VALIDATION REPORT FOR TAHUAMANU AMAZON REDD PROJECT

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Summary:

AENOR INTERNATIONAL S.A.U (AENOR) has performed the validation of the project "TAHUAMANU AMAZON REDD PROJECT" in Perú on the basis of Voluntary Carbon Standard (VCS) and Climate, Community & Biodiversity standard (CCB), as well as the host country criteria.

The project is located in Madre de Dios, a region in the south-east of the Peruvian Amazon with the most accelerated deforestation rate of Peru. The REDD+ project, with 171,584.07 hectares is located within the Tahuamanu Province, covering the districts of Iñapari, Iberia, Tahuamanu and Las Piedras in the department of Madre de Dios. The area faces increasing threats from unsustainable agrarian practices from neighbouring local communities.

The project plans to combine an increase in protection measures (patrolling, working together with other forest concessions and the forest and political authorities) with the promotion of productive activities for neighbouring communities, as a strategy to offer alternative sources of income that do not imply the clearing of forest areas. Based on this approach, the project expects to reduce projected deforestation.

The purpose validation is to have an independent, third party assess the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant VCS and CCB requirements.

In order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria, the validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and internal technical review followed by the issuance of the final validation report and opinion. In the course of the validation process 6 corrective actions and 4 clarifications were raised, all have been successfully closed.

The purpose of the visit assessment was to determine the conformance of the project with respect to the VCS Version 4 Standard and the Third Edition of the CCB Standard and information provided in the joint project description. The field visit took place from 23 to 26 November 2021 in which the lead auditor visited the project area, interviewed key stakeholders, staff and other related experts, and also reviewed the CCB-VCS-PD and supporting documents. Additional to site visit, meetings via teleconferences were carried during December 1 and 2, 2021; in order to validate the baseline calculation and verify the processing data from satellite images. The scope of the validation was to assess the conformance of information in the project design document with the VCS and CCB standards.

This validation report has been submitted to the PP in which 6 CARs and 4 CLs were reported /9/ (see validation protocol in appendix II) for VCS and CCB. However, all these issues raised during the validation process where appropriately closed by means of corrections, more clear explanations and other supported documents.

Hence, once all issued detected were appropriately solved, AENOR carried out a final validation report and deems with reasonable level of assurance that the project complies with all of the validation criteria for VCS and CCB. The assessment team has no restrictions or uncertainties with respect to the compliance of the project with the validation criteria, hence, the audit team concludes that the net GHG emissions reductions or removals, for the lands included in the project boundary at validation stage has been quantified in accordance with VCS rules. AENOR assessed the calculations and can confirm

Summary:

estimated GHG emission reductions are correct, the project expects to avoid annual average net emissions of 1,306,754 tCO_2e (without discounting buffer emissions) for the whole crediting period.

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1 INTRODUCTION

1.1 Objective

The purpose of the validation audit activity was to conduct an independent assessment of the project in order to determine whether the project complies with the validation criteria, as set out in the guidance documents listed in Section 1.2 of this report.

1.2 Scope and Criteria

Validation Scope: The scope of the validation audit is to validate the emissions reductions of the proposed project activity in Peru against the Verified Carbon Standard, the identified methodology and associated tools as well as to validate the Climate Community and Biodiversity requirements of the CCB Standard.

The objectives of this audit included a validation of the projects calculated emission reductions with the Verified Carbon Standard requirements and any additional requirements of VCS AFOLU projects, besides the assessment of the additionality and the risk assessment report. For the CCB Standard also were validated the benefit on Climate Community and Biodiversity generated by the project activities.

The scope was defined as follows:

- The project and its baseline scenarios;
- The physical infrastructure, activities, technologies and processes of the project;
- The GHG sources, sinks and/or reservoirs those are applicable to the project;
- The types of GHGs that are applicable to the project; and
- The project crediting period, as discussed in Section 3.2.11 of this report

Standard Criteria: Even though, the version in force is version 4.2 of VCS standard; project developer is applying templates form from version 3, since they are the ones that are available jointly for VCS and CCB programs. The validation assessment was performed in accordance the reequipments detailed in section 4 of the VCS standard; including the following documents:

- VCS Program Guide, v4.1 /1/
- VCS Standard, v4.2 /2/
- Program Definitions, v4.1 /3/
- AFOLU Non-Permanence Risk Tool, v4.0 /4/
- Climate, Community & Biodiversity Standards, v3.1 /5/
- CCB Program Rules, v3.1 /6/

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

1.3 Summary Description of the Project

The project is located in Madre de Dios, a region in the south-east of the Peruvian Amazon with the most accelerated deforestation rate of Peru. The REDD+ project, with 171,584.07 hectares is located within the Tahuamanu Province, covering the districts of Iñapari, Iberia, Tahuamanu and Las Piedras in the department of Madre de Dios. The area faces increasing threats from unsustainable agrarian practices from neighbouring local communities.

The project plans to combine an increase in protection measures (patrolling, working together with other forest concessions and the forest and political authorities) with the promotion of productive activities for neighbouring communities, as a strategy to offer alternative sources of income that do not imply the clearing of forest areas. Based on this approach, the project expects to reduce projected deforestation.

With these actions, the project expects to avoid a total of 13,067,541 tCO_2e according to the baseline scenario projected for the first 10-year period, with an annual average of net emissions of 1,306,754 tCO_2e.

The objectives of the "Tahuamanu REDD+ Project" are:

- Avoid 35,407.20 has of forest loss in the coming 10 years
- Avoid the negative impact over the biodiversity (including 09 species under some risk of extinction) that lives within or depend on the area under threat
- Contribute with the improvement of welfare of 12 neighbouring communities

Therefore, the project will contribute to the mitigation of climate change, conserving biodiversity and generating benefits for the population of the community. The project goals include the conservation and reduction of deforestation; contribute to improve the quality of life of neighbourhood and local stakeholders; and the conservation of biodiversity.

2 VALIDATION PROCESS

2.1 Audit Team Composition (*Rules* 4.3.1)

Name	Position in the team
Richard Daniel Gonzáles Toledo	Lead auditor
Javier Cócera Cañas	Technical reviewer

The auditors have the Spanish as mother language which is the official language in Peru where the project is located. The auditors have experience in social and cultural issues. They have been auditing CDM, VCS, CCB and GS projects in AENOR for more than 10 years all around the world.

Richard Gonzales is an auditor located in host country. He has many experiences as validator and verifier of VCS&CCB projects in Perú and Colombia. He is an engineer specialized in Mechanical and Electrical with a post grade in Energy with experience in LULUCF activities in VCS, CDM and GS schemes from more than 10 years.

Javier Cócera is a forest engineer with a master in forest management. He has developed his career focused to the forest management. Mainly he has been working through sustainability in two ways: in forestry consultancy, developing forest management plans, working with GIS and LiDAR both in the field and the office and getting experience of the forest resources; and in developing environmental footprint projects and sustainability reports. Currently, Javier is working in AENOR as auditor focused in AFOLU projects.

2.2 Method and Criteria

The validation was performed through a combination of document review, interviews with relevant personnel and on-site inspections, as discussed in Sections 2.2 through 2.4 of this report. At all times, the

project was assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5, findings were issued to ensure that the project was in full conformance to all requirements

2.3 Document Review

The Project Description submitted by the PP was reviewed against the approved methodology and against VCS and CCB requirements. Additional background documents related to the project design, baseline, additionality, community and biodiversity objectives were also made available before and during the on-site visit in Peru along with the Non-Permanence Risk Reports.

To address the corrective actions and clarification requests that arose from the desk review and on-site visit, the project developer revised the project description document version 01 /7/, dated on 01 march, 2021 and developed a final version 6 /8/ dated on 26 July 2023.

2.4 Interviews

The AENOR validation team composed of Richard Gonzalez conducted interviews with project developers; local stakeholders; and key personnel involved in the project activity, in order to confirm selected information and to resolve issues identified in the document review.

The field visit took place from 23 to 26 November 2021 in which the lead auditor visited the project area, interviewed key stakeholders, staff and other related experts, and also reviewed the PD and supporting documents. The people interviewed were those directly affected or involved in the project activity and in some cases were just indirectly affected.

Audit Date	Name	Title	Activities
23/11/2021	Nelson Kroll	General Manager/ MADERACRE	Status of the project activity (Operation and implementation) Property and land use rights Stakeholder identification and analysis used to identify communities Project Communication & Grievance Mechanism Characteristics of the project
	Mirian Chupan	Social Responsibility/MADERACRE	
	Luis Ñaña	Forestry management chief/MADERACRE	
	Karen Parra	Administration chief/MADERACRE	
	Cesar Carcheri	E&M chief/MADERACRE	
24/11/2021	Abraham Cardozo	Mayor of Tahuamanu province	Comments and opinions about the project Benefits of project activities Impacts of the project Sanctions
	Rosa Valdez	Lieutenant mayor of Flor de Acre	
	Willy Neyra	Park ranger - SERNAMP	Patrolling activities Illegal activities within the project

Audit Date	Name	Title	Activities
	Sonia Chipana	Principal of I.E. Iñapari School	Comments and opinions about the project Benefits of project activities Impacts of the projects Project dissemination of monitoring results Agreements
	Marina Jurado	Principal of Primavera School	
	Ricardo Ramos	Representative of San Francisco	
	Teofilo Huaman	Representative of Nueva Esperanza	
	Karla Sumalave	Representative of Noaya	
	Irene Cardozo	President of Nuevo Iñapari Association	
	Milagro Lopez	President of Iñapari Mothers club	
25/11/2021	Griseldo Pereyra	Belgica Native Community member	Comments and opinions about the project Benefits of project activities Impacts of the projects Project dissemination of monitoring results Agreements
	Ricardo Lopez	Belgica Native Community member	
	Manuela Serrano	Teacher of Belgica Native Community School	
	Erica Suares	Belgica Native Community member	
	Leda Batista	Belgica Native Community member	
	Nazareno Aspajo	Belgica Native Community member	
	Esau Marcelo	Keeper/MADERACRE	Working conditions Health and safety at work Project dissemination Patrolling activities
	David Flores	Keeper/MADERACRE	
	Cesar Carcheri	Valorisation and monitoring chief/MADERACRE	Forest harvesting Woking conditions Health and safety at work

Additional to site visit, meetings via teleconferences were carried during December 1 and 2, 2021; in order to validate the baseline calculation an verify the processing data from satellite images. The scope of the validation was to assess the conformance of information in the P.D with the VCS and CCB.

The complete list of interviewees is found in appendix III.

2.5 Site Inspections

The objectives of the on-site inspections performed were mainly to cross check the description provided in the project description related to the environmental conditions of the project area, including:

- Ensure that the geographic area of the project, as reported in the PD and the accompanying KML file, is in conformance with Section 3.10.3 of the VCS Standard;

- Perform a risk-based review of the project area to ensure that the project conforms to all other requirements of the VCS rules and the methodology.
- Observe the Project Proponent's evidence and collect and record data in order to assess whether data collection techniques conform to the monitoring plan and related documentation and to evaluate data quality control systems.
- Select samples of data and information for validation in order to meet a reasonable level of assurance and to meet the materiality requirements of the project, as required by Section 4.1.8 of the VCS Standard;
- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the VCS rules and the applicability conditions of the methodology; and
- Interview local authorities to confirm that the project operates in accordance with current permits and authorizations and its relationship with local actors and communities.

Additional to the site inspection, meetings via teleconferences were carried with project representants and personnel in charge of carrying out the calculations, image processing, monitoring, beta regression, additionality and unique metrics report.

2.6 Public Comments (*Rules* 4.6)

The Joint project description (CCB-VCS-PD) was submitted to the VCS website for a 30-day public comment period from 04/08/2021 to 03/09/2021. No public comments were received during the validation process. Validation team confirmed this issue against public information in VERRA database platform.

2.7 Resolution of Findings

All findings issued by the AENOR audit team during the validation process have been closed for both VCS and CCB Standards. In accordance to VCS and CCB requirements, all findings issued during the validation process, and the inputs for their closure, are described in Appendix II of this report.

2.7.1 Forward Action Requests

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

3 VALIDATION FINDINGS

3.1 Summary of Project Benefits

Section 1.2 of CCB-VCS-PD summarize the standardized benefit metrics, including: GHG emission reductions or removals; Forest cover; Improved land management; Training; Employment; Livelihoods; Health; Education; Water; Well-being and Biodiversity conservation. The audit team reviewed information reported in this section against supporting evidences listed in appendix I; also, AENOR validation team has verified that all achievements reported are substantiated with information provided in the body of the CCB-VCS-PD.

3.2 General

3.2.1 Summary Description of the Project (G1.2)

The project is located in Madre de Dios, a region in the south-east of the Peruvian Amazon with the most accelerated deforestation rate of Peru. The REDD+ project, with 171,584.07 /9/ hectares within the Tahuamanu Province, covering the districts of Iñapari, Iberia, Tahuamanu and Las Piedras in the department of Madre de Dios. The area faces increasing threats from unsustainable agrarian practices from neighboring local communities.

The project plans to combine an increase in protection measures (patrolling, working together with other forest concessions and the forest and political authorities) with the promotion of productive activities for neighboring communities, as a strategy to offer alternative sources of income that do not imply the clearing of forest areas. Based on this approach, the project expects to reduce projected deforestation.

With these actions, the project expects to avoid a total of 13,067,541 tCO_2e according to the baseline scenario projected for the first 10-year period, with an annual average of net emissions of 1,306,754 tCO_2e.

The objective of the "Tahuamanu REDD+ Project" is to contribute to the mitigation of climate change, conserving biodiversity and generating benefits for the population of the community. The project goals include the conservation and reduction of deforestation; contribute to improve the quality of life of neighbourhood and local stakeholders; and the conservation of biodiversity.

Tahuamanu REDD+ project is developed by MADERACRE SAC, who is project proponent. The project start date is April 19, 2017 /29/. Date in which control and surveillance activities for forest conservation began, activity. The scenario existing prior to the implementation of the project is an increasing migration from surrounding regions, which causes a growing exponential deforestation rate. The objectives of the project are:

- Avoid 35,407.20 has of forest loss in the coming 10 years
- Community: Contribute with the improvement of welfare of 12 neighbouring communities
- Biodiversity: Avoid the negative impact over the biodiversity (including 09 species under some risk of extinction) that lives within or depend on the area under threat

AENOR deems that the description in the project description is accurate, complete, and provides an understanding of the nature of the project

3.2.2 Physical Parameters (G1.3)

The project area is politically located in the districts of Iñapari, Iberia, Tahuamanu and Las Piedras, province of Tahuamanu in the department of Madre de Dios.

In section 2.1.5 of the CCB-VCS-PD, there is a summary of a description of the basic physical parameters of the area where the project is carried out. These parameters include the climate, hydrology, soil, types of vegetation and biological diversity.

Climate: the climate of Madre de Dios is tropical: warm, humid and with annual rainfall over 1000 mm with an average temperature of 17°C to 20°C in the months of June and July and a maximum of up to 36°C in the months of December to March. It is occasionally presenting influences of cold air masses, which come

from the southeast of the Americas, causing temperature declines which reach up to 8°C. Data from the 1981-2015, where a seasonal rainfall behaviour is observed, the largest accumulated are recorded between January to April and October to December, where the largest accumulated rainfall is in February. The months of reduced rainfall are between June and August. The Department of Madre de Dios is characterized by three types of climate: Sub humid and warm; humid and warm and very humid and semi-warm. Reported information was contrasted against hydrological characterization of the Madre de Dios Region from National Service of Meteorology and Hydrology of Peru /10/

Hydrology: Madre de Dios Basin is the third largest region in the country and is part of the large basins of the Madeira River, a tributary of the Amazon River. Nine sub-basins have been defined for the Madre de Dios Basin: Tambopata Basin, Inambari Basin, Las Piedras Basin, Tahuamanu or Orthon Basin, Alto Madre de Dios Inter-basin, Alto Madre de Dios Middle Inter-basin, Madre de Dios Middle Inter-basin, Madre de Dios Middle Lower Inter-basin and the Alto Acre Inter-basin. The Project is located in the Tahuamanu or Orthon Basin, presenting an area of 15,190.20 km^2 and a main channel length of 308.51 km, which is located between the provinces of Tahuamanu and Tambopata. The Tahuamanu River travels in a NW-SE direction and crosses the entire province of Tahuamanu. In this sector, its course is meandering presenting meanders and small lagoons. Validation team reviewed the Hydrological Diagnostic Study of the Madre de Dios Basin /11/ developed by Water Resources Conservation and Planning Department - Surface Water Area

Soil: Madre de Dios has relatively young and fertile soils compared to most of the Amazon. The mainland soils, which occupy approximately 80 percent of the department, are consistently sandier, more acidic, and less fertile than floodplain soils. While the appearance and texture of these soils vary greatly from place to place, the vast majority of soils in Madre de Dios fall into only two categories of the soil taxonomy system: Ultisols and Inceptisols. At the regional level, soil varieties have been identified and classified according to their origin: Recent Rainfall Soils; Sub-recent alluvial soils; Local colluvial soils; Old alluvial soils and Raised floors of waste materials this information was contrasted with public information provided by Research Institute of the Peruvian Amazon (IIAP 2009) /12/

Types of vegetation: Madre de Dios has an area of natural forest of 8,102,917 hectares, which places it in third place in the country of departments with the greatest forest area, after Ucayali and Loreto. According to the work carried out by IIAP in 2009, it was determined that the Madre de Dios department has 22 types of natural vegetation that contain at least 2,429 plant species (angiosperms and gymnospermas), including 869 genres and 172 families. The most extensive types of vegetation are: Mixed communities of bamboo, or mixed pacales, associated with trees scattered in hills (28.84 percent), dense semi-sumycifolium forests in hills (16.98 percent) and dense semi-sumycifolium forests in plains (15.42 percent). Project proponent included a complete list of vegetation types in table 7 included in section 2.1.5 of CCB-VCS-PD.

Topography: In terms of elevation and slope, the project area is homogeneous, as 100% of the total area is between the altitude range of 255-462 m.a.s.l. while the maximum slope is 4% (see Figure 3.8). In this sense, the project area is very similar to the landscape in Madre de Dios, where 88.4% of its territory is under 500 m.a.s.l. and 99.7% of it has maximum slopes of 4%. Figure 2.4 of the elevation classes in Madre de Dios.

Geology: All the lithostratigraphic units present in the Project area are from the Cenozoic era, in the Quaternary and Neogene systems.

The Madre de Dios Formation (Nmp – md), that represents about 31.5% of the formation in the entire region of Madre de Dios, is one of the most important units in the entire region. This formation is approximately 400 m thick and consists of the base of a conglomerate of medium to coarse-grained sandy matrix. Maldonado formation represents about 2.2% of Madre de Dios and is considers a conglomerate and sandstone deposits distributed in the Madre de Dios peneplain, which unconformably overlie the Madre de Dios Formation. This formation is characterized by being part of the largest outcrop in the Madre de Dios basin.

Geomorphology: All the relief units present in the Project Area belong to a single morphostructure called Madre de Dios Plains, with three provinces called Holocene Fluvial Plains, Pleistocene Plains and Quaternary Hills and Hillocks. Among them, there are Fluvial plains, non-flooded fluvial plains (Holocene), Pleistocene erosive plains, Hillocks and Erosional hills. This last unit is the most important as it represents 65.2% of the Project Area and 40% of the total area of Madre de Dios.

Physiography: All landscape elements are found within two genetic units of relief (large landscape) Hill and Alluvial Plain, which are subdivided into four Landscapes and four sub-landscapes. The most representative landscape in the Project Area is Quaternary low hills with 72%, which is also the main sub-landscape at a regional level (30.1% of the regional area). This landscape comprises all low hills whose tops are below the original level of the high terraces (less than 50 meters), have convex tops and slopes with lengths of less than 25 m and slopes ranging from 15 to more than 75%.

AENOR assessed this during the site visit; mainly against research Institute of the Peruvian Amazon – IIAP 2009 /12/ and other supporting evidences from Appendix I

3.2.3 Social Parameters (G1.3)

The Project is located within the Tahuamanu Province. Therefore, the characterization of the population will focus on the districts of Tahuamanu. With respect to the province of Tahuamanu, the project area is distributed as follows: Iñapari covers 89,957.25 ha from the projects are; Iberia covers 76,589.5 ha from the project area; Tahuamanu 5,033 and Las Piedras 3.51 ha from project area. The distribution was verified against location of project are by district map /13/.

According to the National Institute of Statistics and Informatics (INEI) /14/, the province of Tahuamanu covers approximately 21,196.86 km^2, which represents 24.85% of the surface area of the department of Madre de Dios, concentrating a population of 12,479 inhabitants. The spatial distribution of the province's population centers is generally located on both sides of the inter-oceanic road, the main communication route with the economic activities.

In the province of Tahuamanu, there are 11,047 inhabitants, of which 6,138 are male and 4,909 are female, representing 44% /14/ of the total population of the province. One of the characteristics of Madre de Dios population and, therefore of the project, it is the high mobility caused mainly by the expectation of working in mining (an expectation that is increasing due to the constant rise in the price of gold) and by the demand to take advantage of the region's forest and agricultural resources. At the departmental level, migration due to the expectation of working in mining or in the services and businesses that are sustained by this activity, are the main causes of the increase in population. Migrants enter Madre de Dios from other regions, mainly from the Andes.

According to Conservation strategies throughout the Interoceanic highway in Madre de Dios, Peru /15/, economic population is associated with various economic activities, mainly gold mining, traditional monoculture agriculture, timber and Brazil nut extraction, livestock and small animal husbandry. The

population of the rural zone is mainly made up of former residents and migrants with more than fifteen years in the zone, dedicated to monoculture agriculture, hunting, fishing, Brazil nut gathering, wood extraction, and seasonal artisanal mining and small businesses (wineries, restaurants, bars, lodges, others).

AENOR assessed this during the site visit and with the documented evidence from Appendix I.

3.2.4 Project Zone Map (G1.4-7, G1.13, CM1.2, B1.2)

Section 2.1.7 of the VCS-CCB_PD describes the project zone map of the project, including: Reference Region /16/, Project Area /17/ and Leakage Belt /18/.

AENOR assessed this during the site visit by visiting project zone; also, it was reviewed KML files /19/ and processed GIS data /20/.

3.2.5 Stakeholder Identification (G1.5)

In order to identify the stakeholders, project proponent followed the criteria by:

- Social relevance: especially neighbouring social groups (communities, producers, etc.)
- Technical relevance: especially entities who have a key role related with forests and forest resources
- Political relevance: especially administrative authorities at a local, regional or national level
- Economic relevance: here are included the type of actors that develop a similar activity than the project proponent and in the surrounding area as potential synergies may occur

The process of identifying actors was carried out through workshops in which tools were used such as: Talking maps, diagram, flyers, which were part of the development of citizen participation workshop report /21/. The agreements of the meetings were registered in minutes /22/ signed between project proponent an advisory committee.

AENOR assessed the identification of stakeholder by reviewing workshop reports /21/, project diffusion reports /23/; flyers project diffusion /24/; and by direct interview whit stakeholder, during the on-site visit. Complete list of evidences is listed in appendix I

3.2.6 Stakeholder Descriptions (G1.6, G1.13)

After identifying stakeholders, the local actors were grouped according to: Rural producers, Local municipalities, Religious community, SERFOR (National Forest and Wildlife Service), Regional Government, Forest concessions, Ministry of Environment, OSINFOR (Forest and Wildlife Resources Supervision Agency), Native Community, PIACI (National Program for Indigenous Peoples in Situation of Isolation and Situation of Initial Contact) - represented by FENAMAD (Native Federation of the Madre de Dios River and Tributaries), Management Committee of Alto Purus National Park (AP-NP) and Forest Management Committee of Tahuamanu.

Validation team in order to confirm that all communities, community groups and other stakeholders, were correctly identified in the project description interview local authorities, including: park ranges from the National Service of Natural Areas Protected by the State (SERNANP) and the Major of Tahuamanu district; also, were interviewed settlers from Iñapari, Iberia, Las Piedras and Tahuamanu, who confirmed that all groups of local actors were considered.

3.2.7 Sectoral Scope and Project Type

Sectoral scope 14 - Agriculture, Forestry, Land Use

AFOLU category of the project: Reduction of Emissions from Deforestation and Degradation (REDD +).

Type of activity: Avoiding Unplanned Deforestation and/or Degradation (AUDD)

3.2.8 Project Activities and Theory of Change (G1.8)

Project proponent included in the CCB-VCS-PD a complete description of activities to be taken in order to achieve the climate, biodiversity and community objectives. Section 2.1.11 includes the activities description, outputs, outcomes and impacts. Main activities include: Project diffusion; FMU Protection Integral Plan implementation; Satellite monitoring and field assessment of sectors with risk of invasion; Support pilot sustainable productive initiatives of surrounding communities, reducing the expansion of agrarian actives and improving livelihood conditions with 2% of project incomes; Strengthen / develop skills and capacities in family members that are part of selected projects, including local company workers; participate in dialogue spaces and management of Protected Areas, including the Territorial Reserve Madre de Dios, searching for strategic partnerships focused on its conservation; Promote activities with entities whose goals are addressed to protect territories (isolated and initially contacted indigenous people) with 1% of annual project incomes; Promote activities with entities whose goals are addressed to protect emblematic fauna and flora species with 1% of annual project incomes; Promote activities with entities whose goals are addressed to contribute to the sustainable development of the population (according to prioritization of the Consulting Committee of Community Relationship of the project, with 1% of annual project incomes; implement Reduced Impact Logging techniques to ensure healthy wildlife population; develop and implement mechanisms for the diffusion of environmental education within children, teenagers and surrounding communities

In order to confirm that project activity would be able to meet it objectives, validation team reviewed the forest management plan /25/, custody and surveillance plan /26/, community development plan /27/ and social monitoring plan /28/. Moreover, during the on-site assessment, interviewed local stakeholders confirmed all activities carried out by the project developer. Therefore, AENOR deems that the theory of change in the project description is accurate, complete, and provides an understanding of the nature of the project and how it will achieve its climate, community, and biodiversity objectives

3.2.9 Sustainable Development

As stated in section 2.1.12. of the CCB-VCS-PD, the implementation of the REDD+ project contributes to many international and nationally stated sustainable development. The current project contributes directly with at least two of the Sustainable Development Goal, which are: SDG 15: Life of terrestrial ecosystems, specially forests and its biodiversity; and SDG 13: Action for climate, because it expects to reduce GHG emissions from forest cover change caused by deforestation, that the project expects to prevent or reduce significantly.

In addition, in the Forest and Wildlife Law, approved in 2016 /26/, promotes the conservation, protection, increase and sustainable use of forest and wildlife heritage within national territory, integrating the management with the maintenance and enhancement of forest ecosystem services and other ecosystems. The National Strategy on Forest and Climate Change is the Peruvian REDD+ Strategy, which includes

eight strategic lines. One of them refers to the "increment of the value of natural forests" including the sustainable forest management.

3.2.10 Implementation Schedule (G1.9)

The most important milestones are described in the in section 2.1.13 of the CCB-VCS-PD. In the following table is summarized the assessment carried out by the audit team

Date	Milestone(s) in the project's development and implementation	VVB Assessment
2015	The concessions conforming the Project Area were added to the joint management of MADERACRE and got the FSC certificate.	Validation team reviewed the concession contracts /27/ of the project proponent and nothing irregular was found
2016	Test year to implement FCS certificate in the new areas.	Validation team reviewed the concession contracts /27/ of the project proponent and nothing irregular was found
2017	FSC re-certification of the entire area under MADERACRE´s management.	Project proponent account with a Forest management certification (FSC certification). Audit team reviewed the validity of FSC certification against original version of the certificates /28/ and confirm this issue
	Starting Date of GHG accounting period.	In line with crediting period
2022	Expected validation and first verification audit.	Validation and verification was conducted as planned
2047	Ending date of REDD+ project.	In line with crediting period

After reviewing listed documents AENOR´s validation team confirm the most important dates of the project schedule.

3.2.11 Benefits Assessment and Crediting Period (G1.9)

April 19th, 2017 is the project crediting period start date and it lasts until April 18th, 2047, providing a total of 30 years of project life, even though the forest concession contract states that it is renewable every 5.

3.2.12 Risks to the Project (G1.10)

As summarized in section, 2.1.18 of the CCB-VCS-PD, project proponent identified the main risk of the project activity, which includes:

- Productive activities are not enough attractive to change the pattern of land use of agrarian neighbors
- New migrants that are not part of the original beneficiaries of the REDD+ project will become new deforestation drivers as they do not participate in the project activities
- Internal conflicts within local settlements
- Fires cannot be controlled because of dry seasons

Project proponent in order to mitigate de risk has implement:

- Design feasibility study and provide continuous technical assistance including accompanying commercial activities in order to access to improved and specialized markets with premium prices
- Work jointly with authorities to a planning process of settlements of new migrants
- Work jointly with local leaders and social specialists in order to understand the expectations, interests and power groups and networks inside local communities
- Incorporate scientific and research information in the forest fires patrolling strategy

The project proponent account with a forest management plan /25/ and Procedures for handling and resolving conflicts /30/ in order to mitigate identified risk. Moreover, during the on-site assessment validation team confirmed the steps taken to minimize or reduce natural and human-induced risks.

3.2.13 Benefit Permanence (G1.11)

Project design documents describes how the biodiversity benefit will extend past the project lifetime. According to section 2.1.19 of CCB-VCS-PD, the measures proposed to guarantee the permanence of climate, community and biodiversity benefits are:

- Develop feasibility studies of products that will be produced with the support of REDD+ project in order to analyse previously if the activity is profitable enough to convince producers to dedicate to these activities instead of looking for new areas to produce conventional crops
- Provide a permanent technical assistance to producers including marketing aspects as part of a strategy to access to premium markets
- Support local and regional authorities urban planning process in order to reduce the risk of uncontrolled migration
- Implement a diagnosis of local relationships inside each community as part of the strategy of sharing benefits and activities at an equitable way to minimize the risk of internal conflicts that affect the project development
- Identify scientific sources of information related with intensity and location of forest fires and incorporate that information in patrolling strategy

AENOR assessed the agreements with the native community of Belgica /31/; agreements with the educational institution “Dos de Mayo” Iberia /32/; agreements with technological institute Iberia – Tahuamanu /33/; agreements whit National Park Alto Purus /34/; and agreements with Health post “Iñapari CLAs Tres Fronteras” /35/. In addition, during de on-site assessment, the principal from Iñapari School and a teacher from Villa Primavera School were interviewed in order to confirm the agreements with project developer; furthermore, a park ranger from SERNAMP was interviewed in order to confirm the supports provided by the project proponent.

AENOR is able to confirm that the project activity will support the improvement of the educational level of community, by developing capacities for the adequate management of the forest in the future and sustainable productive activities to ensure the well-being of the population, impacting positively on climate and biodiversity benefits beyond the project lifetime.

3.2.14 Financial Sustainability (G1.12)

To demonstrate the profitability and sustainability of the project, the Net Present Value (NPV), NPV per hectares and sensitivity analysis have been calculated. The project cash flow 10 years /36/ starting at 2017 shows that at the first two years of the project, incomes from timber sales allowed MADERACRE to achieve the breakeven point. Since 2019, the timber production and sales decreased significantly (as the activities needed to avoid deforestation increased, as there is increasing deforestation pressure). Carbon sales are expected to help from 2022.

Provides cash flow, included the expenses related to REDD Project activities; including: Socialization, Custody and Surveillance, deforestation monitoring, financing and development of productive initiatives, awareness about ANP and PIACI territories, flora and fauna awareness, promotion of sustainable development initiatives and implementation of reduced impact techniques.

Therefore, AENOR is able to confirm that the financial mechanisms adopted provides an adequate flow of funds for project implementation to achieve the project's climate, community and biodiversity objectives and benefits.

3.2.15 Grouped Projects

Not applicable. This is not a grouped project.

1) Eligibility Criteria for Grouped Projects (G1.14)

Not applicable. This is not a grouped project.

2) Scalability Limits for the Grouped Projects (G1.15)

Not applicable. This is not a grouped project.

3) Risk Mitigation Approach for Grouped Projects (G1.15)

Not applicable. This is not a grouped project.

3.2.16 Land-Use Scenarios without the Project (G2.1)

Madre de Dios was a region with difficult access. However, when the Interoceanic Highway was finally completely the transportation cost reduced dramatically, increasing exponentially the internal migration from the highlands of Peru. For that reason, Madre de Dios is having an exponential increase of the deforestation rate, this fact is confirmed whit official information provided by the ministry environment in the platform for monitoring changes in forest cover: http://geobosques.minam.gob.pe/geobosque/view/perdida.php. Migration is focusing on mining areas (in the south of Madre de Dios) and in agrarian activities. In that scenario, the most likely scenario is that agrarian production will enter into the forest concession as it is already happening in other smaller concessions.

3.2.17 Most-Likely Scenario Justification (G2.1)

The most likely scenario described in 2.2.1 of the CCB-VCS-PD is based in two elements: Statistical data of increasing deforestation rate in similar type of land tenure, it means, other forest concessions, in the same administrative unit, Madre de Dios Region; and Expert opinions from a diverse range of stakeholders

(community leaders, forest authorities, etc.) about the profile of each local settlement and the trends on land use.

Validation team contrasted provided information against officinal information reports provided by the national institute of statistics: Magnitude and Population Growth, statistics national institute (https://www.inei.gob.pe/estadisticas/indice-tematico/poblacion-y-vivienda/); Forestry and wildlife law N° 29763 /26/ and Regional agricultural strategy plan 2008 – 2015, developed by Regional government of Madre de Dios /37/ . Therefore, after analyzing, the social baseline and national and local regulation, validation team concludes that agrarian production will enter into the forest concession is the most likely scenario. Then, AENOR deems that the most-likely land-use scenario is justified.

3.2.18 Community and Biodiversity Additionality (G2.2)

In order to validate the additionality, the validation team assessed the main regulation, including: DS No. 011-2015-MINAM "National Strategy on Climate Change" update of DS No 086-2003-PCM /38/; Law N° 26839 "Law on the Conservation and Sustainable Use of Biological Diversity" /39/; Law N° 26821 "Law for the Sustainable Use of Natural Resources /40/"; DS No. 030-2005-AG "Approve regulations for the Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Peru" /41/; DS No. 009-2013-MINAGRI "National Forest and Wildlife Policy" /42/; Law No. 29763 "Forestry and Wildlife Law" and its four Regulations" /43/; DS No. 018-2015-MINAGRI "Regulation for Forest Management" /44/; Law No. 29263 "Law on Ecological Crimes" /45/.

In addition, during the on-site visit, validation team interviewed local authorities (Mayor of Iñapari and park ranges) in order to confirm whether the regulations or lack of laws would likely affect land use in the absence of the project. Also, were interviewed regarding significant financial, technological, institutional or capacity barriers and benefits from project activity regarding community and biodiversity.

Biodiversity is intrinsically connected with the climate targets. The reduction of GHG emissions from reduction of forest loss cause automatically the reduction of biodiversity loss as forests hosts many fauna and flora species that compose the rich biodiversity of the project area. In the case of community additionality, the main positive impact will come from the support that TAHUAMANU REDD+ PROJECT will bring to neighbouring communities, through productive projects, organizational strengthening and enhanced governance. The main positive impact will come from the support that TAHUAMANU REDD+ PROJECT will bring to neighbouring communities, through productive projects, organizational strengthening and enhanced governance. Therefore, AENOR´s validation team is able to confirm that the project activity it is additional.

3.2.19 Stakeholder Access to Project Documents (G3.1)

Section 2.3.1 of CCB-VCS-PD details how document have been and will be shared with the communities. Documents generated for REDD+ project and reports containing the monitoring results will be stored in the administrative offices of the project, in Iñapari, and virtually stored in the web page of MADERACRE, in order to be of free access. A summary of those reports will be shared with stakeholders at the end of each year, physically. The main outcomes and conclusions of the monitoring system will be announced in citizen participation workshops

During the on-site visit, validation team confirmed by interviews with various local actors (complete list of interview person is listed in appendix III) that the information generated for the design of the project has been explained to the community. Also, the result obtained for the preparation of the documents has been exposed to the community, in a draft of the project description, in the VCS and CCB standard. Moreover,

the documentation developed by the project proponent, including previous studies as well as the project description document, were delivered to local stakeholders. In addition, any persons from the communities can directly communicate with the project representatives in their office located in Iñapari. These facts were corroborated during the visit assessment

AENOR assessed this during the on-site visit and through the review of the participatory workshops and conclude that the stakeholders have access to information regarding project activity.

3.2.20 Community Costs, Risks and Benefits (G3.2)

The project proponent, through their communication strategies, which includes workshops, will share relevant information about the costs of the activities, the risks and benefits of the project that is being implemented as a response to increasing threat and in order to enhance the surveillance and protection of project area with the development of environmentally friendly projects, proposed by local communities of the project zone. Also, we will support initiatives of entities linked to nature conservation, ANP management, care of emblematic or endangered wild fauna and flora and the protection of PIACI (isolated indigenous people).

Validation team reviewed internal communication plan /46/; external communication plan /47/; protocol for the resolution of conflicts and damage /48/; flowchart for conflict resolution /49/; community development plan /50/; social monitoring plan /51/. The benefits, costs and risks, as well as the benefits, were communicated to the community during different meetings and workshops. Validation team confirmed this fact during the on-site assessment.

AENOR deems that the information provided was adequate as well as the communities' ability to understand the information provided and the timeliness of such information.

3.2.21 Information to Stakeholders on Validation and Verification Process (G3.3)

The description of the validation and verification process was made known through workshops, in which the members of the communities were present. Validation team reviewed the project diffusion reports /23/, flyers of project diffusion /24/. Also, during the on-site vast was confirmed that many information of the project activity was communicated through local radio stations

AENOR´s validation team confirm the communication methods used to inform communities and other stakeholders of the process for VCS and CCB validation and verification.

3.2.22 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)

During the presentation of the results obtained in the project, the community was advised and the steps to be followed were explained, also the completion of the CCB-VCS-PD and the auditor's visit, indicating that they could conduct the interviews with the community members and stakeholders.

AENOR, during the on-site visit, could talk with various local actors and checked the attendance list of the workshops. Also, AENOR checked that the communities and other stakeholders were informed of the auditor's site visit in a timely manner before the site visit occurred.

During the on-site visit validation team confirmed that stakeholders have actively participated in the process. Some of the workshops held include: REDD+ strategy of the project, Social baseline, Biodiversity baseline, Trainings on REDD+ and climate change and presentation of project progress (validation) and the validation process. In addition, project proponent, provided photographs of workshop sessions, attendance lists and power point presentations.

3.2.23 Stakeholder Consultations (G3.4)

A stakeholders' map has been developed for the Corporate Social Responsibility Program, updated and complemented with the Community Development Plan /50/. Project proponent implement an Advisory Committee for Community Relationships in order to provide support to local communities. Twice per year and in parallel with the Citizen Participation Workshops, the advisory committee meetings are organized to review the improvements and discuss future actions to support the improvement of the communities.

The interaction with the communities has allowed to identify the main stakeholders in the influence zone, learning about their needs and proposing action mechanisms for the project. For example, health and education have been identified as relevant for local development but usually not prioritized by the Peruvian State. Also, to guarantee the project area conservation, it was identified that a focused strategy is to promote productive activities that are environmentally friendly, accessible for local communities and families, that may become alternatives to bring them development.

During the on-site visit, project proponent provided photographs, surveys results and workshop reports; also, the advisory committee for community relationships were intervened. Then, AENOR´s validation team is able to confirm that the consultation process is effective and fulfill the requirement of VCS and CCB requirements.

3.2.24 Stakeholder Consultation Channels (G3.5)

The results of the socialization and consultation processes are reflected in the report of citizen participation workshops /21/, which contains the methods, material used, attendance list, photographs and presentations. Also, archives of minutes of meetings of the advisory committee /52/ shows the result of the consultation process and dissemination of the project.

Project proponent account with a suggestion box, located in Iñapari office, where any local actor can make queries and suggestions. Also, project proponent has a report of suggestions made /53/ and how they have been taken into account.

During the on-site visit the validation team reviewed the communication channel with stakeholders and confirm that there are adequate levels of information sharing.

3.2.25 Stakeholder Participation in Decision-Making and Implementation (G3.6)

The communities present in the project's area of influence correspond to groups of settlers who have migrated to these territories from different towns or cities in the country, with the exception of Belgica Native Community, mainly Yine ethnic group, which is fully integrated into the social and economic dynamics of the area. The interaction with all the actors has been designed through the same mechanism, which corresponds to the citizen participation workshops and the community relations advisory committees. Regarding gender, in the community relationships advisory committee, a representative of the women has a permanent seat and brings the approach of local communities' women to be part of the main discussion and prioritization.

AENOR's validation team checked the above information, during the on-site visit, by interviewing various local actors, including the native community, local authorities and project relations advisory committee.

3.2.26 Anti-Discrimination Assurance (G3.7)

Project proponent ha implement an anti-discrimination and labor equity policy (updated in 2021) for MADERACRE operations /54/. Project proponent forbidden any kind of physical or verbal violence or

discrimination based on disability, language, gender, age, social, legal or economic condition, culture or ethnicity, civil status, religion, opinions, sexual preferences, migratory situation or others. This policy is published in the web page of MADERACRE and is accessible for anyone. AENOR´s validation team reviewed the policy and the web page access, confirming information provided in the CCB-VCS-PD

3.2.27 Feedback and Grievance Redress Procedure (G3.8)

Project proponent, in section 2.3.12 has established a flowchart for receiving, hearing, responding and resolve grievances, taking into account traditional conflict resolution methods. Three stages, each with reasonable time limits: attempt at resolution, mediation and arbitration or courts are described.

Validation team reviewed and confirmed the flowered process, during the on-site visit. Also, the project proponent has developed a procedure for complaints and consultations /55/. Therefore, AENOR´s validation team is able to confirm that the feedback an grievances producers meets VCS and CCB (G.3.8) requirements

3.2.28 Worker Training (G3.9)

Project proponent, in section 2.3.14 has established a flowchart of key aspect for workers training in MADERACRE operations. Training activities includes: Induction Speeches, theory & practical workshops, coordination meetings and short speeches.

Validation team reviewed the annual training activity programme /56/. Also, during the onsite visits some workers and local actors in the project were interviewed in order to confirm whether they have received the necessary training to perform their activities, all of them confirmed this fact. Therefore, AENOR´s validation team is able to confirm that project proponent will provide orientation and training for those employed through project activities and relevant people from the communities and meet the VCS an CCB (G.3.9) requirements.

3.2.29 Community Employment Opportunities (G3.10)

Project proponent account with a procedure for personnel hiring /57/. This procedure provides preferential conditions for community members and disabled persons as one of the vulnerable and marginalized groups. The diffusion of the requirement is done in two local radios and local municipality. This provides an advantage to community members, compared to non-local people, who have not access to these media.

AENOR´s validation team, interviewed some workers in the project zone and is able to confirm that the recruitment process provides advantages to the local population.

3.2.30 Relevant Laws and Regulations Related to Worker's Rights (G3.11)

The relevant legal framework is listed sin section 2.3.16 of the CCB-VCS-PD. AENOR´s validation teams is able to confirm the project's adherence to all relevant laws and regulations covering worker's rights and the measures needed and designed to inform workers about their rights. This was corroborated, through various interviews with workers in the project zone.

3.2.31 Occupational Safety Assessment (G3.12)

Project developer has analyzed the main legal framework related to occupational safety and also has done a specific analysis of the main risks associated to its operations. Based on that, the company provides periodically training to its workers on a module called IPERC (Identification of Dangers, Risk Assessment and Measures of Control).

Validation team reviewed IPERC matrix /58/ in order to verify the measures to reduce and mitigate identified risks. Also, the main safety regulation was assessed, including: law N° 29783 health and safety law /59/; DS N° 009-2005-TR health and safety regulation /60/; Decree 148-2007-TR regulation of committee for supervision of security and health at work /61/; Law N° 26842 General Health Law /62/. Therefore, AENOR's validation team is able to confirm that the project developer is taking the necessary measures regarding occupational safety of workers.

3.2.32 Project Governance Structures (G4.1)

In section 2.2.32 of the CCB-VCS-PD stablish the organizational structure for the governance of the project. The structure was confirmed during the on-site visit by interviewing the general manager, the specialist and coordinators of the project activity.

3.2.33 Required Technical Skills (G4.2)

Project proponent has previous experiences in developing a REDD+ project of similar characteristics. In addition, the project activity has FSC certification, that includes community engagement and biodiversity assessment. Regarding carbon measurement, MADERACRE has hired consultants with experience in the design, implementation, monitoring, validation and verification of many of the REDD+ projects taking place in Peru.

AENOR´s validation team reviewed the resumes of responsible for the project /63/ and the responsibility of preparing the document /64/ and concludes that they have all the capabilities and technical skills required to implement the project successfully, including community engagement, biodiversity assessment and carbon measurement and monitoring.

3.2.34 Management Team Experience (G4.2)

The technical team in charge of the implementation of the project combines different profiles with more than 20 years of experience managing tropical natural forests and is responsible to manage one of the largest forest management units in Peru. The area is managed under FSC standards since January 2007. As part of the integrated forest management, the team is implementing a REDD project since 2009, who has achieved the CCB Gold and VCS certification.

AENOR´s validation team reviewed the resumes of responsible for the project /63/ and conclude that the management team has the expertise and prior experience implementing land management and carbon projects at the scale of this project.

3.2.35 Project Management Partnerships/Team Development (G4.2)

The lead consultant of project activity has more than 15 years working in the design and implementation of forest carbon projects, including reforestation and REDD, under VCS and CCB standards. In addition, all the consultants have experience in developing REDD project activities.

AENOR´s validation team reviewed the resumes of lead consultant /64/ and conclude that the management partnerships team has the expertise and prior experience implementing land management and carbon projects at the scale of this project

3.2.36 Financial Health of Implementing Organization(s) (G4.3)

Project proponent (MADERACRE) has a proven history of forest operations since 2003, which generates during the first 10 years of the REDD project an average of US$ 3.4 million per year with an average annual expense of US$ 2.2 million.

AENOR´s Validation team verified the project cash flow /36/ and supporting evidences in order to confirm the financial health to ensure adequate financial support over the project lifetime.

3.2.37 Avoidance of Corruption and Other Unethical Behavior (G4.3)

The CEO of the company has signed a sworn declaration /65/ committing to avoid any practice of corruption or other unethical behaviour. The sworn declaration may be found in the official webpage of the company: During the on-site assessment, validation team interviewed local authorities and local actors to obtain information about corruption mechanisms in which the company might be involved; however, it was not identified.

3.2.38 Commercially Sensitive Information (*Rules* 3.5.13 – 3.5.14)

Commercial information as prices, contracts and costs are considered commercially sensitive. Therefore, they were excluded from VCS-CCB-report. However, they were shared whit validation team in order to validate the incomes an expensed included in the cashflow

3.2.39 Statutory and Customary Property Rights (G5.1)

Project activity is developing in a concession and there are no indigenous groups or traditional uses of forest resources that have been limited with the assignment of the forest concession. Therefore, there will not be any restitution or compensation.

The property right is demonstrated with the concession contract with the Peruvian Government, issued by Regional Directorate Resolution N° 131-2017-GOREMAD-GRRNYAG-DRFFS/DFFS-TAH issued on March 20, 2017 /66/, which includes the concession contracts N° /27/: 17-TAH/C-J-035-02; 17-TAH/C-J-033-02; 17-TAH/C-J-054-02; 17-TAH/C-J-024-02; 17-TAH/C-J-025-02; 17-TAH/C-J-026-02; 17-TAH/C-J-036-02, for an area of 171,120 ha.

In addition, a Forest Directorate Resolution, signed on April 19, 2017 /29/, approving the operational plan of the consolidated forest concession is considered as start date of project activity, which is the date of surveillance activities for forest conservation began.

According to information provided in the project design document and gathered from authorities and the project proponent. AENOR can confirm that the project protects the rights of the communities and other stakeholders in accordance to the Climate, Community & Biodiversity Standards and the validated project design

3.2.40 Recognition of Property Rights (G5.1)

The property right is demonstrated with the concession contract with the Peruvian Government, issued by Regional Directorate Resolution N° 131-2017-GOREMAD-GRRNYAG-DRFFS/DFFS-TAH issued on March 20, 2017 /66/, which includes the concession contracts N° /27/: 17-TAH/C-J-035-02; 17-TAH/C-J-

033-02; 17-TAH/C-J-054-02; 17-TAH/C-J-024-02; 17-TAH/C-J-025-02; 17-TAH/C-J-026-02; 17-TAH/C-J-036-02, for an area[1] of 171,120 ha.

3.2.41 Free, Prior and Informed Consent (G5.2)

Project activity is developing in a concession and there are no indigenous groups or traditional uses of forest resources that have been limited with the assignment of the forest concession. Therefore, there will not be any restitution or compensation.

3.2.42 Property Rights Protection (G5.3)

Concessions of timber products in forests of permanent production are contracts between the concession holder and the government. This contract defines UTM coordinates (Zone 19L WGS 84) of the concession where the project is being implemented and is in force to project the project zone.

During the on-site visit validation team interviewed the security guards in the entrance area to the project ir order to confirm the activities carried in order to protect the project zone.

3.2.43 Illegal Activity Identification (G5.4)

Identify, discuss and justify conclusions regarding any illegal activities that could affect the project's impacts and the measures needed and designed to reduce these activities so that project benefits are not derived from illegal activities.

Many illegal activities could affect project objectives; for that reason, project proponent identified these activities and implemented the mitigation measures:

Illegal activities	Mitigation measures to be taken
Illegal logging	An enhanced surveillance plan, including periodical patrolling and new control sites in rivers and access roads
Illegal hunting	An enhanced surveillance plan, including periodical patrolling
Illegal harvesting of non-timber forest products	Agreements with local families so they can provide an organized and sustainable harvesting of Brazil nuts
Invasion	An enhanced surveillance plan, including periodical patrolling
Forest fires / clearance of areas	Control sites, monitoring and patrolling actions

During the on-site visit validation team interviewed the security guards in the entrance area to the project in order to confirm the activities carried in order to confirm the mitigation measures taken by the project activity.

[1] *The considered project area is 171,584.07 ha. The difference between the authorized area and the project area is due to the initial method of measurement. When the forest concessions were granted, it had been delimited using cartographic base method, in force according to the regulation. Currently, the area is determined using satellite images and GIS data. Even this difference, which represent 0.27%, all the project area (171,584.07 ha) it is managed by project proponent (MADERACRE SAC) in accordance with concession contract /27/ /29/ /66/ /67/.*

3.2.44 Ongoing Disputes (G5.5)

Tahuamanu concessions have been clearly granted by the concession contract and there are no pending conflicts or disputes with third parties regarding the legality or legitimacy over the project area. Wood milestones and signalling throughout the whole borders of the concession have been installed for this purpose.

During the on-site visited various local actors were interviewed in order to confirm provided information by project proponent and no negatives comments were received about conflicts or disputes in the project area.

3.2.45 National and Local Laws (G5.6)

In section 2.5.7 of the CCB-VCS-PD are listed the most relevant national legal framework and summarize the most important aspects that apply to the project activity. In this sense, AENOR´s validation team intervened a local authority during the on-site visit and confirmed that the project proppant has not been sanctioned for non-compliance with the current legal framework.

3.2.46 Approvals (G5.7)

The forest management plan approved by the Forest Regional Authority by Resolution N° 144-2020-GOREMAD-GRFFS/SOFFS-TAH /67/, dated on December 11, 2020, establishes that the project proponent has all the required approvals to exploit commercially to forest resources and forest ecosystem services in the Project area as described in legal analysis.

3.2.47 Project Ownership (G5.8)

The concession contracts /66/ signed with the government, establishes that the project proponent has the legal rights to the forest resources and forest ecosystem services in the Project area as described in legal analysis

3.2.48 Management of Double Counting Risk (G5.9)

Not applicable. The project does not seek to commercialize carbon reduction units in other programs, systems or markets.

3.2.49 Emissions Trading Programs and Other Binding Limits

Not applicable. The project is not included in an emissions trading program; this program does not exist in Peru to date.

3.2.50 Other Forms of Environmental Credit

The project has not participated in any other environmental accreditation program for the elimination of GHG emissions. Also, the project does not intend to generate any other type of environmental credit related to GHG emissions other than through the VCS Program.

3.2.51 Participation under Other GHG Programs

The project has not been registered by another GHG program.

3.2.52 Projects Rejected by Other GHG Programs

The project has not been rejected by any other GHG program.

3.2.53 Double Counting (G5.9)

There is no double counting of emissions in the project, since:

- The project is not included in an emissions trading program; this program does not exist in Peru to date.
- Peru has not assumed commitments of a cap on GHG emissions; is one of the countries No Annex I of the Kyoto Protocol.

In addition, the project has only applied to the VCS carbon standard.

3.3 Climate

3.3.1 Title and Reference

Project proponent is applying: *VM0006: Methodology for Carbon Accounting for Mosaic and Landscape-scale REDD Projects*. Version 2.2 - 17 March 2017 - Sectoral Scope 14 /68/.

In addition to the methodological document, project proponent is using: VT0001: Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities. Version 3.0 - 1 February 2012 - Sectoral Scope 14 /69/.

Validation team confirms that both documents are valid at starting the validation

3.3.2 Applicability

The project complies with the conditions of applicability of the established methodology. Once the baseline (calculated ex-ante) is validated, it is fixed for ten years and must be re-assessed and updated every ten years

In opinion of AENOR, the evidence and explanations confirm the fulfilment of the project with the methodology. The assessment was carried out for each applicability criterion and included, among others, the review of evidence and sources provided in the CCB-VCS-PD and the compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures as follows:

Applicability condition	Compliance
<u>Conditions Related to Eligible Land Conditions</u> This methodology is applicable to areas where land prior to project implementation meets the following conditions: ✓ *Land in the project area consists of either one contiguous area or multiple discrete project*	✓ *The project area has been a forestry concession since 2002, in addition, satellite images from ten years prior to the start of the project have been analysed to show that the land in the project area qualifies as forest according to the definition of the National Forest*

Applicability condition	Compliance
area parcels, and must meet an internationally accepted definition of forest, such as those based on UNFCCC host-country thresholds or FAO definitions, and must qualify as forest for a minimum of 10 years before the project start date. ✓ *The project area must be deforested or degraded in absence of the REDD project activity and the deforestation and degradation must be mosaic in nature as described in the VCS AFOLU Requirements.* ✓ *Drivers of deforestation and forest degradation must fall into one or more of the following categories):* • *Conversion of forest land to cropland for subsistence farming.* • *Conversion of forest land to settlements.* • *Conversion of forest land to infrastructure, including new roads.* • *Logging of timber for commercial sale (eg, wood planks or poles for commercial sale).* • *Logging of timber for local enterprises and domestic uses.* • *Wood collection for commercial sale of fuelwood and charcoal.* • *Fuelwood collection for domestic and local industrial energy needs (eg, cooking, home heating, tobacco curing, brick making).* • *Cattle grazing in forests.* • *Extraction of understory vegetation (eg, thatch grass collection for roof and livestock bedding materials, shrubs and small trees for straw fences).* • *Forest fires to the extent that they are not part of natural ecosystem dynamics (eg, forest fires related to hunting, honey collection, intentional land clearing on land with a high fuel-load).* None of the drivers listed above must be planned in nature. If deforestation from a specific driver is occurring as a result of planned forest conversion	*and Wildlife Inventory of Peru /70/. This definition complies with the internationally accepted definition of FAO.* ✓ *The historical analysis carried out in the project area reveals the great threat of unplanned deforestation suffered by the project area in the form of a mosaic. Surrounding forest concessions and forest areas are already being deforested by the expansion of agrarian activities. The rural property in Peru is very small and the agrarian production is mainly caused by small-scale agriculture.)* ✓ *The unplanned driver identified is: Conversion of forest land to cropland for subsistence farming.* ✓ *Organic soils and peatland were not taken into account.* AENOR´s validation team reviewed the satellite images from ministry of environment in the GEOBOSQUES platform: https://geobosques.minam.gob.pe and confirm the unplanned identified driver and the main characteristics of project. Also, during the on-site visit to the project zone was confirmed the conversion of forest land to cropland for subsistence farming.

Applicability condition	Compliance
activities, then such a driver must be excluded from analysis. ✓ *This methodology is not applicable to organic soils or peatland.* • *Organic soils and peatland were not taken into account.*	
<u>Conditions Related to Eligible Project Activities</u> This methodology is applicable to projects that implement one or more of the following activities: • *Strengthening of land-tenure status and forest governance.* • *Supporting the development and implementation of sustainable forest and land use management plans.* • *Demarcating forest, tenure and ownership boundaries; promoting forest protection through patrolling of forests and forest boundaries; promoting social inclusion and stewardship in local communities; facilitating social fencing through capacity building; and creating mechanisms to alert law enforcement authorities of forest trespassing.* • *Fire prevention and suppression activities including the construction of fire breaks, reduction of fuel loads, prescribed burning, education to minimize intentionally started fires, support for fire brigades, water cisterns, fire lookouts, and communication systems.* • *Reducing fuelwood consumption and/or increasing energy efficiency by introducing fuel-efficient woodstoves or brick kilns and curing equipment.* • *Creation of alternative sources of fuelwood through agroforestry, farm woodlots management and introduction/intensification of other renewable and non-fossil fuel-based energy sources (such as solar).* • *Sustainable intensification of agriculture on existing agricultural land.*	Project proponent is implementing the following activities: • *Strengthening of land-tenure status and forest governance.* • *Supporting the development and implementation of sustainable forest and land use management plans.* • *Demarcating forest, tenure and ownership boundaries; promoting forest protection through patrolling of forests and forest boundaries; promoting social inclusion and stewardship in local communities; facilitating social fencing through capacity building; and creating mechanisms to alert law enforcement authorities of forest trespassing.* • *Creation of alternative sources of fuelwood through agroforestry, farm woodlots management and introduction/intensification of other renewable and non-fossil fuel-based energy sources (such as solar).* Validation team confirmed the implementation of those activities during the on-site visit by interviewing local authority, workers of the project and local stakeholders.

Applicability condition	Compliance
• *Development of local enterprises based on sustainably harvested non-timber forest products (NTFPs) such as honey, medicinal plants, etc.*	
<u>Conditions Related to Optional Harvest Activities in the Project Area</u> Implementing harvesting in the project area as described in Section 8.2.7 is optional but is only is eligible under this methodology only if the following applicability conditions are met: • *The harvest plan and harvest activities must follow Best Management Practice (BMP) guidance of the country or jurisdiction, if such BMP guidance exists.* • *The harvest plan must describe procedures to protect soil, water and residual trees in the harvest area and provide documentation on the presence/absence of any threatened or endangered species on the site, potential impacts on species and mitigation measures that will be employed.* • *The harvest plan must describe the biophysical sustainability of the harvesting practices. At minimum, the biophysical sustainability must be demonstrated by ensuring that the net removal of biomass from harvesting is less than the net increment of the biomass in the forest. Where possible, the project proponent should use criteria and indicators such as from International Tropical Timber Organization (ITTO) to assess the sustainability of harvesting practices. In addition, it is recommended to obtain sustainability certification from third parties, such as the Forest Stewardship Council or the Sustainable Forestry Initiative.*	The harvest plan and harvest activities follow the two guidelines: The General Forest Management Plan /25/ and the approval /66/, which provides an overview of the original state of the forest and the plan for future use. The Annual Operational Plan /71/ that includes the forest census, which records 100% of the existing trees and details all the activities that will be carried out in the Forest Management. Validation team assessed the forest management plan /25/ and annual operational plan /71/ an confirm that complies with the requirements of the methodology

Applicability condition of applies tool:

Applicability condition	Compliance
a) AFOLU activities the same or similar to the proposed project activity on the land within the	Forest concessions may be reverted to Peruvian State if the concessionaries are not capable to

Applicability condition	Compliance
proposed project boundary performed with or without being registered as the VCS AFOLU project shall not lead to violation of any applicable law even if the law is not enforced;	accomplish with the obligations assumed in the Concession Contract. It is a common practice that abandoned areas are soon occupied for agrarian purposes, recognized by municipalities and other public entities in the coming years. This condition was validated against forest concession contracts /27/ and approvals /29/ /66/ and during the site visit.
b) The use of this tool to determine additionality requires the baseline methodology to provide for a stepwise approach justifying the determination of the most plausible baseline scenario. Project proponent(s) proposing new baseline methodologies shall ensure consistency between the determination of a baseline scenario and the determination of additionality of a project activity.	No new baseline methodology different to the approach described in this methodology is being proposed.

In addition, according to the applies methodology, section 4.4.1. mention that "The project area must be deforested or degraded in absence of the REDD project activity and the deforestation and degradation must be mosaic in nature as described in the VCS AFOLU Requirements (replaced by VCS Methodology Requirements /112/). The definition of mosaic configuration from the AFOLU Requirements were adopted in the VCS Methodology Requirements (v4.1, Section A1.9, 2, b), which states:

Applicability condition	Compliance
"The mosaic deforestation and/or degradation pattern can result when human populations and associated agricultural activities and infrastructure are spread out across the forest landscape. In a mosaic configuration most areas of the forest landscape are accessible to human populations. *Mosaic deforestation and/or degradation typically occur: where population pressure and local land use practices produce a patchwork of cleared lands, degraded forests, secondary forests of various ages, and mature forests; where the forests are accessible; and where the agents of deforestation and/or degradation are present within the region containing the area to be protected*	According to the report: The deforestation route in Madre de Dios: "The loggers have surrounded my concession" (Reaño,2021) /113/, forest concessions and surrounding forest areas are already accessible to deforestation agents, mainly to do agriculture and cattle grazing, and usually joined and/or preceded by illegal extraction of wood. According to According to The National Strategy on Forest and Climate Change /114/ (ENBCC, as its acronyms in Spanish), which is the Peruvian REDD+ Strategy, the rural property in Peru is very small and the agrarian production is mainly caused by small-scale agriculture (less than 5 ha explains more than 90% of Amazon forest loss). In the case of Tahuamanu province, where the project is located, the patches size of deforestation show that

Applicability condition	Compliance
	it happens in small areas, though the proportion of patches between 5-50 ha. Size of the patches of forest loss in the Tahuamanu province were contrasted against official information, provided in the Forest Cover Change Monitoring Platform from ministry of environment (GEOBOSQUES: https://geobosques.minam.gob.pe/). In addition, during the on-site assessment drone overflight was conducted to verify forest degradation at the concession border. Then it was possible to confirm by the audit team that the population pressure and local land use practices produce a patchwork of cleared lands and confirming the mosaic deforestation.

The CCB-VCS-PD describes, in section 3.1.2., the applicability condition of the methodology and tool. Data are provided, and limits are fulfilled. AENOR´s validation team, based on records provided, including spreadsheets calculations /72/ of the emissions reductions, has verified that applicability conditions of the methodology and tool. Therefore, concludes that the project activity complies with the applicability conditions of the methodology, and any tools or modules selected by the project proponent.

3.3.3 Project Boundary

This methodology requires accounting of all potential emissions of CO_2, N_2O and CH_4 from sources not related to changes in carbon pools. Then, project proponent included the following GHG emissions from sources not related to changes in carbon pools (emission sources):

SOURCE		GHG	¿INCLUDED?	EXPLANATION	JUSTIFICATION
BASELINE	Deforestation and forest degradation baseline	CO2	No	Emissions are related to changes in carbon pools. Include only when the degradation has not been included in the estimation of changes in carbon pools and if CFE activities are implemented.	Degradation not included in the estimation of carbon pools but does not implement CFE activities
		CH4	No	Conservatively omitted, except when CFE activities are implemented.	Does not implement CFE activities.
		N2O	No	N2O emissions from burning woody biomass are assumed negligible and conservatively excluded except when CFE activities are implemented.	Does not implement CFE activities.
PROJE		CO2	No		

SOURCE		GHG	¿INCLUDED?	EXPLANATION	JUSTIFICATION
	Cookstove and fuel efficiency (CFE) activities			Emissions are already included in the changes of carbon pools. Include only when the degradation has not been included in the estimation of changes in carbon pools.	Does not implement CFE activities.
		CH4	No	CH4 emissions of burning woody biomass in CFE activities are significant.	Does not implement CFE activities.
		N2O	No	N2O emissions of burning woody biomass in CFE activities are significant.	Does not implement CFE activities.
	Biomass burning from unplanned large and small scale fires	CO2	No	Emissions are already included in the changes of carbon pools	Already included.
		CH4	No	CH4 emissions of burning woody biomass from unplanned fires are insignificant. If the fires are catastrophic, CH4 emissions must be estimated and demonstrated negligible or otherwise accounted for.	Insignificant. No catastrophic fires registered
		N2O	No	N2O emissions of burning woody biomass from unplanned fires are insignificant, unless fires are catastrophic, N2O emissions must be estimated and demonstrated negligible, or otherwise accounted for.	Insignificant. No catastrophic fires
	Fossil fuel used during harvesting	CO2	No	Emissions from fossil fuel combustion is considered de-minimis for REDD.	Minimum
		CH4	No	Insignificant	Insignificant
		N2O	No	Insignificant	Insignificant
	Removal of woody biomass during assisted natural regeneration (ANR) activities	CO2	No	Emissions related to changes in carbon pools are taken into account	Does not implement ANR activities.
		CH4	No	CH4 emissions from removal of woody biomass are significant when fire is used in preparing the land for ANR activities	Does not implement ANR activities.
		N2O	No	N2O emissions from burning woody biomass during ANR activities are assumed negligible and conservatively excluded.	Does not implement ANR activities.
	Fertilizer used during	CO2	No	Assumed negligible	Does not implement ANR activities.

SOURCE		GHG	¿INCLUDED?	EXPLANATION	JUSTIFICATION
	enrichment planting for assisting natural regeneration	CH4	No	Assumed negligible	Does not implement ANR activities.
		N2O	No	Assumed negligible per VCS guidance	Does not implement ANR activities.
	Increased area of rice production systems	CO2	No	Assumed negligible	No rice production areas
		CH4	No	CH4 emissions from rice cropping systems are significant	No rice production areas
		N2O	No	Assumed negligible per VCS guidance	No rice production areas
	Increased fertilizer use	CO2	No	Not applicable	-
		CH4	No	Not applicable	-
		N2O	No	N2O emissions related to increased fertilizer use are de minimis	No Fertilizers
	Increased livestock stocking rates	CO2	No	Not applicable	No grazing
		CH4	No	CH4 emissions related to increases in livestock stocking rates are significant	No grazing
		N2O	No	N2O emissions related to increases in livestock stocking rates are significant	No grazing

Carbon pools

Carbon Pools	Included?	Justification/ Explanation of Choice
Aboveground tree biomass	Yes	Major carbon pool affected by project activities
Aboveground non-tree biomass	Yes	Expected to increase from project activities. Must be included when the land cover under the baseline scenario is perennial tree crop. May be excluded when baseline land cover is annual crop or pasture grass.
Belowground biomass	Yes	Major carbon pool affected by project activities. May be conservatively excluded.
Dead wood	No	Major carbon pool affected by project activities. May be conservatively excluded. If included either or both of standing or lying deadwood may be included.
Litter	No	Excluded as per VCS AFOLU Requirements.
Soil organic carbon	No	Conservative to exclude since this pool is expected to decrease under the baseline scenario. However, may be only included per VCS AFOLU Requirements on the condition that the land cover under the baseline scenario is comprised of annual cropping systems.

Wood products	Yes	Major carbon pool affected by project activities

Taking into account the justifications, assumptions and supporting information provided and the design of the project, AENOR deems that project boundary is correctly defined and in compliance with the applicable methodology and VCS requirements.

3.3.4 Baseline Scenario

According to applied mythology, VM0006: Methodology for Carbon Accounting for Mosaic and Landscape-scale REDD Projects. Version 2.2 - 17 March 2017 - Sectoral Scope 14, the most plausible baseline scenario for a project is the existing or historical changes in carbon stocks in the carbon pools within the project boundary. This baseline scenario is consistent with scenario identified in the CDM Modalities and Procedures for afforestation and reforestation, project activities (Decision 5/CMP.1), paragraph 22, option (a):

Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary.

This option was selected because under the mosaic typology of deforestation, the historical changes in land-use are representative for the most likely future changes in land-use. The most appropriate future scenario is that historical rates, change in rate, and dynamics of deforestation and forest degradation will continue in the future.

Figure 3.4 of project design document, based on official information from the Ministry of Environment (MINAM), the GEOBOSQUES platform, clearly shows the trend of deforestation and has an inflection point in 2009 due to the increase of gold price and the construction of the Interoceanic Highway.

Despite the province of Tahuamanu, where the project is located, is not the main target for the mining activity in the region, it has a similar evolution of the deforestation rates, as per MINAM report The Iberia town, which is located next to the project area, is a main deforestation hotspot.

The increasing of roads due to Interoceanic Highway and illegal wood extraction are threatening the forest cover in the project area and its surroundings. Therefore, the validation team is able to confirm that meets the requirements established by the methodology for baseline scenario.

Madre de Dios was a region with difficult access. However, when the Interoceanic Highway was finally completely the transportation cost reduced dramatically, increasing exponentially the internal migration from the highlands of Peru. For that reason, Madre de Dios is having an exponential increase of the deforestation rate, this fact is confirmed whit official information provided by the ministry environment in the platform for monitoring changes in forest cover: http://geobosques.minam.gob.pe/geobosque/view/perdida.php. Therefore, project activity complies with het baseline scenario, established by the methodology.

3.3.5 Additionality

Additionality was analysed by following the methodological tool VT0001, version 3.0, for the demonstration and assessment of additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) project activities.

The following steps were developed to demonstrate additionality:

- STEP 1. Identification of alternative land use scenarios to the proposed VCS AFOLU project activity
- STEP 2. Investment analysis (not applicable);
- STEP 3. Barrier analysis; and
- STEP 4. Common practice analysis

Following the applied producer stated in the tool, project proponent identified two alternative scenarios:

- Project activities without being registered as a REDD project
- Continuation of the pre-project land use

The identified alternative scenarios are consistent with the applicable laws and regulations at the national, regional and local level. In this sense, Validation team reviewed applicable local regulation /38/ /39/ /40/ /41/ /42/ /43/ /44/ /45/ and concludes that land use scenarios are consistent with mandatory laws and regulations and relevant national and/or sectoral policies and circumstances have been considered and are listed in the project description. Thus, AENOR considers that the identified baseline scenario is correctly justified.

For demonstrating the additionally, project proponent conducted the investment analysis (step 2 of the applied tool). The project proponent carried out the net present value analysis (NPV), section 3.1.5 of the CCB-VCS-PD includes all the steps requested by the applied tool. A cash flow has been done for each one of the three following scenarios:

- The project scenario (including carbon incomes and REDD project activities, including REDD+ certification costs)

- The baseline scenario (with the expected trends of deforestation used to calculate baseline forecasts of forest loss area

- A scenario that includes REDD activities required to face deforestation trends (except certification costs) but without the expected incomes from carbon sales

Project proponent provided the cash flow and sensitive analysis spreadsheet /36/, including supporting evidences: Concession operating costs /72/; Discount rate studies in REDD projects: The Cost of Managing Forest Carbon under REDD+ Initiatives: A Case of Kolo Hills Forests in Kondoa District, Dodoma, Tanzania /73/; Forest concessions in Peru: how to make them sustainable? /74/; price of timber in the forest concession /75/; VCUs prices (2019, 2020 and 2021) /76/; Volumes of timber felled from 2017 to 2021 /77/; Implementation costs in the REDD+ project /78/ and official inflation rate in Peru from 2017 to 2021 /79/.

Commercial information as prices, contracts and costs are sensitive commercial information, as per disclaimer include in section 2.4.7 of the CCB-VCS-PD, therefore this information are not included in this report. Summary of the result are detailed bellow:

Scenario	NPV (USD/ha)
a. Project Scenario	$ 62.83
b. Baseline Scenario	$ 15.82

Scenario	NPV (USD/ha)
c. Project Scenario without carbon incomes	$ 14.47

NPV per hectare in the baseline scenario ($15.82) is higher than project scenario without the carbon incomes ($14.47). This situation meets the requested condition to demonstrate additionality as per applied tool. In addition, sensitive analysis in the horizon of 10 years from 2017 to 2026 was carried out, considering VCUs price, timber volume sold and timber prices.

Sensitivity Analysis	Base scenario	-10%	-20%
1. Carbon price (USD)	3.13	2.82	2.50
NPV per ha – a	$ 62.83	$ 57.17	$ 46.99
NPV per ha – b	$ 15.82	$ 15.82	$ 15.82
NPV per ha – c	$ 14.47	$ 14.47	$ 14.47
Volume sold (in %)	75%	68%	60%
NPV per ha – a	$ 62.83	$ 57.17	$ 46.99
NPV per ha – b	$ 15.82	$ 15.82	$ 15.82
NPV per ha – c	$ 14.47	$ 14.47	$ 14.47
Timber price	S/. 212.72	S/. 191.45	S/. 170.17
NPV per ha – a	$ 62.83	$ 57.72	$ 52.61
NPV per ha – b	$ 15.82	$ 11.90	$ 7.98
NPV per ha – c	$ 14.47	$ 10.55	S 6.64

Comparing result of the in sensitive analysis it is likely that the activities to prevent the deforestation growing will not be implemented due to REDD project is unlikely to be financially attractive and is under a high degree of vulnerability without the incomes from carbon sales.

Project proponent also conducted a common practice analysis (step 4 of the applied methodology). No similar activities are carried out the relevant geographical area. Validation team identified only project activities registered under VCS as AFOLU projects; however according to the methodology other registered VCS AFOLU project activities shall not be included in this analysis.

In conclusion and based on reliable and recognized sources, the justifications about the project activities and their nature, AENOR deems that the investment analyses and common practice analyses are

appropriately justified and deems credible. Relevant national and/or sectoral policies and circumstances have been considered and are listed in the project description. The procedures for identifying the baseline scenario have been correctly followed according to the steps in the combined tool and the identified scenario reasonably represents what would have occurred in the absence of the project. Thus, AENOR considers that the project activity is additional.

3.3.6 Methodology Deviations

Project proponent included three deviations, relating to measurement criteria set out in the methodology:

1. LULC Classes

The change in land use that occurs in Tahuamanu - Madre de Dios is mainly due to self-consumption agriculture (9.1%) and pastures (90.1%), according to the AIDER document (2015) "Motors, agents and causes of deforestation in the Peruvian Amazon"; conservatively, only a change of use from the forest stratum (Selva ecozone) to the pasture stratum (more conservative land use due to the higher carbon content, see the following table) will be used.

Carbon Pool	Pasture	Crop
AGL+BG	121.87	69.91

This deviation does not negatively affect the conservative nature of the quantification of GHG emission reductions or eliminations, since the most representative change in use is used (close to 100%) and at the same time the most conservative, since it has almost double of carbon content. The parameters affected by this deviation are:

In the EQ1: $L(1) = CF * \sum_{i=1}^{nrStrata}(\Delta area_{cropland,baseline}(i) * (OM(i) - OM(cropland)))$

Affected parameters:

nrStrata: 1. Only one stratum.

Cropland: Pastures. Pastures will be taken as more conservative.

Validation team by reviewing provide evidence: Motors, agents and causes of deforestation in the Peruvian Amazon /105/ confirms that the main change in use is from forest land to pasture, so the main driver of deforestation is the conversion of forest land to pasture. Then, validation team considers that this deviation is appropriate to the project activity, and it is conservative.

2. Leakage

*To determine the additional or extra time that deforestation agents will be willing to travel to continue carrying out their activities, the project has chosen not to obtain this information by applying a social assessment, but rather an analysis of the project area and its areas has been carried out following the principles of the methodology to determine the leakage belt, which will be explained in section 3.2.*3.

The reason the information was not collected by asking them directly is that deforestation is illegal. Asking them directly, in addition to being risky, could be interpreted as an authorization to continue their illegal activity and at some point, a way to promote them or a relaxation of governance. In no case, the proponent of the project

undertakes to give this type of signals or messages. It is for this reason that this methodological deviation does not have a negative impact on the conservativeness of the quantification of GHG emission reductions or removals.

The alternative method is to define a belt of 5 km circundating the project area. The value of 5 km was established considering that the reference region, after discounting the area of the leakage belt and project area, cannot be lower than 250 thousands of hectares.

Considering that, with a belt of 5 km, the net area of the reference region is just a little bit higher than 250 thousand of hectares (251,280 ha).

This deviation only modifies the way of delimiting the leakage belt in section 8.3.2.2, it does not affect any other parameter.

Validation team confirmed that the methodology of determining leakage belt are appropriate and due to legal circumstances, then do not affect the conservativeness of the quantification of GHG emission.

3. Emission Factor

The National Forest and Wildlife Service (SERFOR) has been conducting since 2013 the National Forest and Wildlife Inventory (INFFS), in an effort to evaluate the country's forest resources. This inventory is permanent and covers all types of forests (and conservation condition).

The methodology used in the INFFS was established in a participatory process between inventory specialist from MINAM, SERFOR, IIAP, national universities, Regional Government representatives, with the technical support of the US Forest Service and FAO. The strata were defined based on physiographic, floristic and accessibility characteristics, among others, resulting in 6 stratum or ecozones: Cost (Costa), Highlands (Sierra), Lowland Jungle (Selva Baja), High Accessible Forest (Selva Alta Accesible), High Non-Accessible Forest (Selva Alta de Difcíl Acceso), and Hydromorphic zone (Zona Hidromórfica). The sample size for each ecozone was determined, totaling 1854 parcels systematically distributed throughout the national territory. The plots are then divided into 5 panels for staggered fieldwork. After visiting the last panel, the first panel is re-evaluated, and so on.

One of the results that the INFFS produces is the information on carbon stocks for each ecozone. These values are being used, since the publication of the first results, in the national carbon accounting system: the National GHG Inventory, which is done in a periodical basis, the Forest Reference Level presented to the UNFCCC, and the National Determined Contributions for the AFOLU sector.

In addition, it is important to note that MINAM is developing a process to nest all REDD projects in the national accounting system, to improve environmental integrity. For this reason, the project has considered it opportune to use, as far as possible, official sources of information to advance in national alignment. This involves the use of the forest stratification and carbon stocks values from the INFFS.

The whole project area falls inside the Lowland Jungle ecozone, with a carbon stock of 372.68 t d.m/ha that was taken from the LULUCF National GHG Inventory of 2016 . After conversions, the value is equal to 683.24 t CO2/ha.

Validation team reviewed the included deviation of applied methodology, PP instead of implementing the temporary plots (as per methodology requirement), decided to use the values reported by Environmental Ministry of Perú (MINAM) in the Forest Reference Level presented to the UNFCCC, and the National Determined Contributions for the AFOLU sector.

Validation team contrasted value used 683.24 tCO2/ha ($372.68 \times 0.5 \times 44/12$ tCO2e/ha) against official source (https://infocarbono.minam.gob.pe/wp-content/uploads/2021/06/RAGEI_UTCUTS_2016_11-06-21.xlsx). Also, it was reviewed National Determined Contributions for the AFOLU sector and conclude that this emission factor is appropriate to the project activity. Then, this deviation do not affect the conservativeness.

AENOR´s validation team reviewed proposed methodology deviations and the applicability in the emission reduction calculation and is able to confirm that these four (04) deviations do not negatively impacts the conservativeness of the quantification of GHG emission.

3.3.7 Quantification of GHG Emission Reductions and Removals

To quantify current carbon stocks in the project area, was used the procedure defined in the methodology to prevent unplanned deforestation, VM0006, version 2.2. Complete steps to calculate emission reduction are detailed in section 3.2 of the CCB-VCS-PD. Validation team assessed the emission reduction calculation spreadsheet /80/; Beta regression model /81/; deforestation rates /82/; reference region map /16/; project area map /17/; leakage belt map /18/; KML files /19/; GIS data /20/, scarcity factor calculation[2] (appendix 14 of CCB-VCS-PS); Spatial modelling report /115/; and default values form the applied methodology. Result are summarized following:

Final emission reduction is calculated as per equation 105 of the applied methodology:

Net Emission Reductions (NERs)	**=**
ΔGHG from avoided deforestation excluding ANR and harvest areas	1
+ ΔGHG from deforestation due to leakage	2
+ ΔGHG from avoided degradation	3
+ ΔGHG from degradation due to leakage	4
+ΔGHG from leakage by unconstrained geographic drivers	5
+ ΔGHG from assisted natural regeneration	6
+ ΔGHG from changes in long-lived wood products	7
+ ΔGHG from improved cook stoves	8

[2] Validation team assessed the calculation of scarify factor by reviewing appendix 14 against applied methodology (VM0006) and confirm that it was calculated through its two coefficients (SC_1 and SC_2) and historical data in similar areas.
The scarcity factor was calculated using the equation 40 (EQ40) of applied methodology. Remaining area in the project was estimated using the forest loss over the territory of Peru, for the period 2001 - 2020, provided by Environmental Ministry of Perú (MINAM) in the GEOBOSQUES platform (https://geobosques.minam.gob.pe/geobosque/view/index.php).
Then, the two shape factors SC_1 and SC_2 were estimated using a non-linear model. Validation team, after reviewed the appendix14 and procedures established in the methodology, concludes that the two shapes factor were estimated as per VM0006 requirements.

Net Emission Reductions (NERs)	=
+ ΔGHG from other and secondary sources	9
+ΔGHG from avoided deforestation from areas under harvest	10

The following table shows the summary of the results for baseline, leakage and project emissions in tCO_2e:

Year	NERs (tCO_2e)	1	2	3	4	5	6	7	8	9	10
2017	819,602	1,041,457.71	-343,508.79	0	0	0	0	0	0	0	121,653.37
2018	877,454	1,087,126.85	-387,138.88	0	0	0	0	0	0	0	177,466.49
2019	1,021,676	1,312,319.37	-434,280.54	0	0	0	0	0	0	0	143,637.76
2020	1,120,515	1,466,225.91	-485,222.40	0	0	0	0	0	0	0	139,511.90
2021	1,226,377	1,603,992.44	-563,342.86	0	0	0	0	0	0	0	185,727.88
2022	1,354,958	1,777,031.06	-624,097.88	0	0	0	0	0	0	0	202,025.56
2023	1,490,803	1,959,785.53	-688,220.17	0	0	0	0	0	0	0	219,238.33
2024	1,632,902	2,151,156.75	-755,517.29	0	0	0	0	0	0	0	237,262.68
2025	1,780,147	2,349,254.32	-825,027.19	0	0	0	0	0	0	0	255,920.54
2026	1,743,107	2,552,011.98	-1,083,921.51	0	0	0	0	0	0	0	275,017.32

Then, total and average (during the 10 years) net emission reduction are:

$$\boldsymbol{NERs = 13,067,541\ tCO_2e}$$

$$\boldsymbol{AVERAGE = 1,306,754\ tCO_2e}$$

The calculation Voluntary Carbon Units (VCUs) amounts were made by subtracting 10% of the net annual emission reductions, as per equation 106 of the applied methodology, calculated according to the AFOLU non-permanence risk tool.

$$\boldsymbol{Verified\ Carbon\ units\ =\ NERs - buffer.(1+3+6+7+10)}$$

Year	VCU	NERs	buffer	1	3	6	7	10
2017	703,290	819,602	10%	1,041,457.71	0	0	0	121,653.37
2018	750,994	877,454	10%	1,087,126.85	0	0	0	177,466.49
2019	876,080	1,021,676	10%	1,312,319.37	0	0	0	143,637.76
2020	959,941	1,120,515	10%	1,466,225.91	0	0	0	139,511.90
2021	1,047,404	1,226,377	10%	1,603,992.44	0	0	0	185,727.88
2022	1,157,052	1,354,958	10%	1,777,031.06	0	0	0	202,025.56
2023	1,272,900	1,490,803	10%	1,959,785.53	0	0	0	219,238.33
2024	1,394,060	1,632,902	10%	2,151,156.75	0	0	0	237,262.68
2025	1,519,629	1,780,147	10%	2,349,254.32	0	0	0	255,920.54

Year	VCU	NERs	buffer	1	3	6	7	10
2026	1,460,404	1,743,107	10%	2,552,011.98	0	0	0	275,017.32

In AENOR´s validation team opinion the CCB-VCS -PD describes in an appropriate way with evidence and justifications how the project activity fulfils with the applicability conditions of the tool. In addition, the Non-Permanence Risk was calculated according to the tool risk report. A detailed validation assessment carried out by AENOR is provided in sections below. The overall risk rating is 10 %.

Based on the information reviewed, it can also be confirmed that the sources used are correctly quoted and interpreted in the CCB-VCS-PD and supporting documents. All assumptions and data indicated in the project description and all relevant sources were checked and confirmed.

The methodology was correctly applied following the requirements. All values in the project description are considered reasonable in the context of the proposed VCS CCB project activity. Data sources are quoted correctly. Hence, the calculation of baseline emissions, project emissions and the estimated net GHG emission reductions are considered correct.

3.3.8 Monitoring Plan

Project developer implement an organizational structure and carried out training to the personnel responsible for monitoring activities /83/. The monitoring system and the organizational structure of the project monitoring system are detailed in the CCB-VCS-PD (section 2.3.8). The information collected in the field by the technical staff is entered, reviewed and systematized by the head of monitoring and is evaluated by and social responsibility. Many forms have been implemented in order to collect the data for monitoring variables, collected data is digitized, reviewed and incorporated into a database. All field monitoring processes will be documented, all sampling units of established plots will be georeferenced and systematized.

Monitoring plan includes: the analysis of deforestation and degradation; the procedures for processing and interpreting satellite images. Furthermore, the monitoring plan includes the procedures for the quality control and quality assurance (QA/QC procedure) in order to ensure the quality of the project information, minimizing the risks of error, thus obtaining reliable data as the basis of a solid monitoring system. Finally, as part of the adaptive management system implemented by the project, an internal audit process will we carried out.

The list of parameters available at validation and data and parameters monitored are listed in sections 3.3.1 and 3.3.2 respectably in the VCS-CCB- PD. AENOR´s validation team reviewed and cross-checked included information against the applicable methodology and confirm that theya re in compliance with methodological requirements.

The major parameters to be monitored were discussed during the on-site visit, as well as main processes, data management, quality assurance and quality control procedures that will be implemented in the context of the project.

In AENOR's opinion all necessary parameters required by the selected methodology are contained in the monitoring plan. They are clearly described, and the means of monitoring described in the plan comply with the requirements of the methodology.

After the review of evidences provided by project proponent, the interviews and communications, AENOR confirms that monitoring arrangements described in the monitoring plan are feasible within the project design and that the means considered for the implementation, including data management, quality and assurance control procedures, are sufficient to ensure that the GHG net anthropogenic removals achieved resulting from the proposed project activity can be reported ex post and verified. Therefore, in opinion of the AENOR validation team the PP will be able to implement the monitoring plan.

3.3.9 Dissemination of Monitoring Plan and Results (CL4.2)

According to the CCB-VCS-PD the monitoring plan and its results will be presented twice per year in a citizen participation workshops (at the start and close of logging operations). Here, the main conclusions of the monitoring systems of previous year and the expected activities for next year will be shared. Internal meetings for MADERACRE workers.

Formal communication to stakeholders (local communities, public and private entities) will be sharing and public summaries of the monitoring reports and other relevant documents generated by the project will be available in the web page of the company.

3.3.10 Non-Permanence Risk Analysis

PP has elaborated VCS Non-permanence Risk Report /84/ /85/ for the validation process according to the AFOLU Non-Permanence Risk Tool, v4.0 /4/.

Below, it is explained the assessment of the non-permanence risk rating determined by the project participant in the report version 2, dated 18 March 2022, and issues raised to them in this regard.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Project Management	a) *Species planted (where applicable) associated with more than 25% of the stocks on which GHG credits have previously been issued are not native or proven to be adapted to the same or similar agro-ecological zone(s) in which the project is located.*	0	The project does not include the planting of tree species
	b) *Ongoing enforcement to prevent encroachment by outside actors is required to protect more than 50% of stocks on which GHG credits have previously been issued.*	0	The project has not issued any carbon credit.
	c) *Management team does not include individuals with significant experience in all skills necessary to successfully undertake all project activities (ie, any area of required experience is not covered by at least one individual with at least 5 year experience in the area).*	0	The project proponent has a multidisciplinary team with experience in the development and implementation of REDD projects.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
	d) Management team does not maintain a presence in the country or is located more than a day of travel from the project site, considering all parcels or polygons in the project area.	0	The project team has offices in Madre de Dios, region where the project is developed, 5 hours (approximately) from the project site.
	e) Mitigation: Management team includes individuals with significant experience Management team includes individuals with significant experience in AFOLU project design and implementation, carbon accounting and reporting (eg, individuals who have successfully managed projects through validation, verification and issuance of GHG credits) under the VCS Program or other approved GHG programs.	-2	The project proponent has a multidisciplinary team with experience in the development and implementation of REDD projects.
	f) Mitigation: Adaptive management plan in place	-2	Adaptative mitigation is not considered in the project activities.
	Total Project Management (PM): (a + b + c + d + e + f): -4 Total may be less than zero.		

In accordance with provided evidence, MADERACRE is an organization that has been working with conservation concessions in the Peruvian Amazon, by implementing alternative programs for the community's economy and simultaneously protect existing forests and recovering degraded lands. Management team maintain a strong presence in the zone and within the project area, including local office, near to the project area.

Management team engaged carbon project developer team has extensive technical expertise in developing AFOLU projects, as well as in-depth knowledge of national and international carbon market.

In AENOR´s opinion, total project management risk rating (-4) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool: VCS V4.0.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Financial Viability	*a) Project cash flow breakeven point is greater than 10 years from the current risk assessment*	0	No applicable. The project has a 10 years cashflow.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
	b) Project cash flow breakeven point is between 7 and up to less than 10 years from the current risk assessment	0	No applicable. The project has a 10 years cashflow.
	c) Project cash flow breakeven point between 4 and up to less than 7 years from the current risk assessment	0	No applicable. The project has a 10 years cashflow.
	d) Project cash flow breakeven point is less than 4 years from the current risk assessment	0	No applicable. The project has a 10 years cashflow.
	e) Project has secured less than 15% of funding needed to cover the total cash out before the project reaches breakeven	0	Not applicable. Project has secured more than 15% of the funding.
	f) Project has secured 15% to less than 40% of funding needed to cover the total cash out required before the project reaches breakeven	0	Not applicable. Project has secured more than 15% of the funding.
	g) Project has secured 40% to less than 80% of funding needed to cover the total cash out required before the project reaches breakeven	0	Not applicable
	h) Project has secured 80% or more of funding needed to cover the total cash out before the project reaches breakeven	0	Not applicable.
	i) Mitigation: Project has available as callable financial resources at least 50% of total cash out before project reaches breakeven	-2	The project cash flow shows that that it has financial resources for more than 50%
	Total Financial Viability (FV): (a + b + c + d + e + f): -2 Total may not be less than zero.		

In accordance with provided evidence, the project has secured the funding needed to cover the total cash out required before the project reaches breakeven. It was verified against cash flow 10 years /36/ and

supporting evidences of incomes and outcomes. Then, in AENOR´s opinion, total financial viability risk rating (-2) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool: VCS v4.0.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Opportunity Cost	*a) NPV from the most profitable alternative land use activity is expected to be at least 100% more than that associated with project activities; or where baseline activities are subsistence-driven, net positive community impacts are not demonstrated*	0	The REDD Project has a Net Present Value of US$ 61.18 per hectare, whereas the NPV of corn crop is US$ 60 per hectare. It implies that the most profitable alternative land use is less than 100% profitable than the REDD+ Project.
	b) NPV from the most profitable alternative land use activity is expected to be between 50% and up to100% more than from project activities	6	NPV is not under this range.
	c) NPV from the most profitable alternative land use activity is expected to be between 20% and up to 50% more than from project activities	0	No applicable.
	d) NPV from the most profitable alternative land use activity is expected to be between 20% more than and up to 20% less than from project activities; or where baseline activities are subsistence-driven, net positive community impacts are demonstrated	0	No applicable.
	e) NPV from project activities is expected to be between 20% and up to 50% more profitable than the most profitable alternative land use activity	0	Not applicable.
	f) NPV from project activities is expected to be at least 50% more profitable than the most profitable alternative land use activity	0	Not applicable.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
	g) Mitigation: Project proponent is a non-profit organization	0	Tahuamanu Project Proponent is a for-profit organization
	h) Mitigation: Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over the length of the project crediting period	0	The project is developed in an area that is determined by law as a permanent productive forest. The project proponents signed a concession with Peruvian government for 40 years renewable, so it covers the lifetime of the project.
	i) Mitigation: Project is protected by legally binding commitment to continue management practices that protect the credited carbon stocks over at least 100 years.	-8	Local regulation establishes that the project cannot be changed in the future for non-forest uses so even if the project proponent does not renew it, the area would still be considered a permanent productive forest.
	Total Opportunity Cost (OC) (a, b, c, d, e or f) + (g + h or i): -2 Total may be less than 0.		

Tahuamanu Project is developed in an area that is determined by law as a permanent productive forest. The project proponents signed a concession with Peruvian government for 40 years renewable /66/, so it covers the lifetime of the project. Furthermore, local regulation establishes the project are cannot be changed in the future for non-forest uses so even if the project proponent does not renew it, the area would still be considered a permanent productive forest. Then, in AENOR´s opinion, total opportunity cost risk rating (-2) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool, v4.0.

Internal Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Project Longevity	*a) Without legal agreement or requirement to continue the management practice*	0	No applicable
	b) With legal agreement or requirement to continue the management practice	0	= 30 - (project longevity/2)
	Total Project Longevity (PL): 0		

The Tahuamanu REDD+ project area is implemented in a forest concession, granted by the Peruvian state through a concession contract signed /27/ /29/ /66/ for a period of 40-years renewable every 5 years. Then, it is a legal requirement to continue maintaining the forest, even if the contract is not renewed, in that case, the responsibility is transferred to the government as “permanent production forests”.

The legal figure of "Concessions for Conservation" is a tool for the sustainable management of forests under the Peruvian Forest and Wildlife Law /26/ that allows civil society to manage forest areas. Then, in

AENOR´s opinion, Total Project Longevity (0) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool, v4.0.

Therefore, **total internal rick** is calculated as the sum of (PM + FV + OC + PL), totalling 0 (according the NPR tool the total may not be less than zero).

External Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Land and Resource tenure	*a) Ownership and resource access/use rights are held by same entity(s).*	0	Not applicable. The use right has been given by the concession contract.
	b) Ownership and resource access/use rights are held by different entity(s) (eg, land is government owned and the project proponent holds a lease or concession).	2	The ownership and resources access are given by the concession contract. While, the use rights are government owned.
	c) In more than 5% of the project area, there exist disputes over land tenure or ownership.	0	There are no disputes over land ownership between the state and the concessionaire and/or any other third party. This issue was confirmed during the on-site assessment.
	d) There exist disputes over access/use rights (or overlapping rights).	0	There are no disputes over land ownership between the state and the concessionaire and/or any other third party. This issue was confirmed during the on-site assessment.
	e) WRC projects unable to demonstrate that potential upstream and sea impacts that could undermine issued credits in the next 10 years are irrelevant or expected to be insignificant, or that there is a plan in place for effectively mitigating such impacts.	0	Not applicable. This is not a WRC project.
	f) Mitigation: Project area is protected by legally binding commitment (eg, a conservation easement or protected area) to continue management practices that protect carbon stocks over the length of the project crediting period.	-2	The project is developed in an area that is determined by law as a permanent productive forest. Local regulation establishes that the project cannot be changed in the future for non-forest uses so even if the project proponent does not renew

External Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
			it, the area would still be considered a permanent productive forest.
	g) Mitigation: Where disputes over land tenure, ownership or access/use rights exist, documented evidence is provided that projects have implemented activities to resolve the disputes or clarify overlapping claims.	0	There are no disputes over land ownership between the state and the concessionaire and/or any other third party. This issue was confirmed during the on-site assessment.
	Total Land Tenure (LT) ((a or b) + c + d + e + f +g): 0 Total may not be less than zero.		

The ownership and resources access are given by the concession contract /27/ /29/ /66/. While, the use rights are government owned. The project is developed in an area that is determined by law as a permanent productive forest. Local regulation establishes that the project cannot be changed in the future for non-forest uses so even if the project proponent does not renew it, the area would still be considered a permanent productive forest. No disputes or conflicts were identified during the on-site visit. Then, in AENOR´s opinion, total land tenure (0) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool, v4.0.

External Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Community Engagement	*a) Less than 50 percent of households living within the project area who are reliant on the project area, have been consulted.*	0	Not applicable: As the project area is a forest concession granted to a private company, no families live inside them
	b) Less than 20 percent of households living within 20 km of the project boundary outside the project area, and who are reliant on the project area, have been consulted.	0	During the on-site visit, validation team confirms that consultations were carried out outside the project area. However, it cannot be determined if the consultations were made to more than 20% of the population outside the project area.
	c) Mitigation: The project generates net positive impacts on the social and economic well- being of the local communities who derive livelihoods from the project area.	-5	The project is generating net positive impacts on the social and economic well- being of the local communities. Validation team reviewed many agreements between project developer and stakeholders. This

External Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
			issue was validated during the on-site visit.
	Total Community Engagement (CE), (a + b + c): 0 Total may not be less than zero.		

During the on-site visit, validation team confirms that local stakeholders participated in the different workshops carried out by project proponent; also, it was confirmed that consultations were carried out outside the project area. Then, in AENOR´s opinion, total community engagement (0) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool, v4.0.

External Risk	Risk Factor and/or Mitigation Description	Risk Rating	DOE Assessment
Political Risk	*a) Governance score of less than -0.79*	0	Not applicable.
	b) Governance score of -0.79 to less than -0.32	0	Not applicable.
	c) Governance score of -0.32 to less than 0.19.	2	The score was obtained from the "Governance score", calculated by "World Bank Institute´s Worldwide Governance Indicators (WGI). The average value is 0.174 for the period of 2016-2020.
	d) Governance score of 0.19 to less than 0.82.	0	Not applicable.
	e) Governance score of 0.82 or higher.	0	Not applicable.
	f) Mitigation: Country is implementing REDD+ Readiness or other activities, as set out in this Section 2.3.3.	-2	Perú is in the REDD+ Readiness process, financed by the World Bank
	Total Political (PC) ((a, b, c, d or e) + f): 0 Total may not be less than zero.		

validation team confirms the governance score against the world bank platform: http://info.worldbank.org/governance/wgi/Home/Reports; the average indicator was calculated for the last 5 year. Then, in AENOR´s opinion, total political risk (0) is properly justified and in accordance with the AFOLU Non-Permanence Risk Tool, v4.0.

Therefore, **total external rick** is calculated as the sum of (LT + CE + PC), totalling 0.

Natural Risk	Score (LS)	Mitigation	DOE Assessment
Fire	1	1	Despite being a common practice to burn farming areas to open or maintenance, it does not represent an immediate major danger to the Project Areas. This is evidenced in the official data of Madre de Dios, which only reports 1 considerable fire in 20 years.
Pest and Disease Outbreaks	0	-	In the Amazon forest there are no reports on plagues and endemic diseases in natural forests of Madre de Dios
Extreme weather	0	-	The official information confirms that there are many weather events considered natural emergencies. However, the region of Madre de Dios only has records of floods as recurrent and severe emergency for the population, affecting agricultural areas, pastures and urban areas mostly. For the forests, periodic flooding of the floodplain is part of its natural dynamics and does not represent a risk of change in carbon stocks.
Geological Risk	0	-	Madre de Dios is a geologically stable department. According to the National Centre of Geophysical Data is a region with no seismic activity.
Total Natural Risk (as applicable, F + PD + W + G + ON): 1 Determined by LS × M.			

During the on-site visit, validation team confirmed that project proponent has an environmental contingency plan /86/ in order to mitigate an reduce natural risk Then, in AENOR´s opinion, total natural risk (1) is properly justified and in accordance with AFOLU Non-Permanence Risk Tool, v4.0 and was assessed using table 10.

Therefore; overall non-permanence risk rating and buffer determination are calculated as follow:

Risk Category	Rating
a) Internal Risk	0
b) External Risk	0
c) Natural Risk	1
Overall Risk Rating (a + b + c)	**1**

AENOR has checked that information provided in the Non-Permanence Risk Report is consistent with documents of support provided. AENOR deems that information provided is reliable and appropriate, thus, the overall risk rating is credible and realistic. Then, non-permanence risk deduction to be applied for the project is 10%.

3.3.11 Optional Gold Level: Regional Climate Change Scenarios (GL1.1)

Not applicable.

3.3.12 Optional Gold Level: Climate Change Impacts (GL1.2)

Not applicable.

3.3.13 Optional Gold Level: Measures Needed and Designed for Adaptation (GL1.3)

No applicable.

3.4 Community

3.4.1 Descriptions of Communities at Project Start (CM1.1)

The project is located in Madre de Dios, a region in the south-east of the Peruvian Amazon within the Tahuamanu Province, covering the districts of Iñapari, Iberia, Tahuamanu and Las Piedras in the department of Madre de Dios.

Section 4.1.1 of the CCB-VCS-PD details the communities identified in the project area, including: San Francisco de Asis; Flor de Acre; Oceania; La Republica; Chilina Vieja; San Antonio de Abad; San Isidro de Chilina; Noaya; Arca Pacahuara (religious community); Villa Primavera (association); Nueva Esperanza; Belgica (indigenous community); and Iñapari (town centre). Well-being information; community characteristics and diversity within the community are addressed properly in the CCB-VCS-PD.

In AENOR´s opinion, description of the community stated in the CCB-VCS-PD is in line with VCS and CCB requirements. Provided information was confirmed during the on-site visit through interviews with local authority and local stakeholders.

3.4.2 Interactions between Communities and Community Groups (CM1.1)

Communities characterized are mostly migrants from other different regions from Peru. There is also interaction with neighbouring countries (Brasil), mainly in the Iñapari area and nearby places, due to the greatest economic and social dynamics between the two countries.

The process of social and economic dynamics is focused on Iñapari and Iberia (district capitals). The rural areas tend to move to the district capitals. Forestry is the economic activity that has boosted the most commercial and social interaction in the surrounding of project areas. As a result of the development in forestry sector, local companies have emerged to provide complementary services, such as lumber, coal, transportation, food, among others. It is also important to note that the Inter-Oceanic Highway has allowed local development to grow.

The assessment of the interaction between the communities and groups presented in section 4.1.2 of the CCB-VCS-PD at the Project start was carried out through workshops, interviews and surveys. The community interactions were confirmed during the on-site visit. Then, AENOR´s validation team confirms that what is reported in the CCB-VCS-PD are properly addressed.

3.4.3 High Conservation Values (CM1.2)

Project proponent will improve access to basic needs to surrounding communities in order to improve thier well-being. This fact was verified against agreements signed /31/ /32/ /33/ /34/ /35/ by PP and differentness local actors of the project activity.

The project also considers that the project activity will improve the protection of indigenous peoples in situation of isolation and situation of initial contact (PIACI). In this regard, the project proponent has developed an anthropological contingency plan for dealing with situations of risk in the face of evidence or encounters with indigenes population in isolation or initial contact /87/. Validation team reviewed updated plan /87/ (2021) and considers that the protection of PIACI lands and well-being of indigenous communities will be improved due project activity.

In addition to reviewing provided evidences, community well-being high conservation value areas identified in section 4.1.3 of the VCS-PD were confirmed during the on-site visit through interviews with local stakeholders.

3.4.4 Without-Project Scenario: Community (CM1.3)

According to baseline survey /88/, developed by project proponent, points that 83% of the families dedicated to cattle ranching, and 75% of the families dedicated to agriculture plans to expand their areas; 21% of intervened families considers that his property is insufficient. Therefore, in the without project scenario, it is likely that the families will increase their activities.

The surveys carried out were reviewed /88/ and assessed during the on-site visit in order to confirm the plausible scenario without project. AENOR´s validation team confirms that scenario described is the most likely

3.4.5 Expected Community Impacts (CM2.1)

Project proponent has identified four expected impacts:

- Crops productivity
- Agrarian activities stabilization
- Support to education, health and other resources
- Enhanced livelihood conditions

Increase in crops productivity; the improvement of productive practices; support to education and the increase of financial resources will directly impact in the communities its neighbours. The project generates net positive impacts on the well-being of communities and the community groups over the project lifetime. This fact was verified against agreements signed /31/ /32/ /33/ /34/ /35/ by PP and differentness local actors of the project activity

In addition to reviewing provided evidences, community well-being high conservation value areas identified in section 4.1.3 of the VCS-PD were confirmed during the on-site visit through interviews with local stakeholders. Then, AENOR´s validation team confirms that the information reported in the CCB-VCS-PD are properly addressed.

3.4.6 Negative Community Impact Mitigation (CM2.2)

There is no negative impact expected by the implementation of the project.

Even no negative impact is identified, preventively the project activity will monitor indicators, stated in section 4.4.1 of the project design document, in the localities close to the project, based on the monitoring results, the project will design appropriate mitigation measures (if any) to avoid any negative impact regarding this issue. Project proponent will implement the PRA Study (Diagnosis through stakeholders). This study looks for the existence of a potential degradation risk within the project area caused by the deforestation agents from nearby areas such as extraction of firewood, carbon production or illegal logging. The validation team confirms that this measure will mitigate negative impacts to communities.

3.4.7 Net Positive Community Well-Being (CM2.3, GL1.4)

The project plans to invest 1% of incomes in the promotion of sustainable activities. The impact in terms of productivity will be part of the monitoring plan. In addition, the project will provide training; invest in health and education conditions; and ensure the permanent access to water quality and availability.

AENOR´s validation team confirms that net well-being impacts of the project are predicted to be positive for all identified community groups compared with their anticipated well-being conditions under the without-project. This was assessed during the onsite visit through interviews with local stakeholders.

3.4.8 High Conservation Values Protected (CM2.4)

The PIACI territory (National Program for Indigenous Peoples in Situation of Isolation and Situation of Initial Contact) is located at the west of the forest concession. Without the REDD+ project, the expansion of agrarian activities and illegal logging could endanger the territories of these uncontacted groups. The Belgica native community would lose the technical and financial support from MADERACRE, including the FSC certification of their forest areas.

Therefore, in AENOR´s opinion the Project activities represent an opportunity to better protect the HCVs identified in step 3.4.3 of this report by implementing the activities described in section 4.2.4 of the CCB-VCS-PD.

3.4.9 Impacts on Other Stakeholders (CM3.1)

The main expected impact on other stakeholders are:

- Forest area and forest resources protection. The support of local families will benefit indirectly to neighbouring forest concessions as it will reduce the pressure from rural families to establish their agrarian crops and pastures.
- Tax incomes from forest concessions. This should allow to continue operating strengthening the forestry sector and the incomes that the Peruvian Government receives from this productive sector.

Even no negative impacts are identified, preventively the project activity will monitor indicators, stated in section 4.4.1 of the project design document, in the localities close to the project, based on the monitoring results, the project will design appropriate mitigation measures (if any) to avoid any negative impact that might happen.

Furthermore, Project proponent included the indicator: “% of increment in deforestation rate” for the impact forest area and forest resources protection and the indicator “% of increment of income” for the impact tax incomes from forest concessions in table 4.11 of section 4.4.1.

Therefore, in AENOR´s opinion the potential impacts would impact in favourable manner in well-being of the other local stakeholders.

3.4.10 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

No net negative impacts were identified by project proponent.

During the on-site assessment, validation team consulted whether the project would impact negatively; however, the response of the interviewees were only positive impacts on the local population (for example job creation for local stakeholders and taxes increases for government agencies).

The name of stakeholders and local authorities interviewed are detailed in section 2.4 of this report, including the main topics covered.

3.4.11 Net Impacts on Other Stakeholders (CM3.3)

According to the information contained in the description documents of the communities adjacent to the project area, the interviews conducted; and following the CCB standard, it is possible to affirm that the net impact of the Project is positive. Then, the audit team concluded that the likelihood of positive and negative impacts on the well-being of other stakeholder groups is correctly addressed in the CCB-VCS-PD.

3.4.12 Community Monitoring Plan (CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5)

Final version of CCB-VCS-PD (section 4.4.1) has included information related to the monitoring plan to assess the effectiveness of those measures taken to maintain or enhance all identified HCV related to community well-being. In that sense, as specific variables that will be measured at this level are:

- Trend of future land use
- Average size of agricultural area
- Average size of pasture area
- Average density of cattle per hectare
- Level of consumption of firewood
- Level of consumption of charcoal
- Level of consumption of timber for non-commercial purposes
- Average distance to collect firewood / charcoal / timber
- Origin of firewood / charcoal / timber

Project proponent will employ statistical method with a level of confidence of 95% and a margin of error of 10%, in order to determine the sample size. Furthermore, the community indicator will be:

- Productivity (tons/ha)
- Unit Price (compared with price of families who do not access to project benefits)
- Number of trainings received

AENOR´s validation team reviewed the final version of the CCB-VCS-PD and the community monitoring plan and confirmed that the plan includes all CCB requirements.

3.4.13 Monitoring Plan Dissemination (CM4.3)

As stated in section 3.3.9 of this report, the CCB-VCS-PD the monitoring plan and its results will be presented twice per year in a citizen participation workshops (at the start and close of logging operations). Here, the main conclusions of the monitoring systems of previous year and the expected activities for next year will be shared. Internal meetings for MADERACRE workers.

Formal communication to stakeholders (local communities, public and private entities) will be sharing and public summaries of the monitoring reports and other relevant documents generated by the project will be available in the web page of the company.

3.4.14 Optional Gold Level: Exceptional Community Criteria (GL2.1)

Not applicable.

3.4.15 Optional Gold Level: Short-term and Long-term Community Benefits (GL2.2)

Not applicable.

3.4.16 Optional Gold Level: Community Participation Risks (GL2.3)

Not applicable.

3.4.17 Optional Gold Level: Marginalized and/or Vulnerable Community Groups (GL2.4)

Not applicable.

3.4.18 Optional Gold Level: Net Impacts on Women (GL2.5)

Not applicable.

3.4.19 Optional Gold Level: Benefit Sharing Mechanisms (GL2.6)

Not applicable.

3.4.20 Optional Gold Level: Benefits, Costs, and Risks Communication (GL2.7)

Not applicable.

3.4.21 Optional Gold Level: Governance and Implementation Structures (GL2.8)

Not applicable.

3.4.22 Optional Gold Level: Smallholders/Community Members Capacity Development (GL2.9)

Not applicable.

3.5 Biodiversity

3.5.1 Existing Conditions (B1.1)

Original biodiversity conditions in the Project Zone and expected changes under the without-project land use scenario are described in section 5.1.1 of the CCB-VCS-PD.

In order to validate the original conditions validation team assessed the official information from Peruvian environmental ministry, including:

- Categorization approval of endangered wildlife species and prohibit their hunting, capture, holding, transport or export for commercial purposes (Supreme Decree 034-2004/AG) /89/
- Categorization approval of Endangered Wild Flora Species (Supreme Decree N° 043-2006-AG)/92/
- National plan for the conservation of endangered primates in Peru (National Forest and wildlife service (SERFOR, period 2019 -2029) /106/
- National GHG Inventory of year 2014 - Land Use Land Use Change and Forestry Sector (LULUCF)/107/

Also, it was assessed several scientific paper reports, such as:

- Current status of birds and mammals in Madre de Dios region due to deforestation (review article, 2021) /108/
- Assessing the Drivers of Forest Loss in Madre de Dios, Perú (Lucy Jayne Dablin, September 2014)/109/
- Forest mapping and assessment of permanent production forest in the department of Madre de Dios (Kometter, 2013) /110/
- Mammalian diversity in Neotropical lowland rainforests (Voss, R.S., Emmons, L.H., 1996.) /111/
- High jaguar densities and large population sizes in the core habitat of the southwestern Amazon (2012) /103/
- Preliminary report of the study of jaguars and pumas in the certified forest concessions “maderas cocama” and “aserradero Espinoza”. (AREAS-Amazonia of WWF-Perú, 2012) /104/

In addition, provided information of CITES Category and IUCN Category were constated against public information from the International Union for Conservation of Nature’s Red List of Threatened Species (IUCN red list) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITIES).

After reviewed listed information, AENOR considers that the project design document complies with information requirement of CCB standard. Following is summarized the main aspects.

Madre de Dios is recognized worldwide for its high biological diversity. A large part of its territory is a protected area. Currently, there are 6 protected zones (https://madrededios.com.pe/areas-naturales-protegidas.html): Manu National Park, Manu Reserved Zone, Bahuaja-Sonene National Park, Alto Purús National Park, Tambopata Candamo National Reserve, Amarakaeri Communal Reserve and Purús Communal Reserve. Together, covers an area of 3,784,081 ha representing 44.6 % of the department's territory.

The forest characteristics includes: Low Hill Forest; High Hill Forest; Low Terrace Forest and High Terrace Forest.

According to the threat categories of the Ministry of Agriculture, 16 mammalian species with some degree of threat are registered in the Madre de Dios region /89/, such as: choro monkey (*Lagothrix Lagotricha*); river wolf (*Pteronura Brasiliensis*); pacarana (*dinomys Branickii*); maquisapa (*Ateles Chamek*); species affected by hunting pressure and deforestation /90/; Añuje (*Dasyprocta Kalinowskii*); flag or bear flag (*Myrmecophaga Tridactyla*); giant armadillo (*Priodontes Maximus*); tapir (*Tapirus Terrestrial*); the water

mouse (*Neusticomys Peruviensis*); and Laval bat (*Thyroptera Lavali*) threatened by the high pressure of subsistence hunting, among human settlements /91/. A detailed list of wildlife threatened species is included in section 5.1.1 of the CCB-VCS-PD.

Regarding to fauna, according to the decree supreme N° 043-2006-AG /92/, which approves the categorization of threatened species of wild flora in Peru; 7 tree species, with commercial value, exist in the project zone and they are considered vulnerable. In addition, there are two species of high social and ecological value: The Brazil nut (*Bertholletia Excelsa*) and the shiringa (*Hevea Brasiliensis*), which are extracted for its fruits and resins, both in vulnerable and least concern category, respectively. A detailed list of harvestable forest species under threat are included in section 5.1.1 of the CCB-VCS-PD.

In AENOR´s opinion, CCB-VCS-PD gives a complete description of the biodiversity within the project zone and threats to biodiversity; also include biodiversity strategy and scientific articles developed by different authors in the project zone. The identified threats to the biodiversity come from the unsustainable resource use activities, such as illegal wood extraction, hunting, fishing and mining. The audit team has reviewed the evidence provided and considered that the information detailed in the CCB-VCS-PD describe the biodiversity in the project zone properly.

3.5.2 High Conservation Values (B1.2)

PP has identified threatened species of the Felidae family: *Panthera Onca, Puma concolor, Tapiridae* (*Tapirus Terrestris*) and Accipitridae (*Harpia Harpyja*). The project area is in the most concentrated jaguar population in the country. The study carried out by Tobler et al. (2018) /93/, to evaluate the Jaguar population in Guatemala and Peru, determined a population density of Jaguars of 4.5 individuals per 100 km^2 and emphasizes that this data is comparable only with protected natural areas. In addition, there are sites of great importance for wildlife that will be registered during the annual fauna assessment and during the execution of commercial censuses.

The audit team has reviewed the evidence provided and considered that the information detailed in the CCB-VCS-PD describe the HCV in the project zone properly.

3.5.3 Without-project Scenario: Biodiversity (B1.3)

Original biodiversity conditions in the project zone and expected changes under the without-project land use scenario are described in section 5.1.3 of CCB-VCS-PD; which gives a complete description of the biodiversity within the project zone and threats to that biodiversity. In the non-project scenario, the forest loss trend of Tahuamanu province would be the most likely scenario. The deforestation in Tahuamanu province has grown exponentially, having increased almost five times in just five years.

According to land use monitoring between Puerto Maldonado and Iñapari, corresponding to Section 3 of the interoceanic road, carried out by CDC-SZF-INRENA (2007) /94/ states that farming and livestock activities as the main source of deforestation, representing 94.2%; agriculture 3.37% and the rest is a result of infrastructure. In addition, maintenance of the interoceanic road brings it indirect impacts /95/:

- Deforestation, by legal and illegal agriculture in soils without agricultural aptitude.
- Forest degradation, due to forest extraction without management and replacement.
- Increased risks of forest fires (natural causes or induced fires resulting from slash-and-burn practices)
- Illegal hunting, for trade in meat, hides and skins and trafficking in live animals.

- Reduction of environmental services of the forest (water cycle, CO2 fixation, etc.).
- Loss of biodiversity and extinction of species, and the invasion of protected areas This will result in the reduction of the landscape and tourist value of these ecological niches.

The audit team has reviewed the evidence provided and considered that the information detailed in the CCB-VCS-PD describes the project scenario of biodiversity in the project zone properly

3.5.4 Expected Biodiversity Changes (B2.1)

The validation of the key assumptions, rationale and methodological choices used to anticipate changes in biodiversity resulting from project activities under the with-project scenario were validated against the lists of flora and fauna of the project zone /89/ /92/, forest management plans /25/ /67/ /71/ and scientific articles /90/ /91/ /93/ /94/ /95/. The expected biodiversity impacts identified in the project description are reasonable.

3.5.5 Mitigation Measures (B2.3)

In order to maintain and conserve the HCV, section 5.2.2 of the CCB-VCS-PD details the mitigation measures, following is summarized the main activities:

Measures	Activities
Measures to Maintain Flora Species:	1. Carry out evaluations and studies to define the state of Natural Regeneration. 2. Measure the growth of each species so that the necessary information is available to adjust its silvicultural variables at the PGMF (forest management plan) level. 3. Propose silvicultural measures that allow the responsible management of these species, propose adequate silvicultural variables for each species and based on the Cutting Cycle (CC) defined for the FMU: Minimum cutting diameter (DMC) and cutting intensity (IC). 4. Define the need and feasibility of implementing silvicultural treatments by species, this based on the results of evaluations and studies carried out in the same forest. 5. Implement a reduced impact harvesting system, which reduces the impact on the regeneration of species of commercial interest and of other species of flora with some category of threat. 6. Establish an adequate system of control and surveillance of the accesses and limits of the concession to avoid illegal logging and invasions with the consequent change in land use
Measures to Maintain Fauna Species:	1. Prohibit the hunting of species of fauna within the concession. 2. Conduct periodic evaluations of wildlife through sighting records carried out annually by previously trained company personnel. The objective is to know the presence of the

Measures	Activities
	species cataloged as important for monitoring, either because of their degree of threat or because they are indicator species of the state of the ecosystem. Its results should be analysed and presented in the annual monitoring report, making a comparative historical analysis with the findings of previous evaluations. 3. Carry out five-year evaluations that allow evaluating the state of wildlife populations in general, in addition to the evolution of their population indicators over time, taking into consideration or as a baseline the population densities of the species. These evaluations, due to their complexity and the high degree of specialization required for the recognition of the species of fauna, will be carried out by specialists external to the company. 4. Identify during forest census work and other assessment work, sites of importance for wildlife: 5. All sites of importance for wildlife or other HCVs that are identified during forest censuses or other evaluation work should be progressively considered in the cartography to be excluded from the use of the corresponding CP. The area occupied by these sites or HCVs, depending on their importance, will be delimited with the use of signs or other marks on the ground that allow field personnel to locate and avoid them. 6. Establish an adequate system of control and surveillance of the accesses and limits of the concession to prevent poaching.
Measures to Maintain Conservation Areas:	1. Exclude conservation areas from forest extraction. Make a use compatible with the conservation of the area (non-timber management, ecotourism, environmental services, etc.). 2. Prohibit the hunting of fauna species within the concession. 3. Delimit and mark conservation areas with the use of pedestrian paths and information signs. 4. Establish an adequate surveillance system for the accesses and limits of the conservation areas.
Measures to Maintain the integrity of the Landscape	1. Establish an adequate surveillance system for the UMF's accesses and limits. 2. Implement a reduced impact harvesting system.
Measures to maintain water quality:	1. Establish an adequate surveillance system for the UMF's accesses and limits.

Measures	Activities
	2. Establish fiscal strips in rivers and open streams of up to 25 meters on each side of the watercourse. 3. Implement a reduced impact harvesting system. 4. Identify and mark water sources (springs) to prevent them from being affected by forestry operations.

Those activities were validated against forest management plans /25/ /67/ /71/. Then, validation team considers these strategies reasonable to mitigate negative impacts on biodiversity. Also, is able to confirm that PP is taken measures needed for maintenance or enhancement of the HCV attributes.

3.5.6 Net Positive Biodiversity Impacts (B2.2, GL1.4)

Despite the fact that hunting pressure is very low or almost non-existent thanks to the control mechanisms carried out by the concession, the roads and trails used for timber extraction within the concession area and the proximity to the interoceanic road will facilitate access by illegal hunters. Periodic patrols in the sectors defined as most critical due to their easy accessibility are needed to ensure that no illegal hunting activity takes place. Therefore, project proponent will conduct the monitoring of the fauna to control and evaluate the populations of indicator species, including: species of the order primates (*Alouatta Seniculus*, *Ateles Chamek*); species of the family felidae (*Panthera Onca*), tapiridae (*Tapirus Terrestris*) and accipitridae (*Harpia Harpyja*); species of the Cracidae family (*Pipile Cumanensis, Penelope Jacquacu and Mitu Tuberosa*); species of the families Psittacidae (*Ara Ararauna and Ara Chloropterus*), Ramphastidae (*Ramphastos Cuvieri*); Piscidae (*Celeus sp*); and *Geochelone Denticulate*.

Validation team reviewed proposed indicators and suggested species against wildlife assessment in the MADERACRE and MADERYJA concessions /96/ and five-year monitoring of wildlife in the MADERACRE concession /97/. Therefore, validation team considers that the key assumptions, rationale and methodological choices used to anticipate net impacts on biodiversity in the project zone will be positive compared with conditions under the without-project land use scenario

3.5.7 High Conservation Values Protected (B2.4)

Targeted and low-impact logging does not adversely affect any HCV, but sustainable harvesting favours the conservation of almost intact forest cover, while ensuring the conservation of countless species of associated flora and fauna as well as of jaguar and other endangered species. Therefore, validation team considers that activities proposed in the framework of the project do not affect the High Conservation Values since they will be implemented taking into account approved management plans /25/ /67/ /71/ and in compliance with the regulations

3.5.8 Species Used (B2.5)

Harvestable specie and maximum cutting diameters are detailed in the general forest management plan /25/ granted by the government approval /67/. Complete list is detailed in section 5.2.5 of the CCB-VCS-PD. No known invasive species will be introduced into any area affected by the project. In addition, during the on-site forest harvesting activities were observed in order to confirm whether the activities are in line whit approved forest management plan; also, operations manual and rules of MADERACRE /98/ /99/ were assessed.

3.5.9 Impacts of Non-native Species (B2.6)

The forestry management used is of the type of thin polycyclic highly selective, i.e., it exclusively manages the mass on foot favouring the growth of commercial species without eliminating undesirable species. In addition, this system allows forest dynamics to continue as it allows for several periods of years of rest in the previously exploited area. Harvest levels are very low and there is no induced regeneration with exotic species, natural regeneration is promoted. Therefore, there would be no possibility of the area being affected by invasive species.

3.5.10 GMO Exclusion (B2.7)

Not applicable. The REDD+ Project it is guaranteed that no genetically modified organisms (GMOs) will be used.

3.5.11 Inputs Justification (B2.8)

Not applicable. No fertilizers or biological control agents will be used.

3.5.12 Waste Products (B2.9)

Project proponent has developed a forest operation manual /100/, which includes a management plan for waste and solid waste product to identify, classify and manage all waste products resulting from project activities.

Due to the large extension area and the different activities carried out within the concessions (camps, inventories, sampling, drag roads, roads, storage yards, etc.), each person who generates it is responsible for waste management. It is forbidden, for any reason, to dump or leave garbage out of the containers or pools established for this purpose. Temporary dumpsters are installed for storing the waste.

The waste generated in the forestry operations was classified into three categories: common, contaminated and hazardous. The waste must be grouped by these categories:

- Common: Organic, uncontaminated paper, cardboard, plastics, metal cans and glass.
- Contaminated: Filters, fuel and lubricant containers, used gloves and other contaminated.
- Dangerous: Batteries and medical waste

The burning of waste or vegetation is strictly prohibited within the concessions. The sewage is evacuated to a sedimentation well, allowing the oxidation and organic matter degradation. Finally, hazardous waste is transported to an authorized landfill.

Validation team, by reviewing the waste management plan included in the forest operation manual /100/ and observing the waste management process, during the site visit, is able to confirm the project proponent classify and manage all waste products resulting from project activities.

3.5.13 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Measures (B3.2)

Project proponent has identified 3 potential negative impacts on biodiversity outside of the project zone and proposed mitigation measures. Detailed mitigation measures are described in section 5.3.1 of the CCB-VCS-PD. These measures are outlined below, in summary form:

Negative Offsite Impact	Mitigation Measures
Increased deforestation pressure due to the expansion of the agricultural and livestock activies in the areas adjacent to the concession	• Identify and finance every two years a pilot productive initiative. For this purpose, 2% of the annual income of the project will be used. • Promote initiatives that contribute to the sustainable development. 1% of the annual income of the project will be used for this purpose. • Development and implementation of a mechanisms to disseminate environmental education among children, adolescents and communities involved in the project.
Increase in illegal logging of high commercial value forest species in the areas adjacent to the concession.	• Implementation of a comprehensive custody plan in the forest management unit: • Participate in the spaces of dialogue and management of the protected natural areas. • Promote activities with institutions whose objectives are oriented to the protection of Protected Natural Areas. 1% of the annual income of the Project will be used for this.
Loss of biodiversity due to increased illegal hunting of wildlife in areas adjacent to the concession	• Implementation of a comprehensive custody plan in the forest management unit: • Promote activities with institutions whose objectives are oriented to the protection of emblematic fauna and flora species. 1% of the annual income of the project will be used for this purpose.

Validation team, by reviewing the agreements with local stakeholders /31/ /32/ /33/ /34/ /35/ and interviewing the local authority and local actors during the on-site visit, confirms that included measures designed to mitigate negative impacts on biodiversity outside of the project zone are reasonable and likely to be implemented.

3.5.14 Net Offsite Biodiversity Benefits (B3.3)

Project proponent adopted resorbable and likely measures, focused on continuously training to local population. Therefore, AENOR´s validation teams, after reviewing the agreements with local stakeholders /31/ /32/ /33/ /34/ /35/ and interviewing the local authority and local actors during the on-site visit, confirms

that the net effect of the project on biodiversity is positive and any potential negative impact are mitigated

3.5.15 Biodiversity Monitoring Plan (B4.1, B4.2, GL1.4, GL3.4)

The project proponent has developed a comprehensive monitoring plan, which includes environmental, social and economic aspects of the REDD+ project. Final version of CCB-VCS-PD (section 5.4.1) includes information related to the biodiversity indicators, frequency and means of verification.

Mitigation measures activities includes:

- Measures to Maintain Flora Species
- Measures to Maintain Fauna Species
- Measures to Maintain Conservation Areas
- Measures to Maintain the Integrity of the Landscape
- Measures to Maintain Water Quality

AENOR´s validation team reviewed the final version of the CCB-VCS-PD and the biodiversity monitoring plan and confirmed that the plan includes all CCB requirements.

3.5.16 Biodiversity Monitoring Plan Dissemination (B4.3)

The results of the fauna monitoring and high conservation values (HCV) evaluations, as well as the related documentation will be public available in the project proponent web page (http://maderacre.com/sostenibilidad/). Neighbouring communities' dissemination will be conducted through informative workshops and meetings with representatives and residents.

Validation team checked available information in the web page; also, during the onsite visit, socials and environmental specialist were interviewed in order to confirm biodiversity monitoring plan dissemination.

3.5.17 Optional Gold Level: High Biodiversity Conservation Priority Status (GL3.1)

The project could obtain the Gold Level of exceptional benefits for biodiversity thanks to biodiversity conservation due to the fact that the project area host threatened species from the IUCN Red List: *Panthera Onca* (in the near threatened category)

Regarding, flora and fauna, the study conducted to obtain FSC certification, concludes that the only exploitable commercial species classified as endangered by the IUCN red list (2019) is the Ishpingo (*Amburana Cearensis*). Then, for its sustainable management it was defined a minimum cutting diameter of 70 cm, which is 14 cm higher than that defined in national regulations, minimizing the impact and preserving the ecosystem.

Validation team reviewed biodiversity reports, conducted by the project proponent, including, inter alia: Five-year monitoring of wildlife in the MADERACRE concession /97/; study on the health of forest ecosystems under management from the composition of birds in forest concessions of Tahuamanu - Madre de Dios /101/; mammal diversity in forest concessions /102/; high jaguar densities and large population sizes in the core habitat of the southwestern Amazon /103/. The validation team is able to confirm that the project activity would have positive and exceptional impacts on biodiversity.

3.5.18 Optional Gold Level: Trigger Species Population Trends (GL3.2, GL3.3)

Jaguars are listed as "Near Threatened" on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species. With 22,000 jaguars in its territory, Peru is the second country in South America with the largest number of jaguars after Brazil.

Without-project scenario, the loss and degradation of forests would increase the negative impact on the jaguar population. The jaguar population is an indicator of the good forest condition. Then, in project scenario, the connectivity between natural protected areas and the project will be improved, serving as a bridge for the transit of countless species.

Validation team reviewed cited scientific articles /93/ /103/ and the preliminary report of the study of jaguars and pumas in the certified forest concessions “maderas Cocama” and “aserradero Espinoza” conducted by AREAS-Amazonia of WWF-Perú /104/ and concludes that the projected trends in trigger species populations and that the projections meet the CCB requirements (GL3.2 and GL3.3).

4 VALIDATION CONCLUSION

AENOR has performed a validation of the REDD+ project: "TAHUAMANU AMAZON REDD PROJECT" and has verified that the project is in compliance with the Verified Carbon Standard version v4.2; the VCS Methodology Requirements, v4.1; and Climate, Community & Biodiversity Standards, v3.1 without qualifications or limitations.

The project is located in Madre de Dios, a region in the south-east of the Peruvian Amazon, with 171,584.07 hectares within the Tahuamanu Province, covering the districts of Iñapari, Iberia, Tahuamanu and Las Piedras in the department of Madre de Dios.

The validation process was performed on the basis of all issues and criteria of CCB and VCS standards. The conclusions of this report show that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and Monitoring Plans; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final validation report and opinion. In the course of the validation process corrective actions and clarifications were raised; all have been successfully closed as explained in the validation protocol annexed to this report.

The Project participant applied the VM0006: Methodology for Carbon Accounting for Mosaic and Landscape-scale REDD Projects. Version 2.2. Besides, the following tools are applied, VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, version 3.0 and AFOLU Non-Permanence Risk Tool, v4.0

In line the tool VT0001, the CCB-VCS-PD provides and investment analysis to demonstrates that the proposed project activity is not a likely baseline scenario. GHG net anthropogenic removals by sinks attributable to the project are, hence, additional to any that would occur in the absence of the project activity.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; and the subsequent background investigation, follow-up interviews and review of comments by parties have provided AENOR with sufficient evidence to validate the fulfilment of the stated criteria.

The conclusions are summarised as follows:

- The project is in line with all criteria of the VCS Standard v4.2; VCS Methodology Requirements, v4.1; and Climate, Community & Biodiversity Standards, v3.1.
- The project additionality is sufficiently justified in the CCB-VCS-PD.
- The Monitoring Plan is transparent and adequate.

The analysis of the baseline emission, project emissions and leakage has been carried out in a transparent and conservative manner, so that project activity will prevent the emissions of 1,306,754 tCO_2e per year, on average which corresponds to approximately 13,067,541 tCO_2e for the first 10-year period (without discounting buffer emissions).

Date: 31 July 2023

Lead Auditor
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Climate Change Manager
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APPENDIX I: LIST OF EVIDENCES

N°	Documents reviewed or referenced
1	VCS Program Guide, v4.1
2	VCS Standard, v4.2
3	Program Definitions, v4.1
4	AFOLU Non-Permanence Risk Tool, v4.0
5	Climate, Community & Biodiversity Standards, v3.1
6	CCB Program Rules, v3.1
7	VCS-CCB-PD, project description, initial version
8	VCS-CCB-PD, project description, final version
9	Validation protocol (Findings)
10	Hydrological characterization of the Madre de Dios Region. National Service of Meteorology and Hydrology of Peru (SENAMHI). Hydrology Department. December 2017.
11	Hydrological Diagnostic Study of the Madre de Dios Basin. Water Resources Conservation and Planning Department - Surface Water Area.
12	Research Institute of the Peruvian Amazon – IIAP 2009
13	Location of project area by district map
14	Growth and distribution of the population - National Institute of Statistics and Informatics (INEI)
15	Conservation strategies throughout the Interoceanic highway in Madre de Dios, Peru, 2009
16	Reference Region Map
17	Project Area Map
18	Leakage Belt Map
19	KML files
20	GIS data
21	Citizen participation workshop report
22	Agreements of the meetings minutes
23	Project diffusion reports
24	Flyers of project diffusion
25	General forest management plans
26	Forest and wildlife law, 2016
27	Forest connection contracts (Contract N°: 17-TAH/C-J-024-02; 17-TAH/C-J-025-02; 17-TAH/C-J-026-02; 17-TAH/C-J-033-02; 17-TAH/C-J-035-02; 17-TAH/C-J-036-02; 17-TAH/C-J-054-02)
28	FSC certificate (registration code: NC-FM/COC-002176)
29	Forest directorate resolution (Resolution N° 186-2017),
30	Procedures for handling and resolving conflicts
31	Agreements with the native community of Belgica

N°	Documents reviewed or referenced
32	Agreements with the educational institution “Dos de Mayo” Iberia
33	Agreements with technological institute Iberia – Tahuamanu
34	Agreements whit National Park Alto Purus
35	Agreements with Health post “Iñapari CLAs Tres Fronteras”
36	The project cash flow 10 years and sensitive analysis spreadsheet
37	Regional agricultural strategy plan 2008 – 2015, developed by Regional government of Madre de Dios
38	Decree supreme N° 011-2015-MINAM “National Strategy on Climate Change” update of DS No 086-2003-PCM
39	Law N° 26839 “Law on the Conservation and Sustainable Use of Biological Diversity”
40	Law N° 26821 "Law for the Sustainable Use of Natural Resources
41	DS No. 030-2005-AG “Approve regulations for the Implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Peru
42	Decree supreme N° 009-2013-MINAGRI "National Forest and Wildlife Policy
43	Law No. 29763 “Forestry and Wildlife Law” and its four Regulations”
44	DS No. 018-2015-MINAGRI “Regulation for Forest Management”
45	Law No. 29263 "Law on Ecological Crimes"
46	Internal communication plan
47	External communication plan
48	Protocol for the resolution of conflicts and damage
49	Flowchart for conflict resolution
50	Community development plan 2020
51	Social monitoring plan
52	Minutes of meetings of the Advisory Committee
53	Suggestion box report 2019
54	Anti-discrimination and labour equity policy (updated in 2021) for MADERACRE operations
55	Complaints and consultations procedure
56	Annual training activity programme
57	Procedures for personnel hiring
58	IPERC Matrix for Identification of Dangers, Risk Assessment and Measures of Control
59	law N° 29783 health and safety law
60	law N° 29783 health and safety law
61	Decree 148-2007-TR regulation of committee for supervision of security and health at work
62	Law N° 26842 General Health Law
63	Curriculum vitae of project manager from MADERACRE

N°	Documents reviewed or referenced
64	Curriculum vitae of consulting team responsible - PASCAY
65	CEO singed sworn declaration
66	Concession contract approval: Directorate Resolution N° 131-2017-GOREMAD-GRRNYAG-DRFFS/DFFS-TAH issued on March 20, 2017
67	Resolution N° 144-2020-GOREMAD-GRFFS/SOFFS-TAH for approval the management plan
68	VM0006: Methodology for Carbon Accounting for Mosaic and Landscape-scale REDD Projects. Version 2.2 - 17 March 2017 - Sectoral Scope 14.
69	VT0001: Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities. Version 3.0 - 1 February 2012 - Sectoral Scope 14.
70	National Forest and Wildlife Inventory of Peru, 2019
71	The Annual Operational Plan
72	Concession operating costs
73	Discount rate studies in REDD projects: The Cost of Managing Forest Carbon underREDD+ Initiatives: A Case of Kolo Hills Forests in Kondoa District, Dodoma, Tanzania;
74	Forest concessions in Peru: how to make them sustainable?
75	Price of timber in the forest concession
76	VCUs prices (2019, 2020 and 2021)
77	Volumes of timber felled from 2017 to 2021
78	Implementation costs in the REDD+ project
79	Official inflation rate in Peru from 2017 to 2021
80	Spreadsheets of emission reduction calculations: "*Net carbon y VCU´s MADERACRE*"
81	Beta regression model
82	Deforestation rates
83	Attendance list of training activities for monitoring activities
84	Non-Permanence Risk Report, version 1, dated on April 12, 2021 (initial version)
85	Non-Permanence Risk Report, version 3, dated on April 01, 2022 (final version)
86	Environmental contingency plan
87	Anthropological contingency plan for dealing with situations of risk in the face of evidence or encounters with indigenes population in isolation or initial contact
88	Baseline Survey
89	Ministerial Resolution No 034-2004-AG. Categorization approval for endangered species of wildlife and prohibit their hunting, capture, possession, transport or export for commercial purposes
90	Primates of Peru (Aquino and Encarnación, 1994).
91	Peruvian mammals (Pacheco, 2002)
92	Supreme Decree N° 043-2006-AG - Approval of categorization of endangered species of wild flora

N°	Documents reviewed or referenced
93	Do responsibly managed logging concessions adequately protect jaguars and other large and medium-sized mammals? Two case studies from Guatemala and Peru (Tobler et al. 2018))
94	Land use monitoring between Puerto Maldonado and Iñapari, corresponding to Section 3 of the interoceanic road (CDC-SZF-INRENA, 2007)
95	Interoceanic Highway Case Study in the Southern Amazon of Peru by Marc J. Dourojeanni June 2006
96	Wildlife Assessment in the MADERACRE and MADERYJA Concessions (Javier Barrio WWF-Oficina Programa Perú, 2005)
97	Five-year monitoring of wildlife in the MADERACRE concession (Juan F. Loja Alemán, 2017)
98	Forest Operations Manual - MADERACRE
99	Regulation of forest management practices in the operations of workers, clients and/or contractors within the forest concession of the MADERACRE SAC company
100	Forest Operaciones Manual
101	Study on the health of forest ecosystems under management from the composition of birds in forest concessions of Tahuamanu - Madre de Dios (CORBIDI, 2021)
102	Mammal diversity in forest concessions: MADERACRE
103	High jaguar densities and large population sizes in the core habitat of the southwestern Amazon (2012)
104	Preliminary report of the study of jaguars and pumas in the certified forest concessions “maderas cocama” and “aserradero Espinoza”. (AREAS-Amazonia of WWF-Perú, 2012).
105	Motors, agents and causes of deforestation in the Peruvian Amazon.
106	National plan for the conservation of endangered primates in Peru (National Forest and wildlife service (SERFOR, period 2019 -2029)
107	National GHG Inventory of year 2014 - Land Use Land Use Change and Forestry Sector (LULUCF) – Ministry of environmental (MINAM)
108	Current status of birds and mammals in Madre de Dios region due to deforestation (Brian Huamán, 2021)
109	Assessing the Drivers of Forest Loss in Madre de Dios, Perú (Lucy Jayne Dablin, September 2014)
110	Forest mapping and assessment of permanent production forest in the department of Madre de Dios (Kometter, 2013)
111	Mammalian diversity in Neotropical lowland rainforests (Voss, R.S., Emmons, L.H., 1996.)
112	VCS Methodology Requirements, v4.1
113	The deforestation route in Madre de Dios: “The loggers have surrounded my concession” (Reaño,2021),
114	National Strategy on Forests and Climate Change (Peruvian ministry of environment, 2016)
115	Spatial modelling report

APPENDIX II: VALIDATION PROTOCOL (FINDINGS)

Corrective action requests (CARs)

CAR ID	**01**	**Date: 23/12/2021**
Description		
*The project start date is not in accordance to the VCS standard requirement, which states that: The project start date of an AFOLU project is the date on which activities that led to the generation of GHG emission reductions or removals are implemented (e.g., preparing land for seeding, planting, changing agricultural or forestry practices, rewetting, restoring hydrological functions, or implementing management or protection plans). In addition, in accordance with VCS standard, section 3.7.3: AFOLU projects **shall complete validation within five years** of the project start date.*		
Project proponent response		**Date: 09/01/2022**
The project start date has been changed to April 1st, 2017 in order to be in accordance with VCS Standard. The project expects that the current validation will be completed before that date.		
Documentation provided by Project proponent		
Integración del plan de manejo *Reportes de inicio de operaciones*		
VVB Assessment		**Date: 14/02/2022**
Project proponent has not provided stated evidences of project star date.		
Project proponent response		**Date: 25/02/2022**
A Forest Directorate Resolution, signed on April 19, 2017, approving the operational plan of the consolidated forest concession, which will be considered the project start date. Consolidating the forest concessions is key to make more feasible the change of land use pattern, not only because scaling up enhance the profitability of timber business but also implementing a REDD project, which, because of its design costs, is inaccessible to shorter operations. The Resolution has been added.		
Documentation provided by Project proponent		
The *Forest Directorate Resolution* *File name: Resolution N° 186-2017*		
VVB Assessment		**Date: 11/03/2022**
Project proponent provided requested evidence and complies with VCS and CCB requirements. **Then, CAR 1 is closed.**		

CAR ID	02	Date: 23/12/2021

Description

Some section of the VCS-CCB-PD form has not been filled following the instructions of the VCS-CCB-PD template. i.e.:

- *Many tables of the project description are empty, and it is not explicitly indicated that there is no value to report*
- *Many Spanish information does not include English translation (section 1.2 of the VCS standard states that the operating language of the VCS Program is English)*
- *Not all the template instruction is deleted (e.g. sections 1.1., 4.2.1., etc.)*
- *Section 2.1.1. has not included: A brief description of the scenario existing prior to the implementation of the project; an estimate of annual average and total GHG emission reductions and removals; the project's climate, community and biodiversity objectives*
- *Section 3.1.1. hat not included title and version number of tools applied by the project*
- *Section 3.1.2. hat not included complete justification and how the project meets all applicability conditions from methodology (refers to section 4 of the applied methodology)*
- *Section 3.1.3. defined project boundary is not in accordance to the requirement of applied methodology (refer to section 5.1 - table 1 and section 5.2-table 2, of the applied methodology). Also, this section has not included a diagram or map of the project boundary, showing clearly the physical locations of the various installations or management activities taking place as part of the project activity based on the description.*
- *Section 3.1.4. has not identified the baseline scenario in accordance with the procedure set out in the applied methodology and any relevant tools (refers to section 6 of applied methodology)*
- *Section 3.3.2. Some parameters have not included valued monitored neither the reference has been indicated.*
- *Section 3.3.3. The monitoring plan has not included: The procedures for internal auditing and QA/QC nor the procedures for handling non-conformances with the validated monitoring plan.*
- *Section 4.1.3. The focal area (stated in the table) is not identified*
- *Section 4.2.3. The information requested by the template is not included*

Project proponent response	Date: 24/01/2022

Answering each comment:

- *All tables have been filled.*
- *The updated version is fully translated to English*
- *All the instructions from the template have been deleted*
- *Section 2.1.1 has been updated to include a brief summary of the situation of the project zone before the start of the activities and the estimated average reductions thanks to these activities.*
- *Section 3.1.1 includes the version of additionality tool used in this PD*
- *As explained during audit meeting, table 33 shows the full explanation about how the project meets all the applicability conditions of the methodology used.*
- *In Section 3.1.3., the boundaries of the Project have been defined according to the requirements of the methodology. It may be found in Section 5.1, table 1, section 5.2, table 2, table 43 and table 44. A map has been added.*

CAR ID	**02**	**Date: 23/12/2021**
Description		
• *The most feasible baseline scenario is the historic changes in carbon stocks within the project area. This baseline will be used for NER calculations. After that, we select a reference region which will be used to determine the NER generated within the project area.* • *In section 3.3.2, we have included the parameters to be monitored according to section 9.2 of the methodology. Parameters not included won't be monitored.* • *Methodology and data quality control were added for the calculation of forest loss. An internal audit procedure for logging and all forest operations has also been included.* • *All the cells in tables from Section 4.1.3. have been filled up.* • *Section 4.2.3 has been updated to include the information requested in the template.*		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 14/02/2022**
Even project proponent has updated the CCB-VCS-PD, some section is not in accordance with the instruction of the template • *Section 3.1.2. described applicability condition are not in accordance with applied methodology. Also, the applicability condition of applied tool is not included.* • *Section 3.1.3. the boundary is not in accordance to the applied methodology.* • *Section 3.1.4. the project baseline scenario is not in accordance to the applied methodology.* • *Section 3.3.2. Some parameters have not included valued monitored neither the reference has been indicated.* • *Section 3.3.3. The procedures for internal auditing and QA/QC are in Spanish* • *Section 4.1.3. The focal area (stated in the table) is not detailed*		
Project proponent response		**Date: 25/02/2022**
• *All the applicability conditions have been included in Section 3.1.2.* • *Charts 1 and 2 of the methodology has also been included.* • *Section 3.1.4. Baseline scenario proposed by the methodology has been added.* • *Section 3.3.2. All the monitored valued and references have been included* • *Section 3.3.3. Procedures for QA/QC have been translated to English as requested by the standard.* • *Section 4.1.3. A map including the two focal areas of HCV has been added for a more clear location of the areas*		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 11/03/2022**
Project proponent updated the VCS-CCB-PD properly. ***Then, CAR 2 is closed***		

CAR ID	**03**	**Date: 23/12/2021**
Description		
The additionality assessment has not followed the all the sub-steps stablished in the tool VT0001 - Tool for the demonstration and assessment of additionality in VCS agriculture, forestry and other land use (AFOLU) project activities. Furthermore, investment analysis spreadsheets, including all supporting evidences, have been not provided.		
Project proponent response		**Date: 07/01/2022**
The additionality analysis has been updated to include all the steps requested by the methodological tool. The Excel Spreadsheet is more justified including specific references to the assumptions used for this financial analysis.		
Documentation provided by Project proponent		
VVB Assessment		**Date: 02/02/2022**
Project proponent has provided the cash flow; however, has not provided supporting evidences. The project proponent is requested to provide supporting evidences for values considered in incomes and expenses in the baseline and project scenario. The project proponent must explicitly indicate how these values are being obtained. *On the other hand, during the review of the cashflow spreadsheet it was notices that VCUs included in the calculation are not in accordance to the estimated in the spreadsheet of emission reductions.* *Finally, according to the VCS project standard, version 4.2 (section 1.2): "The operating language of the VCS Program is English. The project and program description, validation report, monitoring report, verification report and **all other documentation** (including all and any appendices) required under the VCS Program shall be in English." Therefore, the cash flow must be proved in English.*		
Documentation provided by Project proponent		
• *A new cash flow, in English and with the updated estimated VCU volumes, have been added and with a set of documents that provide evidence for the main assumptions of the cash flow* • *Evidences used for financial assumptions*		
VVB Assessment		**Date: 21/03/2022**
Project proponent provided sufficient evidence, which was included in the additionally assessment. **Then, CAR 3 is closed**		

CAR ID	**04**	**Date: 23/12/2021**
Description		
The methodology deviation included (section 3.1.6) does not described neither justified whether or not negatively impact the conservativeness of the quantification of GHG emission reductions or removals. Also, it is not described which parameters available at validation, data and parameters monitored, or the monitoring plan, are affected by the proposed deviations.		
Project proponent response		**Date: 24/01/2022**
Section 3.1.6 has been updated, these deviations do not affect the conservativeness of the quantification of GHG emission reductions or removals, the parameters affected by the deviations have been identified.		
Documentation provided by Project proponent		
VVB Assessment		**Date: 14/02/2022**
According to the VCS standard (section 3.18.1), deviations from the applied methodology are permitted where they represent a deviation from the criteria and procedures relating to monitoring or measurement set out in the methodology. Then, project proponent is request explicitly indicate which of the cases (monitoring or measurement set out in the methodology) are applying and describe the alternative instead of the approved methodology.		
Project proponent response		**Date: 25/02/2022**
It has been clearly stated what type of impact is associated with each deviation used and a more detailed explanation of the deviations used has been included. The three deviations (scarcity factor, leakage and LULC classes) are deviations from the measurement criteria.		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 21/03/2022**
Project proponent has included properly information regarding applicable deviation in relevant sections of the CCB-VCS-PD. ***Then, CAR 4 is closed.***		

CAR ID	05	Date: 23/12/2021
Description		
The description for Quantification of GHG Emission Reductions (baseline, project and leakage emissions), described in section 3.2. does not follow the procedures and steps included in the methodology VM0006, version 2.2. (refer to section 8 of the methodology). Furthermore, spreadsheet of emission reduction, including all supporting evidences, has been not provided. *In addition, buffer credits have not been discounted as per VCS standard, section 3.14.15., which states that: The number of GHG credits issued to projects is determined by subtracting out the buffer credits from the net GHG emission reductions or removals (including leakage) associated with the project. The buffer credits are calculated by multiplying the non-permanence risk rating (as determined by the AFOLU Non-Permanence Risk Tool).*		
Project proponent response		**Date: 24/01/2022**
All spreadsheets and other supporting evidences are available. *At the end of section 3.2.4 a table has been added with the number of VCUs and the buffer credits according to the VCS standard.*		
Documentation provided by Project proponent		
Updated spreadsheets		
VVB Assessment		**Date: 14/02/2022**
According to the provided model (beta regression), the year 2017 has been considered in its entirety; the project proponent is requested to clarify how the emissions have been discounted for the months not considered during 2017. *Project proponent is requested to clarify and provided the evidence (map) for the size reference area (341,552.03 ha) and leakage area belt area (100,554.47 ha) due to the fact that these values are not in accordance with provided maps* *For determining the project pasture area, it was considered 28.5% of the project pasture in the baseline; then project proponent is requested to justify these assumptions and provide supporting evidences* *Complete description of emission reduction calculation is not included in the CCB-VCS-PD, many of the parameters used are not referenced neither the calculation method is indicated. i.e.: rate, contribution$_{DF}$, effectiveness$_{EQ43}$, effectiveness$_{EQ54}$, effectiveness$_{EQ63}$, sample size of each stratum.* *In addition, emission reduction estimated in the spreadsheet are not consistent in whole CCB-VCS-PD neither in the cash flow spreadsheet.* *Finally, according to the VCS project standard, version 4.2 (section 1.2): "The operating language of the VCS Program is English. The project and program description, validation report, monitoring report, verification report and all other documentation (including all and any appendices) required under the VCS Program shall be in English." Therefore, the emission reduction spreadsheet must be proved in English.*		
Project proponent response		**Date: 25/02/2022**
• *The Beta Regression Model is based on official sources (GEOBOSQUES), following the METHODOLOGICAL PROTOCOL FOR FOREST LOSS DETECTION, in page 4, that states: "A limited number of satellite images were used, which were selected taking as a criterion the least presence of clouds present in the images, this means that images of the months of the dry season were selected, mainly between June and September." Said analysis It has been carried out within the start-up period of the project, so the months from January to April should not be discounted, but these results represent an annual loss of the forest, so it cannot be interpreted on a monthly basis but rather annually."* • *Map 26 shows the right values for Leakage Belt and Reference Region.*		

CAR ID	**05**	**Date: 23/12/2021**
Description		
• *An explanation of how was calculated the 28.5% for pastures has been added in section 3.2.3 (table 81). It has been estimated by assuming that the project will be effective facing deforestation caused by cattle ranching expansion in all the surrounding communities except Arca Pacahuara, where the effectiveness will be only 50%. But, as the families in Arca Pacahuara represent to 57% of the total families of the surrounding communities, the area that is projected to be converted to pastures is 28.5% (which is obtained by multiplying 50% of effectiveness by 57% of weight of Arca Pacahuara families/total surrounding communities' families)* • *All the parameters related with calculations have been described and referenced.* • *ER Calculations have been updated and reconciled with expected sold volumes in cash flow and with all sections in CCB VCS PD.* • *An updated and translated calculation spreadsheets have been provided*		
Documentation provided by Project proponent		
Calculation Spreadsheets		
VVB Assessment		**Date: 11/03/2022**
Project proponent has clarified all requests issues. ***Then, CAR 5 is closed.***		

CAR	**06**	**Date: 23/12/2021**
Description		
Many sections of the VCS-CCB-PD refers to annexes 1 to 11, however they have not been included at the end of the document neither been provided.		
Project proponent response		**Date: 14/01/2022**
All the information described in PD that is included in annexes has been added. A list of annexes has been included in the PD.		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 14/02/2022**
Annex included in the CCB-VCS-PD was provided. However, there were no included in the document; then, they should be updated in the VERRA platform as part of CCB-VCS-PD. ***Then, CAR 6 is closed***		

Clarification requests (CLs)

CL	**01**	**Date: 23/12/2021**
Description		
Project proponent is requested to provide the authorized project area evidences Concession rights do not specify the project area.		
Project proponent response		**Date: 24/02/2022**
The project area is 171,584.07 and is composed by the addition of 7 concession contracts that integrate the MADERACRE SAC Consolidated of forest management, as may be seen in the Regional Directorate Resolution N° 131-2017-GOREMAD-GRRNYAG-DRFFS/DFFS-TAH issued on March 20, 2017, which approves the Forestry Management General Plan. It includes the following number of contracts: 17-TAH/C-J-035-02; 17-TAH/C-J-033-02; 17-TAH/C-J-054-02; 17-TAH/C-J-024-02; 17-TAH/C-J-025-02; 17-TAH/C-J-026-02; 17-TAH/C-J-036-02 *According to concession contracts, the integrated area equals to 171,120 ha (a difference of 0.27% of effective area under control of MADERACRE)*		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 14/02/2022**
Project proponent has provided the evidences of project concessions area. However, it has not justified the small difference between the authorized area and the project area		
Project proponent response		**Date: 25/02/2022**
The difference between the authorized area and the project area is due to the fact that initially, when the forest concessions were granted, these had been delimited using as a cartographic base, and in force at that time, the National Institute of Natural Resources (INRENA) of the year 2002. Later, and according to an update of the GIS Area of the Ministry of the Environment, it was updated with the cartographic base dated in the year 2015, which corresponded to the Vegetal cover 2015. In such a way that an area is managed for the legal part and a GIS area for the forest management part. This can also be seen on page 3 of the PGMF. In short, these differences are due to the use of different cartography on different dates.		
Documentation provided by Project proponent		
VVB Assessment		**Date: 11/03/2022**
Project proponent has justified the small differences between project concession area and the project area determinate with GIS data. ***Then, CL 1 is closed***		

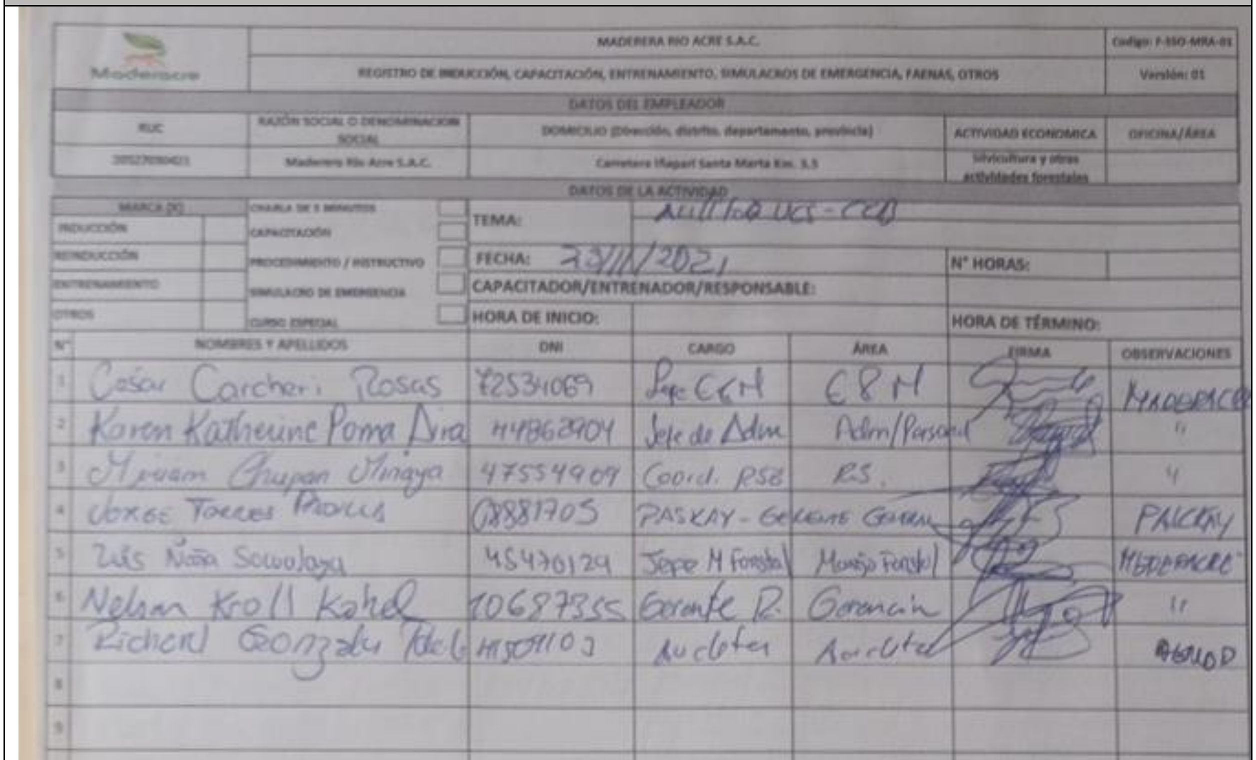
CL	**02**	**Date: 23/12/2021**
Description		
Project proponent is requested to provide specific reference of how the values for the unique project benefits (Outcome or Impact Estimated by the End of Project Lifetime) and standardized benefit metrics (Water, Well-being and Biodiversity conservation) have been obtained		
Project proponent response		**Date: 24/01/2021**
The assumptions used to calculate the values for unique and standardized benefit metrics have been added for VVB review.		
Documentation provided by Project proponent		
Report and evidences of standardized and unique metrics calculations		
VVB Assessment		**Date: 14/02/2022**
Project proponent has provided supporting evidences of unique benefits and Standardized Benefit Metrics; however, it has not detailed how the reported values have been obtained, for example, the page or pages of the referenced documents.		
Project proponent response		**Date: 25/02/2022**
An explanatory document describing each value proposed for unique and standardized benefit metrics have been provided: Standard and unique metrics / Metrics explained *This document provides the basis for calculating the value proposed and the evidence that provides the inputs for that calculations.*		
Documentation provided by Project proponent		
Metrics explained		
VVB Assessment		**Date: 21/03/2022**
Project proponent has provided supporting evidences of unique benefits metrics. ***Then, CL 2 is closed.***		

CL	**03**	**Date: 23/12/2021**
Description		
Project proponent is requested to provide evidences of the management team experience (section 2.4.3 of the VCS-CCB-PD) and project management partnerships/team development (section 2.4.4 of the VCS-CCB-PD).		
Project proponent response		**Date: 24/01/2022**
The CV of key personnel of MADERACRE and PASKAY have been attached for VVB review to assess team experience.		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 14/02/2022**
Requested evidences has been provided and no discrepancies were found. ***Then, CL 3 is closed***		

CL	**04**	**Date: 23/12/2021**
Description		
Project proponent is requested to provide publication referred in section in section 5.1. and 5.2. and 5.5. i.e.: Kometter (2003), Loja (2011), Barrios (2015), Loja (2017, Toddler, et al. (2018), Tony Davis (2013), AREAS-Amazonia of WWF-Perú (2012), among others.		
Project proponent response		**Date: 24/01/2022**
A file with all the publications referred in the bibliography has been shared with the audit team.		
Documentation provided by Project proponent		
-		
VVB Assessment		**Date: 14/02/2022**
Requested evidences were provided. ***Then, CL 4 is closed.***		

APPENDIX III: LIST OF PERSONS INTERVIEWED DURING THE ON-SITE VISIT

Persons interviewed on 23 November 2021



MADERERA RIO ACRE S.A.C. — Código: F-SSO-MRA-01
REGISTRO DE INDUCCIÓN, CAPACITACIÓN, ENTRENAMIENTO, SIMULACROS DE EMERGENCIA, FAENAS, OTROS — Versión: 01

DATOS DEL EMPLEADOR

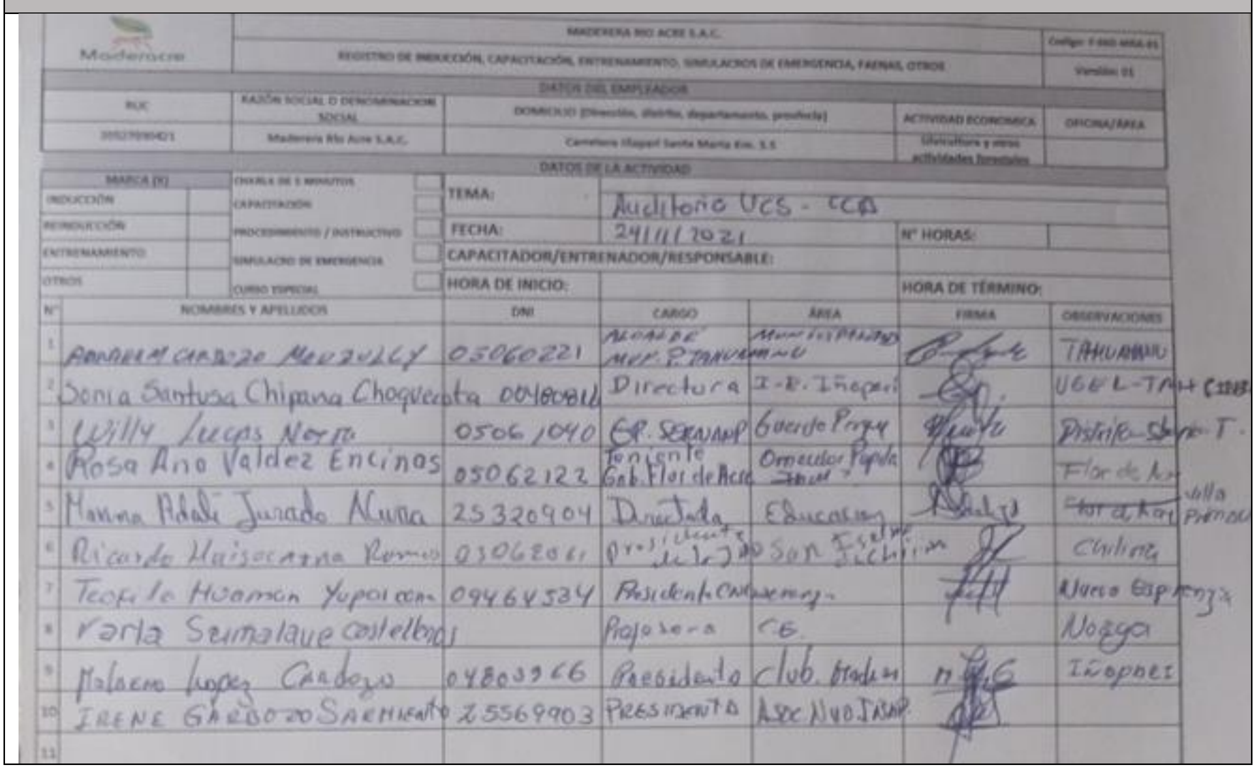
RUC	RAZÓN SOCIAL O DENOMINACIÓN SOCIAL	DOMICILIO (Dirección, distrito, departamento, provincia)	ACTIVIDAD ECONÓMICA	OFICINA/ÁREA
20527936421	Maderera Río Acre S.A.C.	Carretera Iñapari Santa Marta Km. 3.5	Silvicultura y otras actividades forestales	

DATOS DE LA ACTIVIDAD

TEMA: Auditoria UCS - CCB
FECHA: 23/11/2021
N° HORAS:
CAPACITADOR/ENTRENADOR/RESPONSABLE:
HORA DE INICIO:
HORA DE TÉRMINO:

N°	NOMBRES Y APELLIDOS	DNI	CARGO	ÁREA	FIRMA	OBSERVACIONES
1	César Carcheri Rosas	72534069	Jefe CGH	CGH	[signature]	MADERACRE
2	Karen Katherine Poma Díaz	44862904	Jefe de Adm	Adm/Personal	[signature]	"
3	Myriam Chupan Minaya	47554909	Coord. RSE	RS.	[signature]	"
4	Jorge Torres Morales	08881705	PASKAY - Gerente General		[signature]	PASKAY
5	Luis Nina Sowolaya	45470129	Jefe M Forestal	Manejo Forestal	[signature]	MADERACRE
6	Nelson Kroll Kahel	10687355	Gerente R.	Gerencia	[signature]	"
7	Richard Gonzales Abel	41507103	Auditor	Auditor	[signature]	AENOR
8						
9						

Persons interviewed on 24 November 2021



MADERERA RIO ACRE S.A.C. — Código: F-SSO-MRA-01
REGISTRO DE INDUCCIÓN, CAPACITACIÓN, ENTRENAMIENTO, SIMULACROS DE EMERGENCIA, FAENAS, OTROS — Versión: 01

DATOS DEL EMPLEADOR

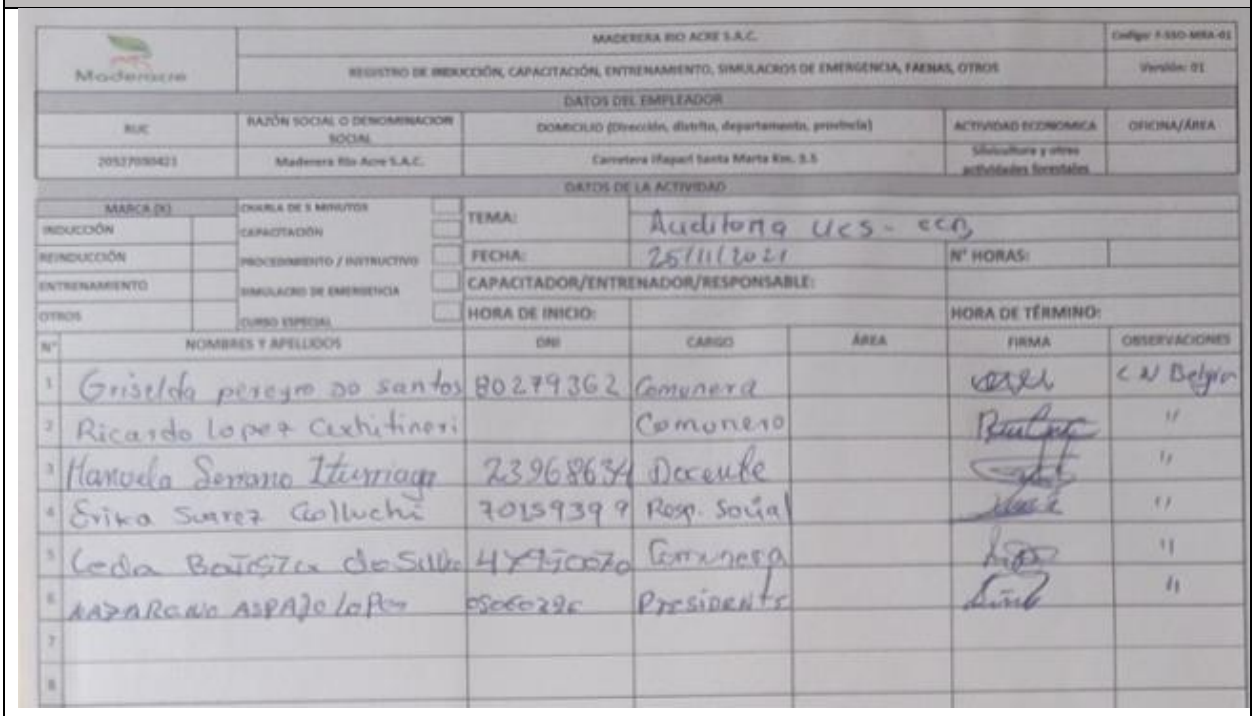
RUC	RAZÓN SOCIAL O DENOMINACIÓN SOCIAL	DOMICILIO (Dirección, distrito, departamento, provincia)	ACTIVIDAD ECONÓMICA	OFICINA/ÁREA
20527936421	Maderera Río Acre S.A.C.	Carretera Iñapari Santa Marta Km. 3.5	Silvicultura y otras actividades forestales	

DATOS DE LA ACTIVIDAD

TEMA: Auditorio UCS - CCB
FECHA: 24/11/2021
N° HORAS:
CAPACITADOR/ENTRENADOR/RESPONSABLE:
HORA DE INICIO:
HORA DE TÉRMINO:

N°	NOMBRES Y APELLIDOS	DNI	CARGO	ÁREA	FIRMA	OBSERVACIONES
1	Abraham Cardozo Menzulcy	05060221	Alcalde Mun. P. Tahuamanu	Municipalidad Tahuamanu	[signature]	TAHUAMANU
2	Sonia Santusa Chipana Choquecota	00480811	Directora	I.E. Iñapari	[signature]	UGEL-TAH [illegible]
3	Willy Lucas Norro	05061040	GR. SERNANP	Guarda Parque	[signature]	Distrito-Santa T.
4	Rosa Ana Valdez Encinas	05062122	Teniente Gob. Flor de Acre	Promotor Popular	[signature]	Flor de Acre
5	Marina Adali Jurado Nuna	25320904	Directora	Educación	[signature]	Villa Primavera
6	Ricardo Maisocarna Ramos	03062061	Presidente	San Isidro Chilina	[signature]	Chilina
7	Teofilo Huaman Yupanqui	09464534	Presidente Comunidad		[signature]	Nueva Esperanza
8	Karla Seimalave Castellanos		Promotora	CG.		Noaya
9	Malaquias Lopez Cardozo	04803966	Presidente	club. Madres	[signature]	Iñapari
10	Irene Gardozo Sarmiento	25569903	Presidenta	Asoc. Nvo. Iñapari	[signature]	
11						

Persons interviewed on 25 November 2021

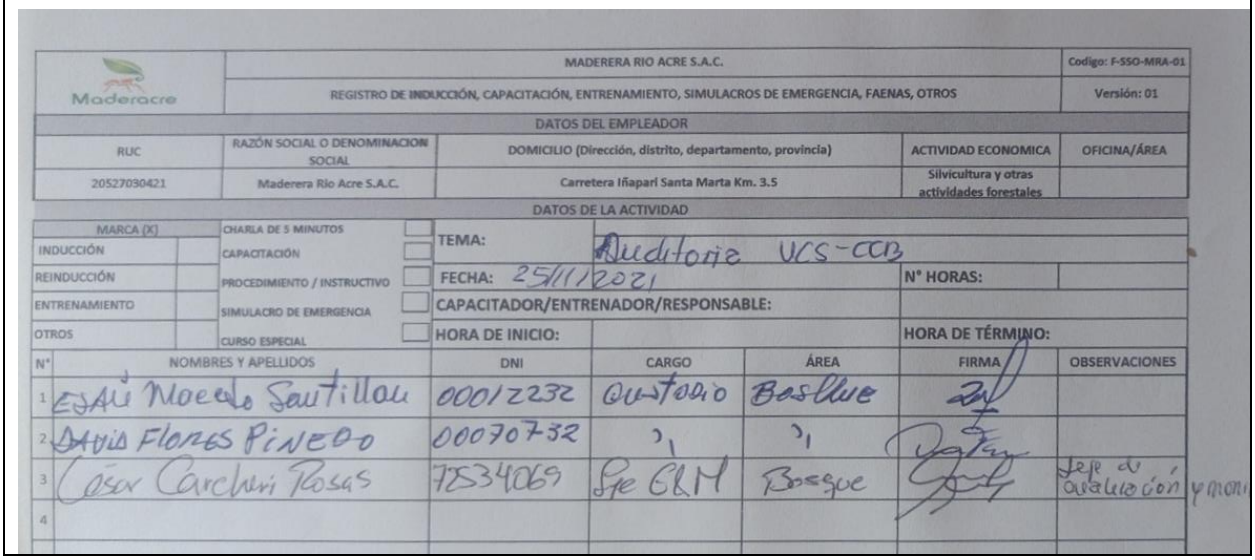


Maderacre	MADERERA RIO ACRE S.A.C.				Codigo: F-SSO-MRA-01
	REGISTRO DE INDUCCIÓN, CAPACITACIÓN, ENTRENAMIENTO, SIMULACROS DE EMERGENCIA, FAENAS, OTROS				Versión: 01
DATOS DEL EMPLEADOR					
RUC	RAZÓN SOCIAL O DENOMINACION SOCIAL	DOMICILIO (Dirección, distrito, departamento, provincia)		ACTIVIDAD ECONOMICA	OFICINA/ÁREA
20527030421	Maderera Rio Acre S.A.C.	Carretera Iñapari Santa Marta Km. 3.5		Silvicultura y otras actividades forestales	

DATOS DE LA ACTIVIDAD

MARCA (X)		CHARLA DE 5 MINUTOS		TEMA:	Auditoria UCS - CCB		
INDUCCIÓN		CAPACITACIÓN					
REINDUCCIÓN		PROCEDIMIENTO / INSTRUCTIVO		FECHA:	25/11/2021	N° HORAS:	
ENTRENAMIENTO		SIMULACRO DE EMERGENCIA		CAPACITADOR/ENTRENADOR/RESPONSABLE:			
OTROS		CURSO ESPECIAL		HORA DE INICIO:		HORA DE TÉRMINO:	

N°	NOMBRES Y APELLIDOS	DNI	CARGO	ÁREA	FIRMA	OBSERVACIONES
1	Griselda peregro do santos	80279362	Comunera			C N Belgica
2	Ricardo Lopez Cextitinori		Comunero			"
3	Haroldo Serrano Iturriaga	23968634	Docente			"
4	Erika Suarez Gallichi	70139399	Resp. Social			"
5	Ceda Batista da Silva	47970070	Comunera			"
6	NADARADO ASPAJO LOPEZ	05662296	PRESIDENTE			"
7						
8						



Maderacre	MADERERA RIO ACRE S.A.C.				Codigo: F-SSO-MRA-01
	REGISTRO DE INDUCCIÓN, CAPACITACIÓN, ENTRENAMIENTO, SIMULACROS DE EMERGENCIA, FAENAS, OTROS				Versión: 01
DATOS DEL EMPLEADOR					
RUC	RAZÓN SOCIAL O DENOMINACION SOCIAL	DOMICILIO (Dirección, distrito, departamento, provincia)		ACTIVIDAD ECONOMICA	OFICINA/ÁREA
20527030421	Maderera Rio Acre S.A.C.	Carretera Iñapari Santa Marta Km. 3.5		Silvicultura y otras actividades forestales	

DATOS DE LA ACTIVIDAD

MARCA (X)		CHARLA DE 5 MINUTOS		TEMA:	Auditoria UCS-CCB		
INDUCCIÓN		CAPACITACIÓN					
REINDUCCIÓN		PROCEDIMIENTO / INSTRUCTIVO		FECHA:	25/11/2021	N° HORAS:	
ENTRENAMIENTO		SIMULACRO DE EMERGENCIA		CAPACITADOR/ENTRENADOR/RESPONSABLE:			
OTROS		CURSO ESPECIAL		HORA DE INICIO:		HORA DE TÉRMINO:	

N°	NOMBRES Y APELLIDOS	DNI	CARGO	ÁREA	FIRMA	OBSERVACIONES
1	ESAU Moeda Santillan	00012232	Auxiliar	Bosque		
2	DAVID FLORES PINEDO	00070732	"	"		
3	Cesar Carchari Rosas	7534069	Jefe CRM	Bosque		Jefe de evaluación y moni
4						