carried out, these were:

**Table 4 Interviews on site**

Date	Name and Role	Topic <sup>4</sup>
29/11/2021	Altevir Ziemba - Accountant of Manoa Sustentável, Exploração e Serviços Florestais LTDA	He explained how the differentiated cash accounting works between the business due to the activities as a timber seller and the accounting for the REDD project
29/11/2021	Natanael Pinheiro da Silva (forest engineer) and Leticia Andrade (Secretary)-SEDAM- State Secretariat of the Environment	The public officials talked about the good relationship with the PP and about the knowledge of the REDD Project.  The SEDAM spoke about the possible motor of deforestation in the region
29/11/2021	Mariluce Messias- Federal University of Rondônia Foundation	She was hired by Manoa to carry out research, analysis and monitoring of fauna, specifically for mammals, she hired some university students to do her thesis, she described the use of camera traps for said work.

<sup>4</sup> All responses described in this table were recorded by the audit team and are available in the document management of ESPL

Date	Name and Role	Topic <sup>4</sup>
26/11/2021	Claudio Benevenuti and Everaldo Jair Dos santos- Plant operators.	Workers for 4 years, and field coordinators. They have spoken about the training they received once a year from January to April before the job starts.  They described how the implementation of "forestry management" is and their knowledge about the REDD+ Project. Flora and fauna management.
26/11/2021	Marizete- Administrative assistant	She told about her work in Manoa, she was not informed about the REDD project.
26/11/2021	Moisés Suares and Francisco Barbosa- forest lookout	They described the activities they carry out in the organization for 23 years. They talked that they received training about fire events, about the wildlife sightings and the REDD project.
25/11/2021	Everton Blan Klebs- Administrative assistant	He described his work, and his knowledge of the REDD project
24/11/2021	Jandir Masiel Spies- Manoa Sustentável, Exploração e Serviços Florestais	He works with Manoa as an engineer, his activities include the preparation of the forest management report, also he is a responsible of the reporting to Biofilica all the activities for the REDD project.

## 2.4 Site Inspections

As a part of the project verification, an on-site inspection was carried out through visits to Manoa Farm in the municipality of Cujubim during the days of November 24, 2021, to November 30, 2021:

- Ensure that the geographic area of the project, as reported in the PD and Monitoring report and its consistency with the annexes (GIS).
- Observe the Implementation status of the project and forest activities.
- Perform a risk-based review of the project area to cover the project boundary.
- Verifying possible substantial discrepancies between the activities described in the monitoring plan and those carried out on site.
- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the VCS requirements and the applicability conditions of the methodology.
- Confirmation that the quality control and quality assurance procedures were in place.

**Table 5. Audit plan in site.**

Date: 24/11/2021 al 30/11/2021			
N.º	Activity	Location	Date
1.	Opening meeting: - Presentation of the audit team - Audit plan - Confirmation of scope - Information on the audit procedure - Information about the conditions under which the audit can be terminated or modified - Impartiality / Confidentiality - Confirmation of interview times and dates - Confirmation of field trips - Questions and answers session	Cujubi- Manoa Farm	25/11/2021
2.	Tours of conservation areas, production units, wildlife trails and other strategic points for verification. Plot 23 SUB1-UPA 27.	Cujubi- Manoa Farm	26/11/2021 to 29/11/2021
3.	Office audit	Cujubi- Manoa Farm	27/11/2021
4.	Closing meeting	Cujubi- Manoa Farm	27/11/2021


The visit began with the opening meeting and subsequent site inspection with the lead auditor and the audited team. The activities, the boundaries of the project, the monitoring, the responsible persons and all the aspects to ensure the information provided by the project proponent. Confirmation of boundaries and activities was verified on site (yellow line) as shown below:



Figure 1. Site inspection<sup>5</sup>.

The audit team collected GPS tracking data and waypoints and took photographs and correlated observations with mapping data supplied by the client in a GeoPDF file.




Table 6. Check points.

Plot/site	Coordinate		Photo
	Latitude	Longitude	
Forest management area	8°52'34.86"S	62°35'17.82"W	

<sup>5</sup> Tracks and photos were recorded in a GIS system by the audit team, and they are available in the document management of ESPL




Plot/site	Coordinate		Photo
	Latitude	Longitude	
Recovery area	8°49'14.46"S	62°37'52.94"W	
Fauna point	8°53'10.31"S	62°38'38.70"W	
Manoa Farm entrance	8°49'24.48"S	62°38'17.38"W	

Plot/site	Coordinate		Photo
	Latitude	Longitude	
Infrastructure	8°52'13.80"S	62°40'36.75"W	
UPA 17	8°49'24.85"S	62°40'7.58"W	
UPA Plot	8°53'35.43"S	62°38'5.43"W	



Plot/site	Coordinate		Photo
	Latitude	Longitude	
Forestry use	8°59'24.47"S	62°32'21.77"W	
Natural regeneration	8°55'49.21"S	62°45'38.34"W	
Conservation area	8°59'5.58"S	62°32'34.38"W	
River	8°50'57.47"S	62°36'18.41"W	

Plot/site	Coordinate		Photo
	Latitude	Longitude	
Forest road	8°50'58.50"S	62°36'19.99"W	

## 2.5 Resolution of Findings

The identification of the findings was determined after reviewing the documentation and the results of the on-site inspections. The findings relate to non-compliance with the requirements of the VCS standard, compliance with local environmental laws and rules and approved methodological procedures. Project information must meet the requirements of the standards by presenting the correct evidence, being consistent with what has been validated, and being based on relevant, verifiable, and internationally recognised sources.

The on-site inspections allowed us to verify that the procedures for obtaining project information and data were relevant, reliable, and transparent. The sampling effort ensured that the relative importance result did not exceed 5%, which was agreed with the project proponent. The information and data were checked for consistency to ensure that there were no errors, omissions, or misrepresentations in the information.

A Corrective Action Request (CAR) shall be raised if one of the following situations occurs:

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient.
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants.
- Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impact the quantity of emission reductions.
- Issues identified in a FAR during validation/verification to be verified during verification have not been resolved by the project participants.

A Clarification Request (CL) shall be raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

A Forward Action Request (FAR) is issued for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

The findings detected were: 03 Forward Action Requests (FAR pending the first verification process), 05 clarifications request (CL) and 01 corrective action requests (CAR). All finding included the issues raised, the responses provided by the project proponent and the final conclusions are included in Appendix 2.

### 2.5.1 Forward Action Requests

According to the last verification report of November 14, 2017, there are the following pending findings that were reviewed in this project verification (see Appendix 2):

1. Coordination between deforestation bulletins and forest surveillance activities.
2. Coordination between forest management activities (FSC) and activities of the REDD+ project.
3. Significant change in carbon stocks due to a project activity.

Likewise, the observations generated from the first verification process were reviewed.

## 2.6 Eligibility for Validation Activities

Earthood Services Private Limited is accredited for the validation and verification projects for the scope 14 AFOLU sector as well as by the VERRA board. Activities were developed due to deviations in the Project Description.

# 3 VALIDATION FINDINGS

## 3.1 Participation under Other GHG Programs

The project is registered in the VCS, complying with the requirements of the standard. The project is not registered under another GHG program.

## 3.2 Methodology Deviations

Deviation from the methodology wasn't found during this monitoring period.

## 3.3 Project Description Deviations

The following deviations from the Project Description presented for the current monitoring period (described in Section 3.2.2 of the MIR) were validated by the audit team:

In 2019, Manoa farm was incorporated into the capital of the company Manoa Sustentável, Exploração e Serviços Florestais LTDA. (belongs to the "Grupo Triângulo"), to facilitate bureaucratic procedures in public bodies that carry out the release and inspection of the Plan of Forest Management. Therefore, currently the proponent of the project is Manoa Sustentável, Exploração e Serviços Florestais LTDA together with Biofílica Ambipar Environmental Investments S.A. Previously, the owner was Triângulo Pisos e Painéis Ltda, proponent of the project indicated in the project's PDD, but in the current verification, Manoa Sustentável Extração e Serviços Florestais Ltda is registered as the proponent.

ESPL reviewed the legal information, the update of the previously prepared contract, and verified all information related to the process (clarification by the Trinângulo Group) and the updated land documents of the farm. VVB verified through discussions with legal and local experts, interviews, i on sitenspections and document review that this change does not interfere in any way with the management and governance process of the project and that it does not affect the additionality or applicability of the project, especially since the companies belong to the same group (Triângulo Group) and therefore the previously established policies and responsibilities remain the same.

One of the proponents of the project, Biofíllica, has a new partner (Ambipar Participações e Empreendimentos S.A.) and there are no contractual or other legal implications for the project. The entry of a new partner will have a positive impact in that the contribution of resources, expertise and gains in scale will allow Biofíllica to move forward more consistently and rapidly with its environmental and conservation activities.

VVB has verified through discussions with legal experts, interviews, inspections on site and document review that this change will not negatively impact the project's outcomes.

There were deviations about the units and information recording from for two proposed indicators: "Harvest damage assessment" and "Frequency of surveillance and patrol operations".

The VVB verified through interviews, document reviews, and on-site inspections to verify the implementation of the monitoring plan that the deviations that occurred did not compromise the results of the monitoring report of the project.

The audit team agrees with justifications, considering the review of legal information and verifying in on-site visits the management and governance for the implementation of the project, and the implementation of the monitoring plan. The deviations were reported and justified by the project proponent and the audit team validated that the deviations didn't impact the applicable methodology, baseline, and additionality.

### 3.4 Grouped Project

The project isn't a grouped project, and therefore new project activity instances do not required validation.

## 4 VERIFICATION FINDINGS

### 4.1 Project Implementation Status

The audit team verified the following:

**Table 7. Evaluation of the project implementation.**

Item	Verification
Presence of any material discrepancies between project implementation and the project description.	There are no material discrepancies between project implementation and the project description.
The implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system.	After the resolution of the findings (Appendix 2) and validated the project description deviations, the monitoring plan has been implemented in accordance with what has been validated, the site assessments & observations, interviews and assessment of the documents provided by the project.

Item	Verification
The existence of any material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology.	There are no material discrepancies between the actual monitoring system, and the monitoring plan.
Whether the project has participated or been rejected under any other GHG programs since validation or previous verification	The project has not participated or been rejected any other GHG programs.
Whether the project has received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification.	The project has not received or sought any other form of environmental credit.
Whether the GHG emission reductions or removals generated by the project have become included in an emissions trading program or any other mechanism that includes GHG allowance trading.	The project is registered in the VCS standard, complying with the requirements of the standard. The project is not registered under another GHG program. There is no risk of double counting.
Whether the project has implemented the activities that result in the SD contributions described in the monitoring report.	The audit team carried out the documentary review and observations on the site and confirms that the project contributes to the UN sustainable development goal.

The technical activities of the REDD+ component implemented during the second monitoring period (January 1, 2017, to August 7, 2020) are environmental education activities, low-Impact Forest Management technical training, annual assessment of social activities, vegetation cover monitoring and surveillance activities.

Through field observations, interviews, and document review, the audit team confirmed that there are no significant discrepancies between project implementation and the project description. In summary, the audit team finds that the project was implemented as described in the project description.



## 4.2 Safeguards

### 4.2.1 No Net Harm

The project proponent identified that low-impact forest management is the most likely activity to generate negative impacts. ESPL verified in the office audit and on-site inspections that to mitigate the negative impacts, Manoa Sustentável, Exploração e Serviços Florestais Ltda, a company that carries out the management, developed and registered in the Sustainable Forest Management Plan, in the Manual of General Procedures and in the Annual Operational Plan of each Annual Unit Production, a series of operating procedures focused on impact reduction strategies that are strictly monitored by the company.

ESPL verified in on-site inspections and in interviews with employees that to mitigate the social risks such for example as accidents at work, the project proponent carries out workplace health and safety training, in addition to monitoring the use of PPE (Personal Protection Equipment) by employees. The project proponent also identifies possible negative impacts, such as disbelief and lack of engagement, which can be triggered by failures in the communication process between different actors. The VVB assessed that as a mitigation measure for the above, the project proponent strengthened the communication procedures through two main paths: ombudsman channel and suggestion box.

ESPL verified in on-site inspections that to mitigate the risks on biodiversity (flora and fauna), the project proponent implements the following measures:

- Training of employees who would be carrying out management activities, updates with the best techniques for managing reduced impact (inventories, planning of roads and courtyards, direction of falling trees, etc.), to mitigate impacts on the forest.
- The maintenance of 100% of future-cut trees, lower class trees and seed carrier trees, of the primary floristic composition in the areas of permanent preservation, as well as the absolute conservation of rare, endemic, and legally protected species, thus contemplating the maintenance of High Conservation Value attributes.
- Conservation of the vegetation surrounding the banks of streams and in areas with steep slopes.
- Mitigation measures that are adopted for fauna include the non-felling of nest trees, guidance on the prohibition of hunting and overfishing, capture, and harassment of wild animals.
- The frequent surveillance that is carried out across the boundaries of the property, acting against possible actions by invaders that could negatively impact the natural resources and biodiversity of the project area.
- Regarding the saltshaker, which consists of another High Conservation Value present in the project area, access to the area is restricted to employees and researchers to promote the maintenance of the area and avoid negative impacts on it and the species that inhabit it.

Through site visit observations, interviews, and through document assessment, the audit team concludes that reasonable steps have been taken to mitigate the identified risks.

### 4.2.2 Local Stakeholder Consultation

ESPL verified that the project proponent carries out the consultation and maintains communication with the stakeholders (Manoa Farm employees, neighbors of the Forest Management Area, farmers, associations, and schools that are present in influence of the area) through activities or mechanisms such as the application of questionnaires to survey positive and negative impacts, availability of the ombudsman channel and development of the suggestion box. Those responsible evaluate each communication and, if so, attend to the demands by implementing the necessary actions.

Of the questionnaires applied during the monitoring period of the project, only one nonconformity emerged from a neighboring property affected by the dust generated from the maintenance of the road carried out by the Manoa farm. Manoa gives the directions for the resolution of the dissatisfaction and when it was within its reach, the Farm took care of providing the resolution to the requests.

In addition to the three main consultation and communication fronts established by Manoa Sustentável, Exploração e Serviços Florestais, the dialogue was also established by other means such as e-mail exchange, meetings, and other informal chats. From the above, the project responded to a suggestion from the university de Rondonia for a cooperation agreement to establish an annual training course in low-impact management techniques impact on the Manoa farm. The agreement was unable to be concluded and formalized within the verified period, due to the Covid-19 pandemic, however, the conversations are being re-established.

ESPL has arranged for documents related to the validation and the first VCS verification of the Manoa REDD+ Project were made available through virtual means on the Verra registry platform for stakeholder consultation. The documents related to the current monitoring period (second VCS verification – 2017 to 2020), will subsequently be made available on the Verra registration platform at the end of the current verification process. News and updates about the project were published in the Biofílica Newsletter through social media. In addition, a catalog with information about the REDD+ Manoa Project was distributed to participants who visited the Manoa farm for training.

ESPL evidenced in the office audit and on-site inspections that the project proponent is strengthening communication with stakeholders through activities such as registering established consultations and communications established, improving in the ombudsman channel dissemination process, and formalizing and tracking processes.

Based on field observations and interviews, the audit team concludes that during the monitoring period the project communicated the necessary relevant information on project implementation, risks, costs and benefits, relevant laws and regulations, and the VCS Program verification process.

### 4.3 AFOLU-Specific Safeguards

ESPL verified in on-site inspections that to mitigate the risks to the local stakeholders, the project proponent implements the following measures:

- The mitigation of the risk of illegal activities, such as invasions and theft of wood is the surveillance of Manoa Farm and environmental education with courses, training, and technical visits. Surveillance activities were successful since no of invasions and loss of forest cover occurred during the monitored period.



- The mitigation of the risk of problems in the trading of carbon credits is the activity of Biofilica participating in national and international events related to REDD+ and carbon credits to publicize, establish and expand the network of commercial contacts with possible interested in the purchase of carbon credits. In addition, Biofilica is always looking for financing alternatives, such as donations and partnerships for the direct implementation of the project's activities.
- The mitigation of the risk of possible negative impacts of forest management activities is low-impact technical procedures certified by FSC and training.

The audit team carried out the documentary review on land tenure and concluded that there is regularity of the property, and there is no burden, encumbrance, or limitation to the full use of it, nor is there any obstacle to the realization of the Manoa REDD+ Project. The project area is owned by the project proponents and does not affect neighboring land ownership private or belonging to indigenous and traditional communities or to the government. In addition, it is important to highlight that there are no traditional peoples and communities in the project area.

The audit team verified that the project proponent communicated the necessary relevant information to local stakeholders during the monitoring period.

Through site visit observations, documentary review and interviews, the audit team concludes that the project proponent has taken the appropriate measures to mitigate the negative impacts on local stakeholders, doesn't generate negative impacts in land use rights and maintains communication with stakeholders about relevant project information.

#### 4.4 Accuracy of GHG Emission Reduction and Removal Calculations

ESPL was able to confirm that the equations, sources, assumptions, parameters, and statistical procedures met the methodological and standard requirements. The procedures for quantifying baseline emissions, the project emissions, leakage, and emission reductions were performed in accordance with the applied methodology.

**Table 8 Data and Parameters Available at Validation**

Parameter	Description	Value applied	Verification
Deforestation	Maps of forest cover areas converted to non-forest cover areas	0.79%/year on average (2000-2012)	This parameter was evaluated during the validation process. Confirmed that the values in MR are equal to those reported in the PDD.
Ctot	Average carbon stock per hectare across all carbon reservoirs in the forest class used in the baseline scenario	513 tCO <sub>2e</sub> ha <sup>-1</sup>	This parameter is verified.
DBH	Diameter at Breast Height (130 cm) for each tree with DBH equal to or greater	Spreadsheet with field data	This parameter is verified in the spreadsheet.

Parameter	Description	Value applied	Verification
	than 15 cm in each plot of the forest inventory		
$BGBfw = 0,0469 \times DAP^{2,4754} \times fc1$ $AGBfw = EXP(-1,716 + 2,413 \times \ln(DAP))$	Equation for converting DBH to fresh biomass	$BGBfw = 0,0469 \times DAP^{2,4754} \times fc1$ $AGBfw = EXP(-1,716 + 2,413 \times \ln(DAP))$	This parameter was evaluated during the validation process. Confirmed that the values in MR are equal to those reported in the PDD.
CF	Carbon content in dry biomass	0.485	This parameter was evaluated during the validation process. Confirmed that the values in MR are equal to those reported in the PDD.
44/12	Carbon mass to CO <sub>2</sub> e mass conversion factor	44/12	This parameter was evaluated during the validation process. Confirmed that the values in MR are equal to those reported in the PDD.
Area opening for management infrastructure	Opening of area for management infrastructure	1,6%	This parameter was evaluated during the validation process. Confirmed that the values in MR are equal to those reported in the PDD.

Table 9 Data and Parameters Monitored

Parameter	Description	Value monitored	Verification
Deforestation of project area and leakage belt	Forest cover areas converted to non-forest cover areas within the project area and leakage belt of the Manoa REDD+ Project.	Deforestation of zero in the years 2017 to 2020	This parameter has been appropriately calculated.
C <sub>tot</sub>	Average carbon stock per hectare across all carbon reservoirs in the forest class used in the baseline scenario	513 tCO <sub>2</sub> e ha <sup>-1</sup>	This parameter is verified.
DBH	Diameter at Breast Height (130 cm) for each tree with DBH equal to or greater than 10 cm in each plot of the forest inventory	Values available in Field Measure Sheet	This parameter has been appropriately taken.

Parameter	Description	Value monitored	Verification
Deforestation planned for forest management infrastructure	Forest cover areas converted into non-forest cover areas due to the construction of forest roads, trails, and yards necessary for forest management	Deforestation in the years 2017 to 2020	This parameter has been appropriately calculated.
$\Delta CabBSLLKt$	Changes in total carbon stock in the leakage belt area.	Carbon stock 2017 to 2020 of zero	This parameter has been appropriately calculated.
Assessment of damage to forest management activity	Evaluation of exploratory damage performed by sampling in the UPAs comparing the previous and subsequent situation of individuals present in the installed plots	Individuals damaged per hectare in UPA: 27, 01 and 10	This parameter has been appropriately calculated.
Frequency of surveillance and patrol operations	Record of the number of surveillance operations performed on the farm during the monitoring period	A record was made in 2020.	This parameter is verified.

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

The evidence used to determine the GHG reductions of GEI was of sufficient quantity and appropriate quality. The audit team took the following steps to assess the quantity and quality of the evidence for emission reductions:

- Recalculation and assurance of areas from project shapefiles.
- Recalculation and assurance of the of GHG emission reductions considering parameters, area, equations, etc.
- Comparison of what was recalculated with what was presented by the project proponent in its spreadsheet and the monitoring report.

The GHG emission reductions ex-post estimates were determined by the project proponent using sufficient quantitative evidence and properly qualitative evidence, as it was verified by the audit team.

## 4.6 Non-Permanence Risk Analysis

The project proponent uses the VCS non-permanence risk report to identify risks and mitigation measures to the project aspects. Justifications and mitigation measures were provided to calculate the total score, fulfilling the objectives of the VCS tool.

**Table 10. Evaluation of the project risks**

Risk	Assessment of rationale, assumptions, and justification	Assessment of quality of documentation and data provided	Conclusion
<b>Internal risks</b>			
Project management	The audit team evaluated the justification for the risk rating and the actions to mitigate the risk of illicit activities within the project area.	The documentation provided is the description of activities of mitigation and the experience of the project proponent that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.  The VVB finds that the mitigation measures are appropriate to cover risk.
Financial viability	The audit team evaluated the justification for rating the risks on project cash flow breakeven point	The documentation provided is a financial analysis that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.
Opportunity cost	The audit team evaluated the justification for rating the risk and the mitigation since the project is legally protected.	The documentation provided is the description and supports on forest regulations that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.

Risk	Assessment of rationale, assumptions, and justification	Assessment of quality of documentation and data provided	Conclusion
Project longevity	The audit team evaluated the justification for rating the risk and the mitigation on legal agreement or requirement to continue the management practice.	The documentation provided is the description and supports on possession and permitted uses of the land that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.
<b>External risks</b>			
Land Tenure and Resource Access/Impacts	The audit team evaluated the justification for rating the risk and the mitigation since the project is legally protected.	The documentation provided is the description and supports on forest and land tenure regulations that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.
Community Engagement	The audit team evaluated the justification for the risk rating on the consult to the households that depend on the project area.	The documentation provided is a in socioeconomic study that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate. Local populations are not reliant on the project area, the risk is not relevant to the project location.
Political risk	The audit team evaluated the justification for rating the governance risk and the mitigation on Country implementing REDD+ Readiness or other activities.	The documentation provided is a description of the participation of Brazil in REDD+ activities and governance indicators that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate.
<b>Natural risks</b>			
Fire	The audit team evaluated the justification for rating the fire risk and the actions of mitigation.	The documentation provided is the description of significance of the risk that allowed for assessment by the audit team and is therefore of good quality.	Risk rating is appropriate. The VVB finds that the mitigation measures are appropriate to cover risk. The other natural risks evaluated do not apply or are insignificant

The reported value of the overall risk rating, as determined based on the risk analysis, was 10%. The audit team performed a complete review of the risk analysis against the requirements of the AFOLU Non-Permanent Risk Tool. The audit team concludes that the assignment of risk scores is appropriate and in conformance to the AFOLU Non-Permanence Risk Tool.

## 5 VERIFICATION CONCLUSION

The project complies with the verification criteria for projects set out in VCS. The project has been implemented in accordance with the validated project description and the deviations were justified.

The audit team concludes that the climate benefits achieved by the project during the project implementation period are positive and that the project has achieved, its stated climate objectives.

The audit team concludes, with reasonable assurance, that the quantification of the net GHG emission reductions, during the verification period, is free of material misstatement and complies with the verification criteria.

Monitoring period: From 01/Jan/2017 to 07/Aug/2020.

The audit team confirms, with reasonable assurance, that the project generates a net reduction of GHG emissions of 1,046,092 tCO<sub>2</sub>e and 941,485 tCO<sub>2</sub>e<sup>6</sup> tradable credits (VCUs) applying a buffer of 10%.

Verified GHG emission reductions in the above verification period<sup>7</sup>:

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)	Buffer pool allocation	VCUs eligible for issuance
01/01/2017 - 31/12/2017	296,657	15,454	0	281,203	28,120	253,083
01/01/2018 - 31/12/2018	220,015	14,361	0	205,653	20,565	185,088
01/01/2019 - 31/12/2019	315,125	14,086	0	301,038	30,103	270,935

<sup>6</sup> The VCU result is presented by rounding off figures in the annual discrimination of the calculations. The foregoing justifies the difference of a couple of units when the buffer of 10% is applied directly to the net emission reduction.

<sup>7</sup> Calculations have been rounded.

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)	Buffer pool allocation	VCUs eligible for issuance
01/01/2020 - 07/08/2020	281,411	23.213	0	258.198	25.819	232.379
Total	1,113,207	67,114	0	1,046,092	104,607	941,485

# APPENDIX 1: DOCUMENTATION PROVIDED BY THE PROJECT

Use appendices for supporting information. Delete this appendix (title and instructions) where no appendix is required.

Folder		File name	
00-findings-responses	assessment-01	00-monitoring-report	ManoaMR_VCSv3.4_EN2.0.docx ManoaMR_VCSv3.4_PT2.0.docx
		01-FAR02	manejo-manoa-eng.png manejo-manoa-pt.png
		02-FAR03	response-finding-significance-assessment.pdf West et al. 2013. Forest biomass recovery after conventional and reduced-impact logging in Amazonian Brazil.pdf analise-significancia-monit-2017-2020.xlsx
		03-CL05	00-calculo-emissoes- vcs-monitreport-manoa-2020-v2.0.xlsx 01-risk-report- Manoa-VCS-RiskReportv4.0-2.0.pdf, Manoa-VCS-RiskReport-CalculationTool-v4.0.xls
		04-CAR06	empresas-clientes-manoa.xlsx
		05-CL07	geo-data- monitoramento-2017.zip, monitoramento-2018.zip, monitoramento-2019.zip arquivos-imagem.zip boletim-manoa-2017.pdf boletim-manoa-2018-2019-v2.pdf boletim-manoa-2018-2019.pdf
		06-CL09	20210709-certidao-inteiro-teor-atualizacao.pdf Esclarecimentos sobre a participação nas empresas do Grupo Triângulo_I.pdf
		FINDINGS- Manoa Project_BD-responses.docx	
	assessment-02	CL-09	Primeiro Aditamento - Manoa_2022-ass.pdf
		FAR-02	resumo-publico-auditoria-anual-2017.pdf resumo-publico-auditoria-anual-2018.pdf resumo-publico-auditoria-anual-2019.pdf resumo-publico-auditoria-anual-2020.pdf
		FINDINGS- Manoa Project_BD-responses-2.0.docx	
		ManoaMR_VCSv3.4_EN3.0.docx	
00-geo-data	kml	PropriedadeManoa.kmz	
	limites	Área-do-projeto	Área_projeto_redd2017.shp
		Cinturao-de-vazamento	LK_v5.shp
		Manejo-vazamento	LM_2.0.shp



Folder	File name			
	localidades	Regiao-de-referencia	Regia_referencia3.shp	
		Área-do-projeto.zip		
		Infraestrutura.shp		
	Manejo	Delimitacao-upas	2021-upas-manejo-triangulo-pt1.shp	
			2021-upas-manejo-triangulo-pt2.shp	
		Parcelas-permanentes	Shapes-inventario-manoa-2015.rar	
			APP UPA 01.shp	
		Upa-01	Arvores.shp	
			Divisao UT.shp	
			Estradas.shp	
			Hidrografia.shp	
			Parcelas permanentes.shp	
			Patios.shp	
			Picadao.shp	
			Picadas.shp	
			UPA 01.shp	
			Upa-10	APP.shp
		ARVORES.shp		
		DIVISAO_UT.shp		
		Estradas_principais.shp		
		Upa-27	APP.shp	
			Arvores.shp	
			Divisao_de_UT.shp	
			Estradas.shp	
			Hidrografia.shp	
			Nascente.shp	
			Parcelas_permanentes.shp	
			Patios.shp	
			Picadao_de_apoio.shp	
			Picadas.shp	
			UPA_27.shp	
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		Mapa-loc-Manoa-pt.png		
00-monitoring-report	ManoaMR_VCSv3.4_EN3.1.pdf			
	version-1.0	ManoaMR_VCSv3.4_EN1.0.pdf		
01-climate	00-emissions-calculation	Vcs-monitreport-manoa-2020-v2.0.xlsx		
		acuracy	Acuracia.zip	
			Manoa-acuracia-2020.xlsx	
		analysis	Analise-FREL-manoa.xlsx	
		prodes	Folder: analise-shp-prodes-2020	
			Desmat_acima200ha.shp	
			Prodes_ap_manoa.shp	
			Prodes_cv_manoa.shp	
			Prodes_rr_manoa.shp	
V1	Vcs-monitreport-manoa-2020.xlsx			

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			2001_Nair.pdf
			2009_Schroeder.pdf
			2009_Tominaga.pdf
			2010_EspiritoSanto.pdf
			2011_Lewis.pdf
			2012_CEPED.pdf
			2013_Araujo.pdf
			Modelo-economico-manoa_3.0.xlsx
			Worldwide-governance-indicators-1996-2020.xlsx
	V1	Manoa-VCS-RiskReport-CalculationTool-v2.xlsx	
		Manoa-VCS-RiskReport4.0-1.0.pdf	
		Manoa-VCS-RiskReport-CalculationTool-v4.0.xlsx	
	02-tabelas	Manoa-VCS-RiskReportv4.0-2.0.pdf	
Tabela-prodes2020-ap-manoa.xlsx			
Tabela-prodes2020-cv-manoa.xlsx			
Tabela-prodes2020-rr-manoa.xlsx			
02-financial-statement	2019	Balancete-geral-gastos-carbono-2019.pdf	
		Balancete-geral-gastos-carbono-2019-.pdf	
		Despesas-carbono-2019-total.pdf	
		Razao_contabil_conta_35810200001_2019.pdf	
	2020	Despesas_Carbono_2020.pdf	
2.2-stakeholders-consultation	2019-ficha-monitoramento-social.pdf		
	Folder-triangulo-eng.pdf		
	Folder-triangulo-pt.pdf		
	Foto-caixinha-de-sugestoes.jpeg		
2.3-specific-safeguards	01-property-rights	2012-08-renovacao-licenca-ambiental-propiedade-rural-2012ª2017.pdf	
		2013-certidao-inteiro-teor.pdf	
		2013-certidao-vintenaria.pdf	
		Cadastro-ambiental-rural.pdf	
		Titulo-definitivo-incra-dominio-14.pdf	
		Titulo-definitivo-incra-dominio-15.pdf	
	02-mitigation-activities	Titulo-definitivo-incra-dominio-16.pdf	
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		201904-treinamentos.pdf	
		201910-202010-sesi-prevencao-riscos-ambientais.pdf	
201910-202010-sesi-programa-saude-ocupacional.pdf			
Contrato_Manoa_assinado.pdf			
3.1.1-surrounding-communities	2017	2017-realtorio-de-atividades-visitas.pdf	
	2019	Folder: 20190709-visita-escola-emef-aluisio-becker, fotos (39 photos)	
		Folder: 20190919-visita-escola-antonio-francisco-lisboa, fotos (14 photos)	
		20191001e02-visita-faro (3 documents .pdf)	
	complementar	Doacao-mascaras	202004-doacao-mascaras-invasivas-oxigenio.pdf
		parouquia	2019-oficio-e-recibo-parouquia-sao-joa-batista.pdf
		IMG-20191027-WA0020.jpg	

Folder	File name		
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			2019-acoes-sociais-print-relat-monitoramento-upa-10.png
3.1.2-land-use-land-cover-change	01-monitoring-bulletins	2017	Boletim-manoa-2017.pdf
		2018	Boletim-manoa-2018-2019.pdf
		2019	Boletim-manoa-2018-2019-v2.pdf
	02-surveillance	Libro-de-entrada-fazenda	Controle-entrada-fazenda-1.jpeg
			Controle-entrada-fazenda-2.jpeg
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			20200727-30-ronda-vigia.pdf
			20200803-06-ronda-vigia.pdf
	03-forest-managment	Autorizacao-exploracao	201704-autex-upa-27.pdf
			201804-autex-upa-01.pdf
			201904-autex-upa-10.pdf
			201904-autex-upa-15.pdf
		Doc-acopio	2018-carta-manejo.jpg
			2018-mapa-tematico.jpg
			2018-PMFS-manoa.pdf
		Parcelas-permanentes	FICHA DE CAMPO E ESTATISTICAS.xlsx
			Plano-monitoramento-estoque-carbono-v1.pdf
			RELATORIO ESTOQUE DE CARBONO-INCLUSAO DE NOVAS AMOSTRAS.pdf
		Plano-operacao-anual	2016-POA-UPA-27.pdf
			2017-POA-UPA-01.pdf
			2018-POA-UPA-10.pdf
			2020-POA-UPA-15.pdf
		procedimentos	201211-manual-procedimentos-gerais-manejo.pdf
			202006-manual-procedimentos-gerais-manejo.pdf
			2020-ficha-epi-funcionarios-manejo.pdf
		Relatorio-monitoramento-AMF	2019-relatorio-monitoramento-AMF-UPA-27e01-2017-2018.pdf
			2020-relatorio-monitoramento-AMF-UPA-10-2019.pdf
		Relatorio-pos-exploratorio	201804-relatorio-final-UPA-27-e-protocolo.pdf
			201904-relatorio-final-UPA-01.pdf
			201912-relatorio-final-UPA-10.pdf
		Relatorio-vistoria	201812-relatorio-vistoria-encerramento-UPA27.pdf
			201903-relatorio-vistoria-encerramento-UPA01.pdf
			202011-relatorio-vistoria-encerramento-UPA10.pdf
3.1.1-leakage-management	00-descharacterization-	_referencias	2010-zoneamento-rondonia.pdf
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			2018-periodo-eleitoral.pdf

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			ci_redd-developers-guidebook-pg.47.pdf
			logistica-flona-jacunda.pdf
			PROJETO DE LEI COMPLEMENTAR - ZONEAMENTO - 27-05-202.pdf
			SILVA-MICHALSKI-2020.pdf
			linha-tempo-mindmap.png
	3-1-3-leakage-monitoring.pdf		

## APPENDIX 2: FINDINGS

Pending FAR (from the last verification report)	01	Potential Impact: High
Description	<p>Interviews with the project staff reveals that surveillance operations are happening without the planned strategic REDD+ approach. The project proponent has systematically monitored the project area and the reference region and produced a deforestation report (bulletin), but this information was not used to support strategic surveillance activities, in the manner described according to the project activity description, which stated that the surveillance strategy would be informed by geospatial information and improved surveillance protocols. Instead, the audit team found that surveillance and territory protection activities were being carried by Manoa, as a project proponent, and that geospatial intelligence was being produced by Biofilica, during the first monitoring period, without intrinsic action coordination between the two of them. The audit team have raised a FAR to signalize the necessity of evidence the implementation of the reviewed surveillance protocols in future verification events. In other words, evidence of coordinated actions between the two project proponents to correctly implement the project activities as described in the validated project description and in a way to improve forest protection measures.</p>	
Project owner Response (14-01-2022)	<p>The first steps to improve the asset surveillance processes began in 2016, with the start of the generation of deforestation bulletins using PRODES data, after the first verification the project proponents started to use the data accordingly, so that the bulletin gives a support to the field team identifying areas of higher risk, making the rounds more assertive.</p> <p>Additionally, to demonstrate the coordinated actions between the parties, in 2020, as part of the implementation of the REDD+ strategy at Fazenda Manoa, the patrols started to be registered in standardized forms, generating a history of the actions. Both activities were better described in section 3.1.2 of the Monitoring Report, in the description of the activity "Physical patrol of the area". All the evidence has already been delivered to VVB and analyzed in the field audit.</p>	
Assessment 1	<p>The project describes in the monitoring report that the bulletins provided the necessary support for the surveillance operations. However, it is not yet clear whether the points suggested in the bulletins for on-site verification were included in the surveillance operations carried out, since there is no evidence of its use on field and its results.</p>	
Project owner Response (10-02-2022)	<p>The proponents understand that the tool used during the monitored period to register the project's surveillance rounds does not make clear the relationship with the survey done with the PRODES monitoring bulletins. This occur mainly because during this period the focus was only on recording the field activities, which did not occur before.</p>	

	<p>Understanding the need to clarify this relationship between the documents prepared for the project, the proponents commit to evaluate and adapt the tool used, in order to make clearer the relationship between the data in the monitoring bulletins and the field activity, besides making its elaboration more agile and effective for the team.</p> <p>This point was better detailed in section 3.1.2 of the Monitoring Report, in the description of the activity "Physical patrol of the area".</p>
Assessment 2	<p>The proponent of the project will carry out the evaluation and adaptation of the tools to ensure and clarify the articulation between the bulletins and the forest surveillance activities. It is proposed as a FAR given that during the current monitoring period emphasis was placed on field activities with the support of geographic information generated by one of the project proponents, however, the coordination of forest surveillance activities was not clearly evidenced according to the validated project description. This topic will be subject to review in the next verification.</p>
Auditor Conclusion	<p>FAR remains open</p>

Pending FAR (from the last verification report)	02	Potential Impact: Hight
Description	<p>Manoa's Farm has a valid FSC certification. The certification status was kept during the monitoring period, which guarantee that the forest was logged using sustainable practices and the project proponent physical presence in the area. The forest management operation helps to secure the land against invaders and illegal loggers by showing to the deforestation agents that the land has a stablished governance and monitoring protocols. The REDD+ activities, will help and orient the forest management decision processes, such as the choice of areas to be managed, access roads to be blocked, or new spots to build surveillance patrols. The project staff presented evidence of activities performed by the forest management operators to avoid unplanned deforestation, degradation, and invasions, such as the orientation of exploitation of UPAs in the north of the farm to ensure physical presence in the region, as well as the destruction of access roads to the end of the farm and the construction of monitoring stations ("Casa do Curica"). However, these actions have not clearly happened driven by REDD+ project inputs, according to the project proponent's strategy. The strategy was not applied as described in the project activity description, which, suggested that strategic land management decisions for controlling illegal access would be guided by geospatial information. Instead, the audit team observed that territory protection activities were being carried by Manoa, as part of the Forest Management Operation activity and as a project proponent, while, in the other side, geospatial intelligence was being produced by Biofilica. During the first monitoring period, the audit team hasn't noted an intrinsic action coordination between the two of them. The audit team have raised a FAR to signalize the necessity of evidence the implementation and the results of this joint management protocols in future verification events. In other words, evidence of</p>	

Pending FAR (from the last verification report)	02	Potential Impact: Hight
	coordinated actions between the two project proponents to correctly implement the project activities as described in the validated project description and also in a way to improve forest protection measures.	
Project owner Response (14-01-2022)	<p>Section 3.1.2 of the MR was altered to make it clearer how the management operations are related to the activities of the REDD+ project, in such a way that together they help to contain deforestation in the area. A map was drawn up relating the APUs exploited with the deforestation that occurred in the monitored period, which was the basis for the justification elaborated (1) (2).</p> <p>Evidences:</p> <ul style="list-style-type: none"> <li>(1) manejo-manoa-pt</li> <li>(2) manejo-manoa-eng</li> </ul>	
Assessment 1	<p>The project describes the articulation between forest management activities and activities of the REDD+ project.</p> <p>The validity of the FSC certificate for the second monitoring period is not evidenced on the Project's Document Management.</p>	
Project owner Response (10-02-2022)	<p>Section 3.1.2 of the MR has been adjusted to make clearer the relationship of the FSC certificate of forest management operations to REDD+ activities and as a demonstration of the continuity of the FSC certificate. The public summaries for the monitored period were added (1) (2) (3) (4).</p> <p>Evidences:</p> <ul style="list-style-type: none"> <li>(1) resumo-publico-auditoria-anual-2017</li> <li>(2) resumo-publico-auditoria-anual-2018</li> <li>(3) resumo-publico-auditoria-anual-2019</li> <li>(4) resumo-publico-auditoria-anual-2020</li> </ul>	
Assessment 2	<p>The evidence (4 reports) was analyzed and is consistent with the description included in the MR. The inclusion of supporting documentation was verified.</p> <p>The project describes in the monitoring report that during the second monitoring period (2017-2020), 4 FSC audits were carried out, ensuring that the forest was exploited using sustainable practices and the physical presence of the proponent in the area, as well as reinforcing the performance of sustainable forest management activities aligned with REDD+ activities and the sustainable use of natural resources.</p>	

Pending FAR (from the last verification report)	02	Potential Impact: High
Auditor Conclusion	The finding has been closed successfully.	

Pending FAR (from the last verification report)	03	Potential Impact: High
Description	<p>In relation to changes in carbon stocks due to planned activities (VM0015 v1.1, step 7.1.1) the proponent considers two types of activities: planned deforestation, due to the construction of yards and roads and planned degradation, depending on the forest exploitation. According to the methodology, if there is a significant change in carbon stocks due to a project activity, this change must be estimated ex-ante and ex-post measurement. The proponent presented an analysis of the significance of the planned carbon stock changes as a function of the forest exploitation, allowing excluding it (ref 81). This analysis was based on the "Tool for testing significance of GHG emissions in A/R CDM project activities". The proponent has considered the average exploitation intensity, according to post exploitation reports and the forest regeneration capacity, based on the annual net volume increment of a similar forest and management condition, according to West (2013), to estimate the emissions related to the forest management activity. The emissions were compared to the overall project emissions, considering the equation 1 of the referenced tool. The audit team consider the proponent's approach acceptable and the calculation presented as accurate (ref. 89). The proponent still constructs the reasoning that the emissions from the forest management activity were conservatively excluded from the project, due to the positive carbon balance, caused by the regeneration and growth of the trees after the exploitation, supporting their claim with scientific articles (ref. 80). The audit team has raised this FAR in order to signalize the need of verifying that the forest logging operations are not going above the harvest intensities that were shown in the significance analysis in future verifications.</p>	
Project owner Response (14-01-2022)	<p>As a way to demonstrate that the forest management operations are not above expectations, the calculation of significance of management activities was performed according to the "tool for testing significance of GHG emission in A/R CDM project activities". The result obtained was a 3% significance of emissions related to the exploration activities. In order to prove the value obtained, the proponents provided the VVB team with the spreadsheet with the significance analysis (1), a document explaining the methodology applied (2) and the reference of the regeneration potential of forest management areas (3). Additionally, section 5.2.2 was adjusted.</p>	



Pending FAR (from the last verification report)	03	Potential Impact: High
	Evidences: (1) analise-significancia-monit-2017-2020 (2) response-finding-significance-assessment (3) West et al. 2013. Forest biomass recovery after conventional and reduced-impact logging in Amazonian Brazil	
Assessment 1	The project showed that the possible decreases in the carbon stock due to the logging activity are insignificant compared to the ex-post emissions.	
Auditor Conclusion	The finding has been closed successfully.	

CL	04	Potential Impact: Medium
Description	According to described in MR, section 2.2 (...) <i>“Documents related to the Manoa REDD+ Project were made available through virtual means on the Verra and Biofíllica websites” (...), “In the same sense, the results obtained for the monitored period are available on these platforms for access to stakeholders who want to consult” (...)</i> however, the documentation related to the second monitoring/verification is not available on the Verra website.	
Project owner Response (14-01-2022)	Section 2.2 of the MR was modified to make it clearer that the documents are available for stakeholder access on the Verra and Biofíllica websites.	
Assessment 1	According to numeral 4.5 of the VCS Program document Registration and Issuance Process, the monitoring report must be included in the relevant documents in Verra registry. The monitoring report of the second verification is not available on the Verra website.	
Project owner Response (10-02-2022)	Section 2.2 of the Monitoring Report was altered to make clearer the availability of documents to stakeholders, since the documents referring to the validation and first VCS verification of the Manoa REDD+ Project were made available through virtual means on the Verra registry platform.  The documents referring to the current monitoring period will be made available after the finalization of the audit.	
Assessment 2	The VVB will assess the updates of the documents in Verra registry platform.	

CL	04	Potential Impact: Medium
Auditor Conclusion	The finding has been closed successfully.	

CL	05	Potential Impact: Low
Description	<p><u>Information quality management</u></p> <p>-The emissions calculations- Sheet Summary has a different value than the others sheets even than the value used and resulting from the Risk report.</p> <p>-In the MR, numeral 3.2.2 Project Description Deviations, there is not consistency with the project name.</p> <p>(...) <i>"Additionally, there are no contractual or other legal implications in the contract of the REDD+ RESE X Rio Preto-Jacundá Project, or any other project implemented by Biofilica prior to this transaction, because of the entrance of a new partner of Biofilica" (...)</i></p>	
Project owner Response (14-01-2022)	<p>The values referring to the emission calculation in the summary spreadsheet were adjusted (1). As for the Risk Report, the results table was adjusted with the updated data (2) (3).</p> <p>In the MR, section 3.2.2 (Project Description Deviations), the project name has been adjusted to Manoa REDD+ Project.</p> <p>Evidence:</p> <p>(1) vcs-monitreport-manoa-2020-v2.0 (2) Manoa-VCS-RiskReport-CalculationTool-v4.0 (3) Manoa-VCS-RiskReportv4.0-2.0</p>	
Assessment 1	The documentation has been updated.	
Auditor Conclusion	The finding has been closed successfully.	

CAR	06	Potential Impact: Medium
Description	There is no described in the MR, numeral 1.11 Sustainable development, Table 02 nor evidence in the Annexes thereto, the documentary evidence/support of the project contributions to the SDG during the second monitoring period.	

Project owner Response (14-01-2022)	<p>Section 1.11 of the Monitoring Report, referring to Sustainable Development, was complemented with the references of the activities related to each SDG. Section 3.1.1 was supplemented to clarify compliance with SDG 12. Furthermore, additional evidence related to it was made available and provided to VVB (1).</p> <p>Evidence:</p> <p>(1) empresas-clientes-manoa</p>
Assessment 1	The project has described and presented the evidence about the project contributions to the SDG during second monitoring period.
Auditor Conclusion	The finding has been closed successfully.

CL	07	Potential Impact: Medium
Description	There is no evidence in the management system the products and GIS data management as support of the leakage monitoring (MR numeral 3.1.3)	
Project owner Response (14-01-2022)	<p>Leakage management is monitored with the same premises as the monitoring of deforestation in the project area. In this sense, through satellite images, annual bulletins are prepared that serve as support for understanding the context of the region of the leakage belt. To clarify this methodology in the MR, section 3.1.3 was amended. In addition, the evidence sent to the VVB team in the shared audit folder was revised, adding, mainly, the data from the monitoring bulletins generated throughout the monitored period (1) (2) (3) and the GIS files used for their elaboration (4).</p> <p>Evidence:</p> <p>(1) boletim-manoa-2017 (2) boletim-manoa-2018-2019 (3) boletim-manoa-2018-2019-v2 (4) geo-data</p>	
Assessment 1	The project has presented the GIS data as support of leakage monitoring.	
Auditor Conclusion	The finding has been closed successfully.	

CL	08	Potential Impact: Low
Description	<u>Methodology implementation</u>	

CL	08	Potential Impact: Low
	<p>-There is not clarity about the compliance of the applied methodology VM0015:</p> <p><i>“Project activities may include some level of planned deforestation, but planned deforestation is excluded from the baseline”</i></p> <p><i>“Baseline activities may include planned or unplanned logging for timber, fuel-wood collection, charcoal production, agricultural and grazing activities as long as the category is unplanned deforestation according to the most recent VCS AFOLU requirements”</i></p> <p><i>“Areas of planned deforestation in the baseline case must be excluded from the project area.”</i></p> <p>For this monitoring period, the PP reports that the project area has not emissions for unplanned deforestation and includes the GHG emissions for planned deforestation. (Relates also to pending FAR 03)</p> <p>-It is not clear why the degradation due the forestry management in the project area is not considered as a disturbance element that affects the concept of stable forest.</p>	
Project owner Response (14-01-2022)	<p>During the monitoring period, the project in fact did not generate emissions due to unplanned deforestation because of the performance of the proponents in the governance and security of the area, being the main result of the activities carried out in this period. Regarding the planned emissions, according to what was validated, they refer to the implementation of infrastructure such as, for example, opening of roads, and forest patios in each annual production unit (UPA) within the project area explored in the monitored period, being the only emissions discounted from the project area.</p> <p>Regarding logging activities, the significance of management activities was calculated according to the "tool for testing significance of GHG emissions in A/R CDM project activities". The result obtained was 3% in relation to logging activities, which is below the 5% significance threshold required by the methodology. Thus, the PPs understand that it is not necessary to consider degradation due to forest management in the project area. The evidence presented in FAR03 and the adjustments made in section 5.2.2 detail this analysis.</p>	
Assessment 1	<p>The project has clarified the calculations on planned deforestation in accordance with what is allowed by the methodology VM0015.</p> <p>The project has clarified that it does not consider the concept of degradation because the emissions from logging activities are insignificant according to the analysis carried out using the methodological tool.</p>	
Auditor Conclusion	<p>The finding has been closed successfully.</p>	

CL	09	Potential Impact: Medium
Description.	<p>It has been identified in Certificate Full Content (updated 2021-07-09), that the ownership of project land (Manoa Farm) has been transferred from PP Triangulo Pisos e Paineis Ltda, who executed the agreement with PP Biofilica, to Manoa Sustentavel Exploração e Serviços Florestais Ltda, who is owned by Reale Comercio de Pisos Ltda, who has the same shareholders of Triangulo. Nevertheless, it has not been presented to verification team evidence of cession of carbon rights to Bioilica by the actual-current land owner, i.e. Manoa Sustentavel, nor has any clarification given in Monitoring Report about this change of land ownership, even though new owner belongs o same economic group Triangulo.</p>	
Project owner Response (14-01-2022)	<p>Item 3.2.2 of the MR was amended to clarify the situation that led to the change in land ownership and the consequences of this for the project. In addition, an explanatory note from the Triângulo Group (1) and the updated full title certificate of the farm (2) are available to VVB. Additionally, the PPs are already mobilizing for the contractual update to include this change, in order to make it clear that there are no impacts to the carbon cession with this change.</p> <p>Evidence:</p> <ul style="list-style-type: none"> <li>(1) Esclarecimentos sobre a participação nas empresas do Grupo Triângulo_I</li> <li>(2) 20210709-certidao-inteiro-teor-atualizacao</li> </ul>	
Assessment 1	<p>Section 3.2.2 of MR has been amended providing clarification of the change of the ownership of the land.</p> <p>Nevertheless, the announced intention to update/amend the contract with Biofilica regarding the cession of carbon rights has not been presented. Even though the current shareholders of Triangulo Pisos e Paineis Ltda (former owner of project land) and Reale Comercio de Pisos Ltda (who currently owns 100% of Manoa Sustentável Exploração e Serviços and Paines Ltda, which is the current owner of project land), these are two different entities, and in case of any change in shareholders, the carbon rights defined in the agreement with Biofilica could be compromised.</p> <p>Therefore, it is not possible to close out this finding before the agreement with Biofilica is amended.</p>	
Project owner Response (10-02-2022)	<p>The project proponents evaluated the situation of the impact of the change of owners of the farm, and defined, with the objective of facilitating the understanding in relation to the cession of carbon rights and also to officialize the activities already carried out by Manoa, to elaborate an amendment to the contract of the Manoa REDD+ Project, where Triângulo Pisos e Painéis Ltda, is no longer the proponent of the project (Released Representative) and gives way to Manoa Sustentável Extração e Serviços Florestais Ltda (Adherent Representative). This amendment was agreed upon and signed by the legal heads of the institutions and was made available to the VVB (1). Additionally, section 3.2.2 of the Monitoring Report has been changed to make clear</p>	

CL	09	Potential Impact: Medium
	<p>the deviation that occurred in the project, clarifying that this change does not impact the additionality or the applicability of the project, since both companies are within the same Group and the guidelines previously adopted in the project remain the same.</p> <p>In addition, the proponents decided that, with the conclusion of the audit by VBB, they will forward to Verra, in addition to the monitoring and verification report, the appropriate documentation for updating the project registration with regard to the updating of the proponents. All other sections of the MR that refer to the bidders have been updated, keeping only Biofilica and Manoa (Sections 1.3, 2.3, and 4.3.1).</p> <p>Evidences:</p> <p>(1) Primeiro Aditamento - Manoa_2022-ass</p>	
Assessment 2	<p>Amendment to the contract of the Manoa REDD+ Project, where Triângulo Pisos e Painéis Ltda, is no longer the proponent of the project (Released Representative) and gives way to Manoa Sustentável Extração e Serviços Florestais Ltda (Adherent Representative) was verified.</p>	
Auditor Conclusion	<p>The finding has been closed successfully.</p>	