TAUARI REDD+ PROJECT

Document Prepared by CARBONEXT Tecnologia em Soluções Ambientais Ltda.

Project Title	TAUARI REDD+ Project
Version	01
Date of Issue	28-August-2023
Prepared By	Carbonext Tecnologia em Soluções Ambientais Ltda.
Contact	Gomes de Carvalho, nº 1510 – 19º floor. São Paulo – SP, Brazil; (55) 11 3045 1970. www.carbonext.com.br.

CONTENTS

1 PROJECT DETAILS

1.1 Summary Description of the Project

The TAUARI REDD+ PROJECT aims to protect 21,016.38 hectares of Amazon rainforest located in Aripuanã and Juína municipalities, Mato Grosso State, Brazil. The project promotes forest conservation and estimates to reduce 1,908,218 tCO_2e (average of 63,607 tCO_2e/year) in 30 years by Avoiding Unplanned Deforestation (AUD) in four farms, which are Continental, União, Recanto do Sinuelo and Cachoeirinha.

Historically, the state of Mato Grosso (MT) has contributed greatly to the deforestation of the Amazon biome. The deforestation in the state of MT in 2019 reached the highest value in the last ten years, resulting in 1,702 km^2 of deforestation[1]. This value represents 17% of the total deforestation occurred that year in the Amazon biome. Considering the total deforestation, 74% does not have authorization from the environmental agencies, thus, characterizing it as illegal deforestation. It is important to point out that the land grabbers activities, such as illegal logging, still have a large presence in the region and the unauthorized forest fires, usually caused by them, often affect extensive areas.

Specifically, in Aripuanã and Juína regions, the configuration of land occupation over the years has been based on deforestation, i.e., through illegal deforestation, land grabbers act to guarantee land ownership. This dynamic of territorial occupation and land use has caused severe damage to natural resources and consequently to the Amazon biome present in the region.

Given project approval, activities such as fire brigade training (internal and external community), reinforcement of terrestrial and remote monitoring, border maintenance (firebreaks and fencing), training courses will be carried out to qualify the project's employees and neighbors among other social activities will be implemented.

Thus, the project also aims to improve the social and environmental conditions in the project region, specifically contributing to enhancing deforestation control and developing social activities.

[1] http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/increments

1.2 Sectoral Scope and Project Type

Sectoral Scope: 14 – Agriculture, Forestry, and Other Land Use (AFOLU)

Project Category: Reducing Emissions from Deforestation and Degradation (REDD)

Activity Type: Avoided Unplanned Deforestation & Degradation (AUDD)

This is a grouped project.

1.3 Project Eligibility

According to the VCS Standard v.4.4 regarding Reduced Emissions from Deforestation and Degradation (REDD) projects[2], eligible activities are those which reduce net GHG emissions by reducing deforestation, which is the case for this project activity. Deforestation is defined as the direct, human induced conversion of forest land to non-forest land. The entire Project Area currently meets the internationally accepted definition of forest[3], and it had been forest for a minimum of 10 years before the project start date.

The definition of forest may include mature forests, secondary forests, and degraded forests. More specifically, according to the Decision 11/CP.7 of the Marrakesh Accord, the following definition of forests is adopted (UNFCCC, 2002)[4]: "Forest" is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 meters at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 meters are included under forest, as are areas normally forming part of the forest area which are temporarily un-stocked as a result of human intervention such as harvesting or natural causes, but which are expected to revert to forest.

Under the VCS, secondary forests are defined as forests that have been cleared and have recovered naturally. Secondary forests must be at least 10 years old and meet the lower limit of the forest threshold parameters at the start of the project. The main effect of this project activity to reduce carbon emissions by preventing the conversion of forest lands with high carbon stocks to non-forest lands with lower carbon stocks. In addition, avoiding conversion of forests to cropland or pasture can reduce emissions of CH_4 that are associated with biomass burning used to clear the land. This project activity stops unsanctioned deforestation on forested lands and is thus eligible as a REDD activity. It reduces GHG emissions by stopping deforestation of mature forests, which would have occurred because of:

[2] https://verra.org/wp-content/uploads/2022/12/VCS-Standard-v4.4-FINAL.pdf

[3] https://www.fao.org/3/Y4171E/Y4171E10.htm

[4] https://unfccc.int/files/meetings/workshops/other_meetings/application/pdf/11cp7.pdf (page 5 of the PDF)

i) socio economic forces that promote alternative uses of forest land and the inability of institutions to control these activities;

ii) poor law enforcement and lack of property rights;

iii) subsistence farming and illegal logging.

The configuration of deforestation applicable to this project as defined by the methodology is classified as frontier, which is described as the result of the expansion of roads and other infrastructure into forest lands. Roads and other infrastructure can facilitate forest access which leads to increased encroachment by human populations, such as subsistence farming on previously inaccessible forest lands.

This project activity is also eligible in the sense that it respects all Brazilian forest legislation and is in accordance with local and national environmental interests, as described in section "1.14 Compliance with Laws, Statutes and Other Regulatory Frameworks".

As required in VCS standard 4.4, this project meets the following requirements:

- This project meets all applicable rules and requirements set out under the VCS Program, as described in Section 3;
- This project is being developed with a methodology eligible under the VCS Program, as described in Section 3;
- This project and the implementation of the project activities does not lead to the violation of any applicable law;
- The methodology in use (Section 3) permits the project proponent its own choice of model. The model for this project has been built in order to meet the requirements set out in the VCS Program document VCS Methodology Requirements, and it will be demonstrated at validation that the model is appropriate to the project circumstances (i.e., use of the model will lead to an appropriate quantification of GHG emission reductions or removals).
- It is an eligible AFOLU project category under the VCS Program: Reduced Emissions from Deforestation and Degradation (REDD);
- This project is not located within a jurisdiction covered by a jurisdictional REDD+ program, as cited in 1.11;
- Implementation partners are identified in the project activity;
- This project does not convert native ecosystems to generate GHG. The project area only contains native forested land for a minimum of 10 years before the project start date, as section 1.13 shows;
- This project does not occur on wetlands and does not drain native ecosystems or degrade hydrological functions;

- Non-permanence risk will be analysed in accordance with the VCS Program document AFOLU Non-Permanence Risk tool.

1.4 Project Design

☐ The project includes a single location or installation only

☐ The project includes multiple locations or project activity instances, but is not being developed as a grouped project

☒ The project is a grouped project

Eligibility Criteria

This is a grouped project. Tauari REDD+ is an AFOLU project activity designed to include REDD Avoided Unplanned Deforestation (AUD) components. In this sense, this project activity is designed to include more than one "project activity instance", such as the accession of new communities or landowners to the project across its lifetime. Thus, this grouped project is designed to allow the expansion of the project activity, after the project validation.

This grouped project has one clearly defined geographic area within which project activity instances may be developed, which is defined using geodesic polygons, corresponding to the Reference Region. The determination of baseline scenario and demonstration of additionality are based upon the initial project activity instances (4 farms) and will be presented in this PD for validation. For inclusion of new geographic areas, it will be demonstrated that such areas are subject to the same baseline scenario and rationale for the demonstration of additionality as the geographic area that does include initial project activity instances.

A single baseline scenario is determined for the entire designated geographic area (Reference Region), in accordance with VM0015 methodology. The additionality of the initial project activity instances was demonstrated for each designated geographic area, in accordance with the methodology applied to the project. All factors relevant to the determination of the baseline scenario or demonstration of additionality (i.e., common practice; laws, statutes, regulatory frameworks, or policies relevant to demonstration of regulatory surplus; historical deforestation rates) were assessed across the grouped project geographic area and respective Reference Region.

The project proponent has defined the capacity limit for this project activity in terms of the Reference Region. If exceptionally a new instance is located outside the Reference Region, it will be guaranteed that all limit premises will respect the same conditions of similarity of historical deforestation rates as applied in the Reference Region to the initial project instances.

For this grouped project, the following set of eligibility criteria for the inclusion of new project activity instances has been defined, which is applicable for VM0015 REDD AUD activities, and the geographic area demarcated by the Reference Region:

1) Meet the applicability conditions set out in the methodology applied to the project: all the applicability criteria mentioned in VM0015 shall be met for any new instance: a) baseline activities shall include unplanned deforestation; b) project activities shall include one or a combination of the eligible categories defined in the description of the scope of the methodology (table 1 and figure 2 of VM0015); c) new instances may include different types of forest systems meeting the definition of "forest"; d) at the date of inclusion in this project, the new instance shall include only land qualifying as forestfor a minimum of 10 years prior to the project start date; e) The project area can include forested wetlands (such as bottomland forests, floodplain forests, mangrove forests) as long as they do not grow on peat.

2) Adopt and apply the project activities, technologies or measures specified in the project description: all new instances to be included in this project activity will necessarily be assessed using the same satellite imagery and field techniques as applied for the first 4 instances, as described in the PD.

3) All new instances shall be subject to the baseline scenario determined in the project description for the specified project activity and geographic area.

4) All new instances shall be subject to the same community and biodiversity without-project scenarios as determined for the project.

5) All new instances shall have characteristics with respect to additionality that are consistent with the initial instances for the specified project activity and geographic area. For example, the new project activity instances must have financial, technical and/or other parameters (such as the size/scale of the instances) consistent with the initial instances, or face the same investment, technological and/or other barriers as the initial instances.

6) All new instances shall be subject to the same processes for stakeholder engagement as will be described in section 2.2.

7) All new instances shall have similar monitoring elements.

In addition, new project activity instances shall:

1) Preferentially occur within the Reference Region (as mentioned above any instance to be included outside the Reference Region will undergo all the required similarity assessments).

2) Comply with all the set of eligibility criteria for the inclusion of new project activity instances (cited above).

3) Be included in the monitoring report with sufficient technical, financial, geographic, and other relevant information to demonstrate compliance with the applicable set of eligibility criteria and enable sampling by the validation/verification body.

4) Be validated at the time of verification against the applicable set of eligibility criteria mentioned above.

5) Have evidence of project ownership, in respect of each project activity instance, held by the project proponent from the respective start date of each project activity instance (i.e., the date upon which the project activity instance began reducing or removing GHG emissions).

6) Have a start date that is the same as or later than the grouped project start date.

7) Be eligible for crediting from the start date of the instance through to the end of the project crediting period (only).

Where a new project activity instance starts in a previous verification period, no credit may be claimed for GHG emission reductions or removals generated during a previous verification period and new instances are eligible for crediting from the start of the next verification period. Where inclusion of a new project activity instance necessitates the addition of a new project proponent to the project, such instances shall be included in the grouped project within five years of the project activity instance start date. The procedure for adding new project proponents will respect the rules of the VCS Program document Registration and Issuance Process.

AFOLU non-permanence risk analyses will be assessed for each new geographic area. The leakage assessment will be reassessed where new instances of the project activity are included in the project.

1) The geographic area within which all project activity instances shall occur is delineated with the Reference Region set in this PD.

2) The determination of the baseline for the project activity is in accordance with the requirements of the methodology applied to the project.

3) The demonstrations of additionality for the project activity are in accordance with the requirements of the methodology applied to the project.

4) A set of eligibility criteria for the inclusion of new project activity instances at subsequent verification events is defined in this PD (above in this topic).

5) A description of the central GHG information system and controls associated with the project and its monitoring is provided in the Monitoring Plan.

It is important to notice that the Leakage Management areas originally inserted in the project design will be priority to recruit new project instances. If the new instances involve the original Leakage Management areas, new areas shall be identified and adopted to manage leakage.

1.5 Project Proponent

Organization name	Carbonext Tecnologia em Soluções Ambientais
Contact person	Janaina Dallan
Title	Carbonext CEO
Address	R. Gomes de Carvalho, 1510 – 19th floor – Vila Olímpia, São Paulo – SP, Brazil, zip code:04547-005
Telephone	+ 55 (11) 3045-1970
Email	redd.tauari@carbonext.com.br

Organization name	Arthur Chiarotto Penteado
Contact person	Arthur Chiarotto Penteado
Title	Project Proponent / Landowner
Address	Rua professor Alexandre Correa, nº 300 - Jardim Vitória Régia. São Paulo - SP
Telephone	+55 (16) 3972-2449
Email	Arthur@grupopenteado.com

Organization name	Arthur Junqueira Ferreira Penteado
Contact person	Arthur Junqueira Ferreira Penteado
Title	Project Proponent / Landowner
Address	Rua professor Alexandre Correa, nº 300 – Jardim Vitória Régia São Paulo - SP
Telephone	+55 (16) 3972-2449
Email	Ajfp@grupopenteado.com

Organization name	Graziella Vicente Bisquolo Penteado
Contact person	Graziella Vicente Bisquolo Penteado

Title	Project Proponent / Landowner
Address	Rua professor Alexandre Correa, nº 300 – Jardim Vitória Régia São Paulo - SP
Telephone	+55 (16) 3972-2449
Email	Graziela@grupopenteado.com

Organization name	Fazenda Continental LTDA.
Contact person	Arthur Chiarotto Penteado & Graziella Vicente Bisquolo Penteado
Title	Project Proponent / Landowner
Address	Alameda dos Maracatins, nº 780 - Indianápolis. São Paulo - SP
Telephone	+55 (16) 3972-2449
Email	Arthur@grupopenteado.com

1.6 Other Entities Involved in the Project

There are no other entities involved in the project development at this moment.

1.7 Ownership

Organization name	I. Fazenda União: Arthur Junqueira Ferreira Penteado (CPF: 002.150.158-00), Arthur Chiarotto Penteado (CPF: 033.456.578-21), Flavia Chiarotto Penteado (CPF: 114.651.418-20). II. Fazenda Continental: Fazenda Continental LTDA. (CNPJ: 44.947.794/0001-70). III. Fazenda Recanto do Sinuelo: Arthur Junqueira Ferreira Penteado (CPF: 002.150.158-00). IV. Fazenda Cachoeirinha: Arthur Junqueira Ferreira Penteado (CPF: 002.150.158-00). The CNPJ (Brazilian corporate registration) and the CPF (Brazilian private individual registry number) are the official registration numbers that allow to evidence the titularity of rural properties: all the property registration documents are available for the audit team.
Contact person	Arthur Chiarotto Penteado
Title	Project Proponent / Landowner
Address	Rua professor Alexandre Correa, nº 300 - Jardim Vitória Régia. São Paulo – SP
Telephone	+55 (11) 99631-6664
Email	Arthur@grupopenteado.com

In compliance with VCS Standard 4.4 (Section "3.7 Ownership", "Requirements"), the evidence establishing project ownership accorded to the project proponent(s) will be presented to the audit team as the Project Area land titles, which correspond to enforceable and irrevocable agreements with the holder of the property with right in the land, vegetation, conservational and management process that generates GHG emission reductions and removals, which vests project ownership in the project proponent. All the Project Area land titles will be provided to the audit team at validation.

1.8 Project Start Date

The Tauari REDD+ Project start date was set to September 03, 2020. Considering the Program Definitions v4.3 and the VCS Standard v4.4, the Start Date is defined as "the date on which activities that led to the generation of GHG emission reductions or removals are implemented".

The definition of the Start Date for the Tauari Project was based on a police report issued when an invasion in the Continental farm was identified. The invaders committed environmental crimes, thefts and carried out illegal activities such as illegal logging. The judicial process will be made available to the auditors. The police led the invaders off the property and a court settlement is underway, there is no conflict between the parties.

After the invasion, property boundaries were reinforced, and sustainable forest management was conceived and carried out to keep the borders always monitored and guarantee the land ownership, preventing further invasions.

Equipment acquisitions such as cars and motorcycles to ensure ground monitoring have been made. Tractors to demarcate and maintain firebreaks were also purchased.

It is a common practice in neighboring areas and settlements nearby to use fire to clear the land and, often, these fires are not properly controlled and end up passing to the neighboring properties and forest areas (becoming forest fires).

Thus, the Tauari REDD+ project aims to protect the project area not only from invasions but also from fires that could come from neighboring areas.

1.9 Project Crediting Period

Start date: 03rd September 2020.

End date: 02nd September 2050.

30 years.

1.10 Project Scale and Estimated GHG Emission Reductions or Removals

The estimated annual GHG emission reductions/removals of the project are:

☐ <20,000 tCO_2e/year

☒ 20,000 – 100,000 tCO_2e/year

☐ 100,001 – 1,000,000 tCO_2e/year

☐ >1,000,000 tCO_2e/year

Project Scale	
Project	x
Large project	

Year	Estimated GHG emission reductions or removals (tCO_2e)
Year A (e.g., 2019)	
Year B	
Year C	
Year…	
Total estimated ERs	
Total number of crediting years	
Average annual ERs	

1.11 Description of the Project Activity

The Tauari REDD+ project has as the main objective the conservation of 21,016.38 hectares, which is the total project area protected native Amazon Forest, located in the region with the highest illegal deforestation rate in the Mato Grosso state[5], specifically in the cities Aripuanã and Juína. The Mato Grosso state was the third in Brazil's deforestation ranking for the year 2022 with a deforested area of 239,144 hectares and an increase of 25% compared to 2021[6].

This project is not located within a jurisdiction covered by a jurisdictional REDD+ program and also the Project Area is a private property thus, it is not covered by jurisdictional REDD+ program. Hence, there is no overlapping or double counting.

In the Tauari REDD+ project region, the main drivers of deforestation are cattle ranching and logging, both legal and illegal. This region is called the "Arc of Deforestation", where the process

[5] https://g1.globo.com/mt/mato-grosso/noticia/2022/04/21/colniza-mt-e-primeiro-no-ranking-de-desmatamento-ilegal-com-92percent.ghtml

[6] RELATÓRIO ANUAL DO DESMATAMENTO NO BRASIL(ANNUAL REPORT ON DEFORESTATION IN BRAZIL), 2023 - https://storage.googleapis.com/alerta-public/dashboard/rad/2022/RAD_2022.pdf

of deforestation has historically been concentrated and where the Ministry of the Environment and Climate Change (MMA) defines by decree each year municipalities that are priorities for actions to prevent, monitor and control deforestation. The municipalities of Aripuanã and Juína have been on this list since 2008[7]. The northwestern region of Mato Grosso is one of the most forested regions in the state compared to the others and the process of deforestation, driven mainly by cattle ranching, means that this region stands out within the jurisdictions with the highest rates of deforestation[8].

Within this scenario of intense deforestation pressure, conservation actions are essential in the region, and the 4 properties that comprise the Tauari REDD+ project represent of 21,016.38 hectares of preserved forest, which will seek to contribute to these actions trying to establish a barrier against the advance of deforestation and thus contribute to the fight against climate change.

The project activity for the Tauari REDD+ Project will combine conservation measures with the Sustainable Forest Management in the project area's properties.

Project's major climate, community and biodiversity objectives

In order to contribute to the major climate objectives through forest conservation, as described above, the Tauari REDD+ project seeks to avoid emissions of 1,908,218 tCO_2e (average of 63,607 tCO_2e/year), which corresponds to avoiding the deforestation of around 6 thousand hectares over a 30-year period.

Furthermore, the project will implement certain activities with the aim of obtaining the necessary instruments and institutional support to ensure that sustainable forest management continues, and that leakage is mitigated. The activities will be quantified in the project budget and made available to the auditors. Other activities will depend on agreements with governmental and educational entities and/or NGOs. For these latter activities, the project proponent will apply its best efforts to convince these entities to collaborate with the project but will not be able to participate in direct funding. The Tauari REDD+ project proposes the implementation of the following activities for the benefit of the community and biodiversity:

- Technical Training on Sustainable Cattle Raising: The aim of this initiative is to provide the community with technical training in sustainable cattle ranching, given that community members find few job opportunities in the region and consequently accept to take part in illegal activities and actions. Students and technicians of both sexes will be able to sign up, with the prerequisite of having completed basic studies (high school).

[7] Listagem de munícipios prioritários (List of priority municipalities) - https://www.gov.br/mma/pt-br/assuntos/servicosambientais/controle-de-desmatamento-e-incendios-florestais/pdf/Listagemmunicpiosprioritriosparaaesdepreveno2021.pdf

[8] https://apublica.org/2023/07/legal-desmatamento-no-mato-grosso-cresce-e-vai-na-contramao-da-amazonia/

- Forest Management Courses: Courses on forest management methods will be offered to the local community in order to enable them to work on the proposed project or on other properties that have forest management.
- Fire Brigade Training: The training will be given to train and prepare the fire brigade and, in addition to the property's employees, the project's neighbors will also be able to take part in the training event.
- Advice on nutritional aspects: lectures will be offered by professionals on health-related issues, such as transmissible diseases, healthy eating, hygiene habits, etc. The purpose is to improve the quality of life and access to basic health information, especially for communities with difficult access to health care.
- Biomass, fauna and flora inventory will be carried out to monitor the carbon stock and local biodiversity.
- Support for municipal and state secretaries: The Secretariats will benefit from having an innovative REDD model under their jurisdiction, developed by Carbonext, which can serve as an example and be replicated in other properties. The project will contribute and help raise the public profile, providing visibility and methodological advances in monitoring and combating forest degradation.
- Surveillance activities aimed at mitigating illegal logging and land occupation in the area will be conducted through the Tauari REDD+ Project, covering a significant area. By conducting actions in the region, as well as sustainable forest management, the project aims to significantly impact biodiversity loss, deforestation and degradation. This process can be further consolidated through combined efforts with private and government entities and NGOs. In this context, the project proponent will seek to mobilize the regional forestry sector and try to strengthen the engagement of all sectors involved in deforestation issues in the long term. The main condition for carrying out this activity is the approval and validation of the Tauari REDD+ project, which will be another important reference for the engagement of all potential private landowners in the region.
- Avoiding illegal land occupation: The local community will be strategic in monitoring illegal land occupation and possible illegal logging. Those interested in being trained and carrying out local monitoring will be included in the project, an activity that could also become a new source of income for local communities.

The Tauari REDD+ project aims to ensure the continuity of ongoing forest protection activities and the implementation of the following actions:

I. Qualification of the local community to participate in activities related to forest management within and outside the farm.

II. Long-term protection of the property area and opposition to encroachment.

III. Improving local security by monitoring the project and sharing documentation publicly.

IV. Organization and training of forest fire brigades.

V. Continued efforts with municipal and state secretariats to continue consolidating an environmental management model that is attractive and replicable for future REDD projects.

In addition, the monitoring strategy is a key point in ensuring the success of this project. The project's monitoring will combine the application of MonitoraCarbon[9] with current field patrols. The project proponent will organize a regional effort to train and share information with stakeholders.

In this way, a new development model can be created in the region and its surroundings, based on a model that takes advantage of the forest's full potential, combined with the preservation of natural resources and sustainable economic activities, including sustainable forest management and non-timber products.

Sustainable Forest Management within the properties

Sustainable Forest Management (SFM) is a combination of forest extraction techniques, adapted to the conditions of the forest. This concept guides the exploitation of forest resources (wood, residual woody material from logging and non-timber products), guaranteeing the supply of wood processing and improvement units. In addition, studies show that carbon sequestration by young forests, considering that the harvested areas are made in such a way as to promote regeneration in the most complete and efficient way in SFM, is in fact greater and faster than in older forests[10].

Forest management on the Tauari REDD+ project properties take place in a sustainable way, which guarantees the use of available resource based on techniques that seek a reduced impact on harvest, the conservation of the forest, preventing soil erosion and wear, reducing the risk of fire and enabling the maintenance of natural regeneration and the protection of biodiversity. This makes it possible to guarantee that the timber product has been obtained in a sustainable method, enabling it to be sold and providing security for the buyer.

SFM enacts REDD's goals, as it is a tool to enhance forest surveillance. The presence of workers in timber management areas is a significant factor to reduce the pressures of illegal wood harvesters trespassing inside the Project Area.

Sustainable Management is carried out in a part of the PA. In the sustainable management area, permanent preservation areas (PPA) were excluded. The Brazilian Forestry Code decrees that

[9] MonitoraCarbon is a deforestation alert system, implemented by Carbonext, which detects probable changes in land-use, validates and sends alerts for monitoring agents to confirm and take appropriate actions.

[10] Natural regeneration of forests captures carbon faster than previously thought - https://www.wribrasil.org.br/noticias/regeneracao-natural-de-florestas-captura-carbono-mais-rapido-do-que-se-pensava

permanent preservation areas (PPA) of the watercourses must be fully preserved. The management plan will be presented in the PD and the information will be used in the quantification of GHG emission reductions and removals presented in section 3 and 4.

Leakage management

It is assumed that leakage manifests itself mainly as changes in land use (cattle ranching, timber, etc.) in the project surroundings. These land-uses have become more uses have become more economically attractive than the sustainable management of forest resources, mainly due to the following factors: market pressure; occupation of border areas and other areas where law enforcement and command-and-control are not effective; among other secondary factors.

The Project proponents will adopt proactive initiatives to fight these leakage sources, based on a cooperative effort with local stakeholders to promote a new approach to forest and land use in the region.

1.12 Project Location

1.13 Conditions Prior to Project Initiation

- **Ecosystem type:**

  The boundaries of the Tauari REDD+ Project are 100% covered by the Amazon Rainforest biome. Three forest types are present in the project area: Submontane Open Ombrophylous Forest (As); Submontane Dense Ombrophylous Forest (Ds); and Submontane Semideciduous Forest (Fs)[11].

- **Current and historical land-use:**

  The project area is entirely forest for at least 10 years, as detailed in the section "1.3 Project Eligibility". Sustainable forest management (SFM) has been carried out since 2013 (it started in União Farm and is currently carried out only in União and Continental Farms).

  The common practice established in the region is the invasion of the area and extraction the wood that can be used for sale (commercially viable) and then clear the area using fire, the clearing with fire takes place until it is feasible to install pasture for cattle. Without the TAUARI REDD+ project, the project area is vulnerable to these external threat's (common practices).

[11] The variations in these forest types were defined by the topographic and latitudinal variation: https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=263011

- **Has the land been cleared of native ecosystems within 10 years of the project start date?**

  ☐ Yes ☒ No

1.14 Compliance with Laws, Statutes and Other Regulatory Frameworks

There is no specific governing legislation in Brazil about carbon credit projects or even for the carbon credits generation. However, Brazil is advancing on this theme, and there are draft bills being considered in the plenary (both Senate and Chamber of Deputies) regarding the carbon market, for example, PL 2148/2015 proposes the regulation of the carbon market in Brazil by creating a Brazilian system of emissions trading in accordance with the Paris agreement on climate change. In addition, it provides for the certification of carbon credits for alternative source power generation projects. Also, PL 415/2020 establishes the Amazon Fund, a non-profit civil association, whose objective is to allocate the value of donations to the realization of non-refundable investments in actions to prevent, monitor and combat deforestation and to promote conservation and sustainable use of the Legal Amazon. The Amazon Fund will be eligible for access to payments for results of REDD+ projects, achieved by the country and recognized by the United Nations Framework Convention on Change of the Climate. In addition, PL 4516/2021 consolidates the incentive to issue green debentures, intended for investment projects in sustainable development. More recently presented, the PL 412/2022 and PL 2229/2023 propose the ordination of the non-voluntary Brazilian Emissions Reduction Market (MBRE) and they do not present any impeditive to the voluntary carbon market.

Although the Brazilian legislature is processing these proposals, note that all projects must be aligned with the laws and principles that govern the legal sphere to be approved subsequently inserted to the Brazilian legal system.

In this context, there is a hierarchy between norms in the Brazilian legislation, which starts with the Federal Constitution as the main governing rule and, thereafter, subordinated to this are state and municipal laws. All branches of applicable and complementary laws to the carbon-generating project and their applicable rules have their origin, foundation, and validity in the Federal Constitution.

Regarding Environmental Law and the Environment, Article 225 of the Federal Constitution is the basis for all norms, principles, objectives, and policies. The National Land Policy is indicated in Article 184. Furthermore, rights such as possession, property, and free enterprise are also based on the Federal Constitution. Therefore, there is no legal impediment to REDD+ projects execution and the execution of commercial carbon credit transactions from this type of project.

Thus, considering the premises contained in the brief explanation above, there are several rules applicable, directly, and indirectly, to the project generated from carbon credits, each one regulating a specific aspect.

- **Law nº 11. 284/2006** - Provides for the management of public forests for sustainable production, institutes the Brazilian Forest Service - SFB. Among other topics, this law deals with the management of public forests for sustainable production; Direct management; Forest concessions; Management and inspection bodies; Principles and

concepts (http://www.planalto.gov.br/ccivil_03/_Ato20042006/2006/Lei/L11284.htm);

- **Law nº 12.651/2012 (Forest Code)** - The Forest Code establishes general rules on the protection of vegetation, Permanent Preservation areas and Legal Reserve areas, forest exploitation, the supply of forest raw materials, control of the origin of forest products and the control and prevention of forest fires. In addition, it provides economic and financial instruments to achieve its objectives. Creates the CAR which was later regulated by MMA Normative Instruction No. 2 of May 5, 2014 (http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm);

Regarding the Forest Code, the following definitions of the Brazilian Forest Code stand out as being relevant:

- *"III – Legal Reserve (LR): area located inside a rural estate, excluding the Area of Permanent Preservation, necessary for sustainable use of natural resources, conservation and recovering of ecological processes to conservation of biodiversity and to shelter and protection of native fauna and flora.*

- *VI – Legal Amazon: the States of Acre, Pará, Amazonas, Roraima, Rondônia, Amapá and Mato Grosso, and the regions located to the North of parallel 13ºS, in States of Tocantins and Goiás, and to the West of meridian 44ºW, of the State of Maranhão."*

The Legal Reserve (LR) must be registered in property deed in the Real Estate Registry Office: its location must be publicly known, and future landowners must know where it is located, its boundaries and frontiers.

The LR can be located anywhere inside a rural estate. Brazilian Forest Code determines that, once allocated, LR may not be changed even in cases of real estate transfer, land dismembering or area rectification. The LR allocation is a prerequisite to obtaining permission to exploit the native vegetation existing inside the rural estate. In order to obtain this Permit for Forestry Stewardship, the landowner must previously register the location of the LR in land property documents through the Real Estate Registry Office, before suppressing any kind of native vegetation. According to Provisory Measure No. 2166-67 (Medida Provisória nº 2.166-67) of August 24, 2001:

- *"Article 16. The forests and other types of native vegetation, excepting those located in Areas of Permanent Preservation, as well as those not subject to the politics of restricted use or subject to specific legislation, are susceptible to suppression, as long as a portion of vegetation is preserved, as Legal Reserve, at a minimum:*

- *I – eighty percent (80%), in rural estates located in forest zones located in the Legal Amazon*."

However, according to first paragraph of article 62 from the Environmental State Code of Mato Grosso (mentioned in the section of State Laws - Supplementary Law nº 38/1995), the local law

allows Legal Reserve to be 50% (this local law is in compliance with the aforementioned Provisory Measure No. 2166-67, thus, constituting no legal conflicts between state and federal levels):

- *"Article 62. Forest or other forms of native vegetation that represent a minimum percentage of the rural property area are considered Legal Reserves, aiming to maintain its vegetation cover and all existing life forms:*
    - *§ For areas of forest or transitional woods, the minimum percentage allowed per property will be 50% of its surface area."*

Thus, the TAUARI REDD+ project complies with the state law (first §, article 62 and with the Forest Code), with Legal Reserve equivalent to at least 50% of the area of the property. In this case, the project presents the following percentage of Legal Reserve.

Property (Farms)	Total Area (ha)	Legal Reserve Area (ha)	Legal Reserve (%)
Continental	18,401.81	9,348.88	51
Recanto do Sinuelo / Cachoeirinha*	1,909.26	952.99	50
União	18,017.20	13,172.86	73

*For the Rural Environmental Registry (in Portuguese: *Cadastro Ambiental Rural* – CAR), Recanto do Sinuelo farm and Cachoeirinha farm form a unique block.

Federal Laws:

- **Law nº 5.452/43 - CONSOLIDATION OF LABOR LAWS (CLT):** It regulate individual and collective labor relations, recently amended by law **No. 13.467/2017** (labor reform) (https://www.planalto.gov.br/ccivil_03/decreto-lei/del5452.htm and https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/lei/l13467.htm);
- **Law nº 5.889/73:** regulates specifically the rules applicable for rural employees (https://www.planalto.gov.br/ccivil_03/leis/l5889.htm);
- **Law nº 9.433/1997 (The National Policy on Water Resources) -** The National Policy on Water Resources is based on the assumption that water is a limited natural resource, with economic value and public domain. Likewise, the management of water resources must always provide for the multiple use of water, and the management of water resources must be decentralized and count on the participation of the Public Power, users, and communities (http://www.planalto.gov .br/ccivil_03/leis/l9433.htm);

- **Law nº 12.305/2010 (National Solid Waste Policy)** - The National Solid Waste Policy brings together the set of principles, objectives, instruments, guidelines, goals, and actions adopted by the Federal Government, alone or in cooperation with states, the Federal District, municipalities, or individuals, with a view to the integrated management and environmentally appropriate management of solid waste. This is a milestone in Brazilian environmental legislation, as it is the first federal standard created with a focus on the problem of solid waste. Thus, the aforementioned law deals with relevant issues related to social, environmental, and economic interests in practically all activities. It includes as instruments the environmental, sanitary and agricultural monitoring and inspection, technical and financial cooperation between the public and private sectors for the development of research on new products, methods, processes and technologies of management, recycling, reuse, waste treatment and final disposal environmentally sound tailings; scientific and technological research; environmental education, among others (http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/l12305.htm);

- **Law nº 12.187/09 (National Policy on Climate Change - PNMC)** - The PNMC's objectives are to make economic and social development compatible with the protection of the climate system, the reduction of anthropogenic greenhouse gas emissions in relation to their different sources, the strengthening of human removals by sinks of greenhouse gases in the national territory, the implementation of measures to promote adaptation to climate change by the 3 (three) spheres of the Federation, with the participation and collaboration of economic and social agents stakeholders or beneficiaries, in particular those especially vulnerable to its adverse effects; the preservation, conservation and recovery of environmental resources, with particular attention to the great natural biomes considered National Heritage; the consolidation and expansion of legally protected areas and the encouragement of reforestation and the recovery of vegetation cover in degraded areas; and encouraging the development of the Brazilian Emissions Reduction Market – MBRE (http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/l12187.htm);

- **Decree nº 9.578/2018** - Provides for the National Fund on Climate Change (FNMC), dealt with in Law no. 12,114, of December 9, 2009, and the National Policy on Climate Change, dealt with in Law n. 12,187, of December 29, 2009. Among the topics covered by the decree is the application of FNMC resources to projects to reduce carbon emissions from deforestation and forest degradation, with priority for natural areas threatened with destruction and relevant to conservation strategies biodiversity (art. 7, V) (http://www.planalto.gov.br/ccivil_03/_ato2015- 2018/2018/decreto/d9578.htm);

- **Resolution nº 001/1986 of CONAMA** - Deals with Environmental Licensing. It is an administrative procedure through which the Public Administration establishes conditions and limits for the exercise of certain activities (http://www.ibama.gov.br/sophia/cnia/legislacao/MMA/RE0001- 230186.PDF);

- **Law nº 9.985/2000 (SNUC Law)** - This Law establishes the National System of Nature Conservation Units - SNUC, establishes criteria and norms for the creation, implementation and management of conservation units and presents a series of important concepts for a proper understanding conservation units (http://www.planalto.gov.br/ccivil_03/leis/l9985.htm);

- **Law nº 6.938/1981 (National Environmental Policy)** - The National Environmental Policy has the objective of preserving, improving and recovering the environmental quality conducive to life, aiming to ensure conditions for socio-economic development, the interests of national safety and the protection of human dignity (https://www.planalto.gov.br/ccivil_03/leis/l6938.htm);

- **Law nº 10.406/2002 (Civil Code)** - Deals with various rights and obligations, including possession, property and legal business (http://www.planalto.gov.br/ccivil_03/leis/2002/l10406compilada.htm);

- **Law nº 6.015/1973 (Public Records Law)** - The law deals with public records and, especially, in its chapter V it refers to the registration of rural properties, through which the ownership of rural property is demonstrated (http://www.planalto.gov.br/ccivil_03/leis/l6015compilada.htm);

- **Decree n° 11.075/2022 (Brazilian Carbon Market)** – Establishes the procedure for the elaboration of Sectoral Plans for the Mitigation of Climate Change and institutes the National System for the Reduction of Greenhouse Gas Emissions (https://www2.camara.leg.br/legin/fed/decret/2022/decreto-11075-19-maio-2022-792682-publicacaooriginal-165314-pe.html).

Some of the farms hold sustainable logging activities. These activities are carried out according to Sustainable Forest Management Plans previously approved by the Mato Grosso State Government. These management plans were conceived in accordance with Brazilian Forest Code and local regulation.

In the Mato Grosso State, the Secretariat for the Environment (Sema/MT) is the body responsible for environmental licensing. The State Water Resources Council (Cehidro) and the State Environment Council (Consema/MT) are the collegiate bodies. Sema/MT is responsible for licensing the forest management activities, and the "annual operating plan" (POA) is the document issued by the competent agency in order to authorize the exploration of a specific area inside the farm, called "the "Annual Production Unit" (UPA). The authorization is valid for 12 months and informs the maximum volume per species allowed for exploration. The sum of the UPAs makes the broader area called "Forest Management Area" (AMF).[12]

[12] https://legislacao.mt.gov.br/mt/decreto-n-1313-2022-mato-grosso-regulamenta-a-gestao-florestal-do-estado-de-mato-grosso-e-da-outras-providencias?origin=instituicao

State (Mato Grosso)[13]:

- **Supplementary Law nº 38/1995**: Provides on the State Environmental Code and makes other provisions;
- **Decree 1.245/2022** - Provides for rural land regularization in the State of Mato Grosso in areas that were donated to the State of Mato Grosso and regulates art. 9 to 9-D of Law No. 3.922, of September 20, 1977, which provides for the State Land Code;
- **Decree 1.160/2021** - Creates the "CARBONO NEUTRO MT" program; provides for the adhesion of the State of Mato Grosso to the "Race to Zero" campaign, in the scope of the United Nations Framework Convention on Climate Change; sets voluntary targets for the reduction of illegal deforestation in the State; creates the Action Plan for the Prevention and Control of Deforestation and Forest Fires in the State of Mato Grosso - PPCDIF/MT 4th phase (2021 - 2024), and makes other provisions;
- **Decree 1.490/2018** - Establishes the Action Plan for Prevention and Control of Deforestation and Forest Fires in the State of Mato Grosso and makes other provisions;
- **Normative Instruction SEMA/MT1/2007:** Disciplines the technical and administrative procedures for environmental licensing of rural properties in the state of Mato Grosso;
- **Ordinance SEMA/MT99/2007:** Lists the documents required to instruct the projects for Single Environmental Licensing, Forest Exploitation Plan, Multiple Use Sustainable Management Plan, Verification of Legal Reserve of Intact Properties, Forest Planting Project and Circumstantiated Survey;
- **Supplementary Law nº 327/2008:** Creates the Rural Environmental Legalization Program and regulates the stage of the environmental licensing process for rural properties;
- **Law nº 11.606/2021:** Establishes the State Policy for the Promotion of the 2030 Agenda for Sustainable Development of the United Nations (UN) as a guideline for public policies in the State of Mato Grosso;
- **Law nº 11.506/2021:** Provides for the creation and implementation of the Sustainable School Program and the seal of the same name in the school system of the State of Mato Grosso;
- **Law nº 9878/2013:** Creates the State System for Reducing Emissions from Deforestation and Forest Degradation, Conservation, Sustainable Forest Management and Increasing Forest Carbon Stock - REDD+ in the State of Mato Grosso and makes other provisions;
- **Chapter III on Natural Resources of the Constitution of the State of Mato Grosso:** provides on definitions of the ecologically balanced environment, as defined in the Federal Constitution, and establishes other provisions of competence of the State System of Environment.

[13] https://legislacao.mt.gov.br/mt

Municipal (Aripuanã)[14]:

- **Supplementary law Nº 99/2014:** Provides for the environmental code in the municipality of Aripuanã and provides other provisions;
- **Law Nº 1.231/2015: A**pproves the municipal education plan of the municipality of Aripuanã and provides other provisions. Its 15th goal indicates the promotion of Environmental Education at all ages, levels, and teaching methods as a right for the entire school community, through a critical and complex approach that contributes to building sustainable societies.

Municipal (Juína)[15]:

- **Supplementary law Nº 864/2006:** Provides for the environmental code in the municipality of Juína and provides other provisions;
- **Law N°1.859/2019: Reviews the municipal education plan of Juína and.** It ensures the development of curricular projects articulated with the common national base, related to Environmental Education.

As such, the Project Area is following all identified applicable laws, and no cases of non-compliance with laws, statutes and other regulations were identified. Given the permanent invasion attempts against the Project Area, the best efforts of the project proponents are required to prevent property invasion and to remain in compliance with Brazilian Forest Code.

1.15 Participation under Other GHG Programs

1.15.1 Projects Registered (or seeking registration) under Other GHG Program(s)

The project has not been registered, nor is seeking registration under any other GHG programs.

1.15.2 Projects Rejected by Other GHG Programs

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

[14] https://leismunicipais.com.br/prefeitura/mt/aripuana

[15] https://leismunicipais.com.br/prefeitura/mt/juina

1.16 Other Forms of Credit

1.16.1 Emissions Trading Programs and Other Binding Limits

Does the project reduce GHG emissions from activities that are included in an emissions trading program or any other mechanism that includes GHG allowance trading?

☐ Yes ☒ No

If yes, provide the name of the emissions trading program or other mechanism that allows GHG allowance trading.

1.16.2 Other Forms of Environmental Credit

Has the project sought or received another form of GHG-related credit, including renewable energy certificates?

☐ Yes ☒ No

If yes, provide the name of the other program(s) under which the project has sought or received another form of GHG-related credit.

Supply Chain (Scope 3) Emissions

Have the owner(s) or retailer(s) of the impacted goods and services[16] posted a public statement saying, "VCUs may be issued for the greenhouse gas emission reductions and removals associated with [organization name(s)] [name of good or service]" since the project's start date?

☐ Yes ☒ No

There are no impacted goods or services derived from the project activities.

Has the project proponent posted a public statement saying, "VCUs may be issued for the greenhouse gas emission reductions and removals associated with [name of good or service] [describe the region or location, including organization name(s), where practicable]."

☐ Yes ☒ No

There are no impacted goods or services derived from the project activities.

Have the producer(s) or retailer(s) of the impacted good or service been notified of the project and the potential risk of Scope 3 emissions double claiming via email?

☐ Yes ☒ No

[16] Impacted goods and services are all goods and services directly impacted by the technologies and measures specified as project activities in the project description. Please see the VCS Program document *VCS Program Definitions* for additional information.

There are no impacted goods or services derived from the project activities.

In all other cases, demonstrate that a public statement(s) by the owner(s) or retailer(s) of the impacted good(s) or service(s) or project proponent (as applicable) has been made throughout the project crediting period. Where applicable, also demonstrate that the impacted good or service's producer(s) or retailer(s) have been notified of the project and the potential risk of Scope 3 emissions double claiming via email. Evidence of the public statement(s) and email(s) must be provided in this report or attached as an appendix.

1.17 Sustainable Development Contributions

The development and implementation of monitoring and social activities will come from the net carbon payment revenues of the GHG Crediting Period, which is 30 years (2020 to 2050). These activities will generate net positive impacts on the climate, communities and biodiversity of the project area and its surroundings.

The project is aligned with the environmental priorities defined by the Brazilian Federal Administration and its international commitments represented by the elements of the Brazilian NDC, which the country committed to adopt within the framework of the Paris Agreement, COP21[17]. Brazil has committed to reduce its emissions in 37% by 2025 and 43% by 2030, when compared with 2005 levels. It has also pledged to end illegal deforestation by 2030[18]. To attain this goal, it is essential that independent and voluntary actions join government initiatives.

During the project period, the activities will involve technical training on sustainable cattle raising, fire brigade, lectures on nutritional aspects, surveillance activities, among others, describe in Section 1.11. These activities will contribute to meeting some of the targets of the following SDGs: (01) No poverty; (03) Good health and well-being; (04) Quality education; (8) Decent work and economic growth; (13) Climate action; (15) Life on land ecosystems.

The table below shows how the project's actions will contribute to the SDGs. Goals for each proposed activity are under construction with the theory of change and will be presented in the validation of the project.

[17] Brasil, "REDD+ e a NDC do Brasil," Ministério do Meio Ambiente - MMA, 2016. http://redd.mma.gov.br/pt/redde-a-indc-brasileira (accessed Aug. 01, 2023).

[18] UNFCCC, "Nationally Determined Contributions Registry | UNFCCC," 2022? https://unfccc.int/NDCREG (accessed Aug. 01, 2023).

Table 1. Sustainable Development Contributions

SDG Target	SDG Indicator	Net Impact on SDG Indicator	Contributions Over Project Lifetime
1.1	1.1.1: Proportion of the population living below the international poverty line	Decrease	Employing people to carry out project activities
3.d	Number of people who participated in lectures on guidance on nutritional and health aspects	Increase	Participation of local communities in lectures
4.5	4.5.1: Parity indices for all education indicators on the list that can be disaggregated	Increase	Presence of women in the activities carried out by the project
8.3	8.3.1: Proportion of informal employment in total employment by sector and sex	Increase	Employing people to carry out project activities
13.0*	SDG 13.0: Tones of greenhouse gas emissions avoided or removed Brazil's NDC[19]: Reduction of 37% (2025) and 50% (2030) of CO2 emissions	Increase	Prevent the release of carbon into the atmosphere
13.3	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Increase	Providing technical fire brigade training for community and employees
15.1*	SDG 15.1.1 Forest areas as a proportion of total land area Brazil's NDC: Zero illegal deforestation (2030)	Increase	Reducing the annual deforestation rate in the region during the project period
15.2	15.2.1 Progress towards sustainable forest management	Increase	Carry out SFM on properties

*The indicator also is measured in Brazil's NDC.

[19] https://unfccc.int/sites/default/files/NDC/2022-06/Updated%20-%20First%20NDC%20-%20%20FINAL%20-%20PDF.pdf

1.18 Additional Information Relevant to the Project

2 SAFEGUARDS

3 APPLICATION OF METHODOLOGY

3.1 Title and Reference of Methodology

Approved VCS Methodology VM0015 "Methodology for Avoided Unplanned Deforestation", Version 1.1, 3 December 2012[20].

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[21].

AFOLU "Non Permanence Risk Tool" VCS Version 4, Procedural Document, 19 September 2019, v4.0[22].

3.2 Applicability of Methodology

The table below brings the applicability conditions and how the project meets the condition.

Table 2: Applicability Conditions for the Project

Applicability Condition	Project Compliance
Baseline activities may include planned or unplanned logging for timber, fuel-wood collection, charcoal production, agricultural and grazing activities as long as the category is unplanned deforestation according to the most recent VCS AFOLU requirements	The baseline activities include planned logging.

[20] https://verra.org/wp-content/uploads/imported/methodologies/VM0015-Methodology-for-Avoided-Unplanned-Deforestation-v1.1.pdf

[21] http://verra.org/methodologies/vt0001-tool-for-the-demonstration-and-assessment-of-additionality-in-vcs-agriculture-forestry-and-other-land-use-afolu-project-activities-v3-0/

[22] https://verra.org/wp-content/uploads/2019/09/AFOLU_Non-Permanence_Risk-Tool_v4.0.pdf

Project activities may include one or a combination of the eligible categories defined in the description of the scope of the methodology (table 1 and figure 2).	According to Table 1 from VM0015, (table below) the eligible category to this project activity falls into categories: i) **A** (Recanto do Sinuelo and Cachoeirinha farms), since in regard the Baseline it consists of deforestation in old-growth forests without logging and in regard the Project Case the project activities involve protection without logging, fuel wood collection or charcoal production. ii) **D** (União and Continental farms), since in regard the Baseline it consists of deforestation in old-growth forests with logging and in regard the Project Case the project activities involve protection with controlled logging (sustainable forest management – SFM). For these types of project activities, the carbon balance is represented as shown in the figures below.
The project area can include different types of forest, such as, but not limited to, old-growth forest, degraded forest, secondary forests, planted forests and agroforestry systems meeting the definition of "forest".	The project is an area covered only by forest for at least 10 years before the Project start date: the date when activities are initiated to protect against the risk of future deforestation. The Project Area meets the internationally accepted definition of forest, which may include mature forests, secondary forests, and degraded forests. More specifically, according to the Decision 11/CP.7 of the Marrakesh Accord, the following definition of forests is adopted (UNFCCC, 2002): "Forest" is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5

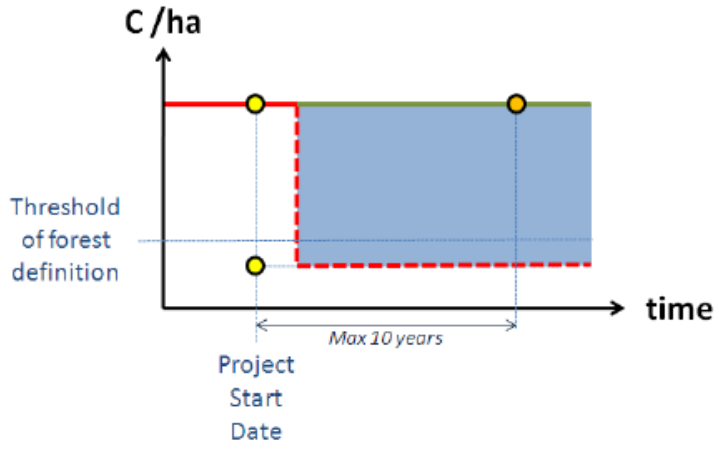
	meters at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 meters are included under forest, as are areas normally forming part of the forest area which are temporarily un-stocked as a result of human intervention such as harvesting or natural causes, but which are expected to revert to forest.
At project commencement, the project area shall include only land qualifying as "forest" for a minimum of 10 years prior to the project start date.	Project area images starting 10 years prior to project start date, from 2011 to 2021, were analysed to identify the forest areas according to Brazil forest definition.
The project area can include forested wetlands (such as bottomland forests, floodplain forests, mangrove forests) as long as they do not grow on peat. Peat shall be defined as organic soils with at least 65% organic matter and a minimum thickness of 50 cm. If the project area includes a forested wetlands growing on peat (e.g., peat swamp forests), this methodology is not applicable.	The Project Area does not include forested lands growing on peat. The Project Area is area is composed by the following soil types, none of which meet the criteria for turf, cited in the VM0015 methodology: • Dystrophic Red-Yellow Argisols • Dystrophic Red-Yellow Latosol • Litolic Neosol Dystrophic

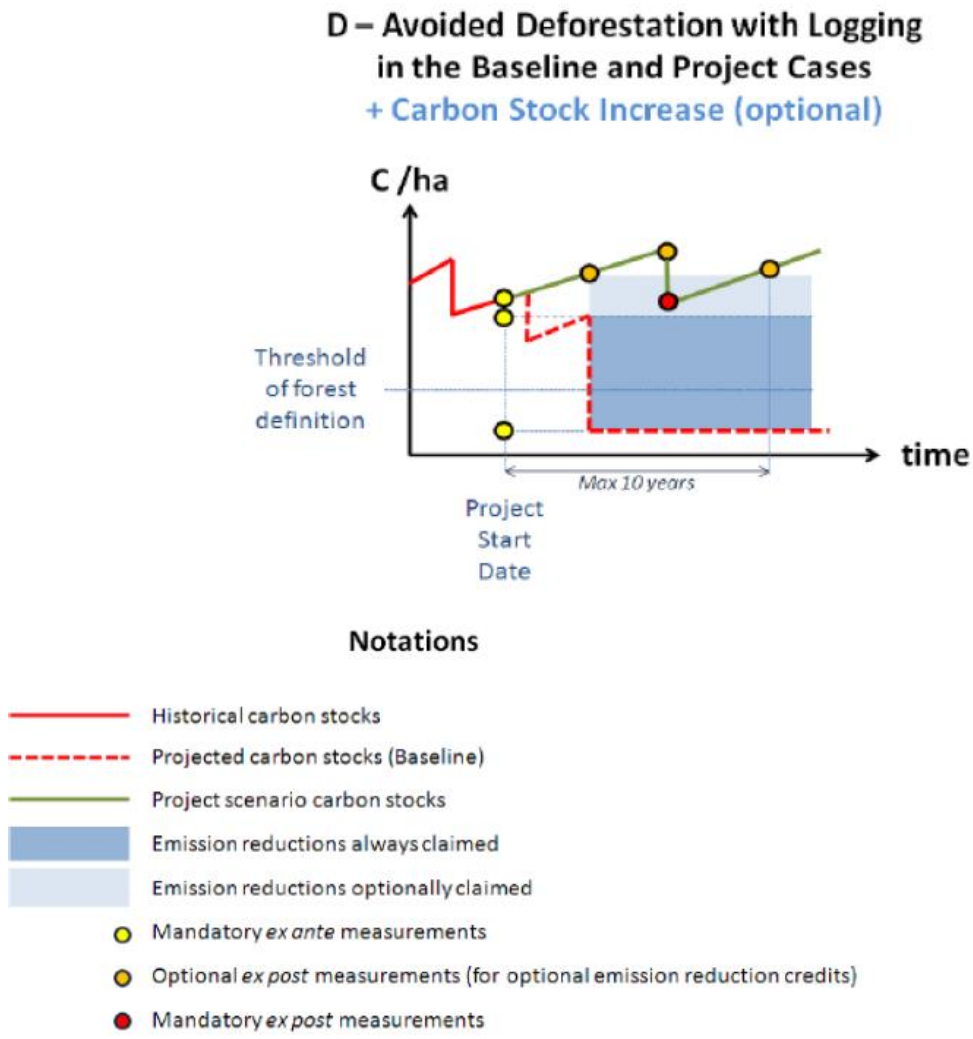
Table 3: Scope of the Methodology (Table 1 of VM0015)

			PROJECT ACTIVITY	
			Protection without logging, fuel wood collection or charcoal production	Protection with controlled logging, fuel wood collection or charcoal production
BASELINE	Deforestation	Old-growth without logging	**A**	**B**
		Old-growth with logging	**C**[1]	**D**[1]
		Degraded and still degrading	**E**[1]	**F**[1]
		Secondary growing	**G**[1]	**H**[1]
	No-deforestation[2]	Old-growth without logging	No change	Degradation
		Old-growth with logging	IFM	IFM-RIL
		Degraded and still degrading	IFM	IFM
		Secondary growing	No change	Degradation

1. Accounting for carbon stock increase in the project scenario is optional and can conservatively be omitted.
2. If the baseline is not deforestation, the change in carbon stocks is not covered in this methodology.

A - Avoided Deforestation without Logging





In this context, it is demonstrated that the VM0015 methodology is applicable to the proposed AUD project activity.

As mentioned in section 3.1 of this PD, "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, was used in this project. The tool is applicable to this project, according to statements below:

a) The project activity does not lead to violation of any applicable law, even if the law is not enforced;

b) There is a baseline methodology to provide for a stepwise approach justifying the determination of the most plausible baseline scenario.

Section 3.1 of this VCS-PD also mentions the use of AFOLU "Non-Permanence Risk Tool" VCS Version 4, Procedural Document, 19 September 2019, v4.0, which is mandatory to be applied to GHG removals or avoided emissions through carbon sinks.

APPENDIX