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Address Rua Rodolfo Freygang, 15, Sala 102, Centro, Blumenau, SC, 89.010-060 Brasil

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1. DEVELOPMENT OF THE PROTOCOL

General Coordination

Pedro Guilherme Kraus, Bachelor, Specialist and Master of Science in Public Administration, and Ph.D. in Production Engineering

General Review

Marlene Hillesheim Kraus, Bachelor's in Business Management, Specialist in Finance, and Master of Science in Production Engineering

Development and Technical Coordination

Ivan Xavier Junior, Forestry Engineer

Technical Development

Guilherme do Nascimento, Chemical Engineer and Master of Science in Chemical Engineering

Luana Tiara Hoffmann, Forestry Engineer, and Master of Science in Forestry Engineering

English Version and Translation

Camila Hillesheim Kraus, Bachelor's in Law, Specialist in Business Law, Cambridge Certificate of Proficiency in English







Technical Review

Giane Carla Kupper Müller, Biologist, Master of Science in Education, and Ph.D. in Environmental Engineering

Karin Schacht, Biologist and Specialist in Environmental Management and Handling in Forestry Systems

Lucas Ferriolli Mariotto, Biologist, Master of Science in Zoology, and Ph.D. in Comparative Biology

Ronald Olavo Schwanke, Chemical Engineer and Master of Science in Chemical Engineering

Rodrigo de Bortoli, Chemical Engineer, and Master of Science in Chemical Engineering

Sabrina Lehnen Stoll, Bachelor's in Law, Specialist in Public Law, Specialist in Labor Law and Preparation for the Judiciary, and Master of Science in Public Law

Suély Fabiana Toniolli, Environmental Engineer, Bachelor's in Law, and Specialist in Sustainable Projects, Climate Change, and Carbon Credits

Legal Analysis

Andreza Louise Azevedo, Lawyer OAB/SC 44.808, Specialist in Tax Law, Corporate Law, and Civil Procedure

Thiago Pamplona da Silva Müller, Lawyer OAB/SC 25.887, with qualification in Business Law, Specialist in Tax Law, Business Management, and Training in Exponential Business Management







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3. LIST OF ABBREVIATIONS AND ACRONYMS OF INTEREST

Translator's note: taking into consideration that the Brazilian acronyms may be of interest in further research done by foreigners using internet research tools, we chose to translate all nouns but not the acronyms themselves, clarifying the general meaning while still allowing research without misunderstandings. Also, whenever the acronym is of international common knowledge, as an example, IPCC, we chose to keep such acronym in its common form as practiced in the English Language.

- ABNT Brazilian Association of Technical Standards
- **APP** Permanent Preservation Area
- **CAR** Rural Environmental Registry
- **CF** Constitution of the Federative Republic of Brazil
- **CCIR** Certificate of Registration of Rural Property
- **CIDH** Inter-American Court of Human Rights
- **CND** Negative Certificate of Debts
- **CNDT** Negative Certificates of Labor Debts
- **COP** Conference of the Parties
- **ESG** Environmental, Social and Governance
- GHG Greenhouse Gases







IBAMA – Brazilian Institute of Environment and Renewable Natural Resources

ICROA - International Carbon Reduction and Offset Alliance

ICVCM - Integrity Council for the Voluntary Carbon

INC/FCCC – Intergovernmental Negotiating Committee for a Framework Convention on Climate Change

- IPCC Intergovernmental Panel on Climate Change
- IPTU Urban Territorial Property Tax
- **ISO –** International Organization for Standardization
- ITR Rural Territorial Tax
- **CDM** Clean Development Mechanism
- **SDM** Sustainable Development Mechanism
- MTE Ministry of Labor and Employment
- NDC Nationally Determined Contribution
- NIRF Property Number in the Federal Revenue
- **OC -** Advisory Opinion
- **SDG** Sustainable Development Goals
- **UN** United Nations
- **PNMC** National Policy on Climate Change







PNPSA – National Policy for Payment for Environmental Services

RL – Legal Reserve

UNFCCC – United Nations Framework Convention on Climate Change







4. GLOSSARY

Additionality: A criterion characterized by the socio-environmental impact generated by natural resource conservation activities, or by greenhouse gas (GHG) emission reduction activities, through process optimization and/or the use of recycled raw materials, renewable energy, among others.

Certification Agent: A technical professional from the certifying body, responsible for supervising the programs and their certification processes.

Agriculture: The technique of soil cultivation for the direct production of plant products, or indirectly, through animal husbandry, for food or raw material supply.

Credit Retirement: The permanent withdrawal of carbon credits from the market, regulated or voluntary, indicating their allocation for GHG emission compensation.

Permanent Preservation Area: A protected land area covered or not by native vegetation, with the environmental function of preserving water resources, landscape, geological stability, and biodiversity, facilitating the gene flow of fauna and flora, protecting the soil, and ensuring human well-being.

Legally Protected Areas: Land areas dedicated to the protection and maintenance of biological diversity, and of their associated natural and cultural resources, managed through legal instruments or other effective means.







Third-Party Audit: An impartial and independent procedure for analyzing methodologies, eligibility, and the project, conducted to ensure the quality and credibility of certification.

Third-Party Auditor: An impartial and independent professional who conducts a thorough and systematic analysis of documents, activities, and/or processes involved in certification.

Blockchain: A decentralized data recording technology, protected by cryptography, in which data storage and editing are shared transparently, reliably, quickly, and securely.

Baseline Scenario: The project scenario before its implementation. The methodology indicates the requirements for constructing the baseline scenario.

Project Scenario: The geographical boundaries of the property or operational limits of the organizations where the project is located.

Certifier: The entity responsible for supervising the programs and their certification processes.

Certification: A set of steps that demonstrate a project's or activity's compliance with GHG emission removal and reduction programs.

Conservation: A set of actions aimed at the rational and sustainable use of natural resources.

Carbon Credit: Representation of one ton of carbon dioxide equivalent, removed or reduced, which has undergone the process of validation, verification, and certification.







Carbon Debit: Representation of one ton of carbon dioxide equivalent emitted by human activities (carbon footprint).

Carbon Dioxide Equivalent: A measure that represents various GHGs through the equivalence of their global warming potentials relative to carbon dioxide.

Externalities: Areas beyond the boundaries of the project scenario, where any positive or negative influences can be recorded with the project's implementation.

Afforestation: Unlocated GHG emissions that may occur in the project scenario.

Leakages: emissões não localizadas de GEE que podem ocorrer no cenário do projeto.

GHG: Gases present in the atmosphere capable of absorbing and re-emitting solar radiation, potentially retaining heat on the planet's surface.

Methodology: A set of guidelines, rules, and procedures established for the development of a specific project.

Losses: Any deficit that can occur in the project's carbon stock (project failures, fires, natural catastrophes, among others).

Project: Application of a specific and validated methodology to mitigate climate change.

Protocol/Standard/Certification Standard: General guidelines to be followed for certification programs and processes.







Reduction: Decrease in GHG emissions to the atmosphere.

Reforestation: Planting of trees in exploited areas where there was previously forest vegetation.

Removal: Withdrawal of GHGs from the atmosphere.

Legal Reserve: A land area within a rural property or possession, functioning to ensure the sustainable economic use of the natural resources of the rural property, aid in the conservation and rehabilitation of ecological processes, and promote biodiversity conservation, as well as shelter and protection of wild fauna and native flora.

Reservoirs: Elements that store carbon (above-ground biomass: trunk, branch, leaf; below-ground biomass: roots; dead wood; soil organic carbon; among others).

Silviculture: The technique of cultivating forests, native or otherwise, for food or raw material supply.

Sinks: Points of consumption and transformation of GHGs (industrial processes, carbon reservoirs, other natural biological processes, among others).

Token: A digital representation of an asset, allowing for its traceability.

Tokenization: The process of transforming a good or right into a digital representation.

Validation: A stage in the certification process where the third-party auditor evaluates the eligibility criteria and performs the







validation/acceptance of the methodology proposed by the project developer.

Native Vegetation: Vegetation inherent to the ecosystem or region where it lives, i.e., that grows within its natural boundaries including its dispersal area.

Verification: A stage in the certification process where the third-party auditor carefully analyzes the scope of the project presented by the project developer.







5. ABOUT THE CERTIFIER

LuxCS is the first carbon credit certifier in Brazil, headquartered in Blumenau, Santa Catarina State. Its mission is "To be a reference in transparency and integrity in the certification of carbon credits, ensuring the accuracy and reliability of certified projects." As a vision, it seeks to "*Be an agent of change in personal and business behaviors and practices, contributing significantly to the preservation of the planet and the well-being of future generations.*"

It operates in creating standards and methodologies suited to the Brazilian market conditions and based on the best international practices. It follows a high standard of corporate governance, based on the ICROA Code of Best Practice, the ICVCM Fundamental Carbon Principles, and the IPCC Guidelines for National Greenhouse Gas Inventories.

LuxCS believes that fostering the removal and reduction of GHG emissions and actively participating in certification processes and ongoing evolution in combating climate change will significantly contribute to the sustainable development of Brazil and the world.







6. TRIPLE C PROTOCOL STANDARD

The Triple C Protocol standard refers to a set of guidelines, rules, and general procedures for validation, verification, and certification of GHG emission removal and reduction projects, generating credits for carbon compensation, effectively contributing to the fight against climate change and promoting sustainability.

This protocol includes two distinct certification programs: the GHG removal program, aimed at nature-based solutions; and the UnCarbonize program, focused on certifying inventories, and reduction and compensation of GHG emissions. These cover specific project scopes, which are addressed in item 6.2 and are available at luxcs.org.

The financial assets generated through the Triple C Protocol standard are based on the human right to a healthy environment (UN OC 23/2017 Opinion and UN Resolution 76-300/2021), the right to a balanced environment as a common use good (CF, 1988, Art. 225), the PNMC (Federal Law No. 12.187), and the PNPSA (Federal Law No. 14.119/2021).

6.1. PRINCIPLES OF THE TRIPLE C PROTOCOL STANDARD

To ensure the integrity and high environmental quality of the certified credits, the Triple C Protocol standard has five basic principles:

6.1.1. ACCURACY

Ensures that measurements and estimates are dependable according to statistical analysis indicated in specific methodology. Thus, it allows certification programs to be recognized as effective tools for mitigating





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climate change, increasing the confidence of investors and buyers of carbon credits.

6.1.2. CREDIBILITY

Ensures the reliability of the certification process through impartial and independent third-party auditing. The audit is conducted during the methodology validation stage applicable and the project's eligibility, and during the verification stage of the measurements and calculations performed.

The Triple C Protocol standard was developed and supervised by a group of impartial and independent experts, striving to be recognized as dependable and legitimate by all stakeholders, including governments, companies, civil society organizations, and investors.

6.1.3. LEGITIMACY

Ensures that the protocol is accepted as an internationally recognized standard for certifying climate change mitigation projects, and that it is implemented fairly and equitably. Stakeholder participation in the development of the protocol, through public consultation promoted by the certifier, allows all concerns and expectations to be considered and addressed appropriately.

Legitimacy also allows stakeholders to assess the effectiveness and suitability of the protocol, with periodic reviews and updates envisaged in this context, to ensure its relevance and updating in the face of dynamic climate change mitigation processes.







6.1.4. PRACTICALITY

Aims to ensure that all certification procedures are objective, understandable, accessible, and economically viable. In this way, it facilitates and broadens access for investors and rural producers to develop projects for environmental conservation and climate change mitigation.

6.1.5. TRANSPARENCY

Guarantees all interested parties' free access and regular disclosure and updating of information related to the certification process. In this way, stakeholders can monitor the performance of projects and the efficacy of the certification system, contributing to the continuous improvement of the protocol and corroborating the increasing enhancement of its credibility in the market.

6.2. MAIN PROJECT SCOPES

6.2.1. GHG REMOVAL PROGRAM

Removal projects are characterized by the withdrawal of GHGs from the atmosphere and their storage in reservoirs, through nature-based solutions. In this context, the program's additionality criteria include the conservation of biodiversity and ecosystem services by valuing existing carbon stocks or the potential for new removals.

LuxCS certifies GHG removal from projects developed in all Brazilian biomes, including:







- a. Native vegetation, encompassing APP (*TN: Permanent Preservation Areas*), RL (*TN: Legal Reserve*), and other land areas protected by law, according to specific methodologies.
- b. Afforestation and reforestation, native or otherwise.
- c. Agriculture.
- d. Silviculture.

Projects can be developed in isolated or consortium areas, having one or more owners, according to a specific methodology. The specific methodologies for the development of projects for each scope can be consulted at luxcs.org.

6.2.2. UNCARBONIZE - EMISSION REDUCTION PROGRAM

Emission reduction projects are classified as such when they present significantly lower amounts of GHG emissions compared to the baseline scenario. The comparison is made between the certified emission inventory of the process and/or organization of interest in relation to the established baseline scenario according to a specific methodology.

The additionality criterion in UnCarbonize program projects is met through the optimization of industrial processes, the substitution and/or addition of lower environmental impact technologies, the processing of potentially polluting waste, and the transition to alternative energy matrices.

LuxCS certifies GHG inventory projects, emission reduction projects for generating credits, and emission compensation projects, in different scopes:







- a. Partial inventory, conducted in a specific sector or unit of an organization.
- b. Complete inventory, conducted across all sectors and productive units of an organization.
- c. Production chain inventory, conducted across all sectors and productive units of an organization and entities belonging to its production chain.
- d. Partial compensation, achieved through the acquisition of compensation credits corresponding to the total value of a partial inventory or the partial value of a complete inventory.
- e. Total compensation, achieved through the acquisition of compensation credits corresponding to the total value of a complete inventory.
- f. Extended compensation, achieved through the acquisition of compensation credits corresponding to the total value of a production chain inventory.

The specific methodologies for the development of projects for each scope can be consulted at luxcs.org.







7. CERTIFICATION PROCESS

7.1. STAGES OF THE CERTIFICATION PROCESS – GHG REMOVAL PROGRAM

The certification process for the GHG removal program is conducted through an electronic platform, with the stages presented in Figure 1 and described subsequently.



Figure 1: Stages of the certification process for the GHG removal program.

7.1.1. CERTIFICATION REQUEST

The interested party, landowner, enterprise owner, or legal representative requests a feasibility analysis from a LuxCS duly accredited project developer.







7.1.2. FEASIBILITY ANALYSIS

At this stage, it is necessary to present general documentation of the property (refer to section 8.2) and other data and documents as requested by the project developer.

This professional evaluates the documentation and property data and indicates the applicable methodology if the project proves viable, through a technical opinion.

7.1.3. VALIDATION OF METHODOLOGY AND ELIGIBILITY

The third-party auditor, duly accredited to LuxCS, analyses, and confirms the proposed methodology and the project's eligibility, and issues a technical opinion.

7.1.4. PROJECT DEVELOPMENT

The project developer, duly accredited to LuxCS, collects data and information, and generates estimates in accordance with models and methodology validated by a third-party auditor.

7.1.5. PROJECT VERIFICATION

The third-party auditor, duly accredited to LuxCS, verifies the completeness of the data collected and presented in the project, and issues a technical opinion.

7.1.6. CERTIFICATION

LuxCS oversees the entire process and issues the corresponding certificate.







7.1.7. CREDIT REGISTRATION

The carbon credits are registered and issued as tokens, using blockchain technology in a closed network for greater security and tracking of these until their retirement. After registration, the carbon credits can be traded.

7.2. STAGES OF THE CERTIFICATION PROCESS – UNCARBONIZE PROGRAM

The stages of obtaining certifications for the UnCarbonize program for organizations are conducted through an electronic platform, presented in Figure 2, and described subsequently.



Figure 2: Stages of the certification process for the UnCarbonize program.

7.2.1. CERTIFICATION REQUEST

The managing partner of an organization or the legal representative requests a feasibility analysis from a LuxCS duly accredited project developer.







7.2.2. FEASIBILITY ANALYSIS

At this stage, it is necessary to present general documentation of the organization (refer to section 8.2) and other data and documents as requested by the project developer.

This professional evaluates the documentation and data of the organization and indicates the applicable methodology if the project proves viable, through a technical opinion.

7.2.3. VALIDATION OF METHODOLOGY AND ELIGIBILITY

The third-party auditor, duly accredited to LuxCS, analyses, and validates the proposed methodology and the project's eligibility, and issues a technical opinion.

7.2.4. PROJECT DEVELOPMENT

The project developer, duly accredited to LuxCS, acquires data and information, and generates estimates in accordance with models and methodology validated by a third-party auditor.

7.2.5. PROJECT VERIFICATION

The third-party auditor, duly accredited to LuxCS, verifies the completeness of the data collected and presented in the project, and issues a technical opinion.

7.2.6. CERTIFICATION

LuxCS oversees the entire process and issues the corresponding certificate.







7.2.7. REGISTRATION

The certifications of this program are registered and issued as tokens, using blockchain technology in a closed network for greater security and tracking of these.

7.2.8. COMPENSATION

The organization has the possibility to acquire compensation credits based on the number of emissions estimated by certified and registered inventories, according to the stages presented in Figure 3 and described subsequently.



Figure 3: Stages of the compensation process for the UnCarbonize program.

7.2.8.1. Certification Request

The managing partner of an organization or the legal representative requests certification for partial or full compensation, using carbon credits certified in standards endorsed by ICROA.







7.2.8.2. Certification

LuxCS oversees the entire process and issues the corresponding certificate.

7.2.8.3. Registration

The compensations are registered and issued as tokens, using blockchain technology in a closed network for greater security and tracking of these.

7.3. ROLES OF THOSE INVOLVED IN THE CERTIFICATION PROCESS

7.3.1. LAND AREA, ENTERPRISE, OR ORGANIZATION OWNER

After identifying the possibility of carrying out a certification project, the landowner, enterprise or organization owner, or the legal representative, requests a feasibility analysis from a project developer through the electronic platform; the progress of the entire process can be monitored on this platform.

The validation and verification stages carried out by third-party auditing are initiated only after the request by the landowner, enterprise or organization owner, or the legal representative. To register on the electronic platform, visit luxcs.org.

7.3.2. LEGAL REPRESENTATIVE

The legal representative is responsible for managing the project and may answer in the name of the landowner, enterprise, or organization owner, in all the stages of the certification process.







The legal representative will be authorized, through a representation power of attorney legally recognized, they may be the project developer, the investor or another person designated by the landowner, enterprise, or organization owner.

7.3.3. PROJECT DEVELOPER

The project developer assesses the documentation and data of the property, enterprise or organization and conducts the feasibility analysis of the project, considering economic, legal, and technical aspects, to indicate the applicable methodology if the project proves viable. Different uses and/or soil characteristics, or activities of the organization, may require the application of multiple methodologies in the same property, enterprise, or organization.

Subsequently, the project developer conducts measurements, performs the necessary calculations, and develops the project, following the methodology validated by a third-party auditor and the general guidelines of this protocol. The general guidelines for project development can be found in section 8.

Upon passing a specific proficiency exam, promoted by the certifier or an entity authorized by LuxCS, the professional receives accreditation as a project developer of the Triple C Protocol standard. This individual must follow LuxCS's internal policies. For more information, visit luxcs.org.

7.3.4. THIRD-PARTY AUDITOR

The third-party auditor validates the methodology proposed by the project developer in the feasibility analysis, as well as the project's eligibility. In a subsequent stage, the third-party auditor verifies the project and its









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application scope, which must be in accordance with the validated methodology.

Upon passing a specific proficiency exam, promoted by the certifier or an entity authorized by LuxCS, the professional receives accreditation as a third-party auditor of the Triple C Protocol standard. This individual must follow LuxCS's internal policies. For more information, visit luxcs.org.

7.3.5. CERTIFIER

LuxCS is the certifier responsible for the continuous development of the protocol and the methodologies used in certifying projects for emission inventories, removal, and reduction of GHG; as well as for managing the electronic platform, monitoring, and supervising all stages of the certification process, where it acts as a second layer of security, in addition to third-party auditing.

7.3.6. ELECTRONIC PLATFORM

The electronic platform is a multi-user online tool, responsible for ensuring the flow of information in the certification process. It integrates GHG removal unit suppliers, project developers, auditors, issuing entities, and other stakeholders who actively and voluntarily seek to reduce their socio-environmental impact.







8. GENERAL GUIDELINES FOR DEVELOPING A CERTIFICATION PROJECT

8.1. IDENTIFICATION OF PARTICIPANTS IN THE PROJECT

8.1.1. PROJECT HOLDER

- a. Full name or corporate name.
- b. CPF or CNPJ (TN: Brazilian Tax IDs).
- c. Address.
- d. E-mail address.
- e. Phone number.

8.1.2. OTHER PROJECT PARTICIPANTS

Provide information about relevant individuals or organizations to the project, such as the legal representative.

8.1.3. PROJECT DEVELOPER

- a. Name of the project developer and corporate name.
- b. CPF or CNPJ (TN: Brazilian Tax IDs).
- c. Address.
- d. E-mail address.
- e. Phone number.
- f. Proof of active registration in the professional council.
- g. Professional regularity certificate from IBAMA (TN: IBAMA is an acronym for Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, a possible translation would be Brazilian Institute of the Environment and Renewable Natural Resources,











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an administrative federal organ under Brazil's Executive branch of government).

8.2. PROPERTY INFORMATION

8.2.1. PROPERTY OR RIGHT OF USE OF THE LAND AREA

Describe and provide evidence of ownership or property rights of the land area where the project is or will be implemented. This may include, as appropriate, but is not limited to:

- a. Full property certificate or updated property registration.
- b. Other information from local registries, such as property ownership or land use or management records.
- c. Tradition and freedom certificates or equivalent.
- d. Licenses or concessions for the use of the area.
- e. Property rights and/or land use plans.
- f. Certificate of liens and real or personal repossession lawsuits.
- g. Declaration of no double counting, as per the model available at luxcs.org.

8.2.2. URBAN PROPERTY

- a. Proof of IPTU (Urban Property and Territorial Tax) registration.
- b. Negative Certificate of Debts for IPTU.







- c. Negative Certificates of Labor Debts from MTE, when applicable ¹² ³.
- d. No embargoes or fines on IBAMA⁴.

8.2.3. RURAL PROPERTY

- a. CCIR⁵ (Certificate of Registration of Rural Property)
- b. Negative Certificate of Debts for ITR (Rural Territorial Tax)⁶;
- c. NIRF⁷ (Property Number in the Federal Revenue).
- d. Receipt of rural property registration in CAR (Rural Environmental Registry)⁸;
- e. Negative Certificates of Labor Debts from MTE, when applicable¹²

3;

f. No embargoes or fines on IBAMA⁴.

⁸ https://www.car.gov.br/#/





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¹ (TN: all following links are website links to guide the interested party to access the certificates and documents requested, Brazil has most of its bureaucracy systems available online with easy ways to request verification and validate that the documents are originals) https://cndt-certidao.tst.jus.br/inicio.faces

https://www.gov.br/pt-br/servicos/emitir-certidao-de-debitos-e-consulta-de-autos-de-in fracao

³ https://eprocesso.sit.trabalho.gov.br/Certidao/Emitir

https://servicos.ibama.gov.br/ctf/publico/areasembargadas/ConsultaPublicaAreasEmbarg adas.php

https://sncr.serpro.gov.br/ccir/emissao;jsessionid=IXJNFqGmXVtY+c02rtQNzdFh.ccir4?win dowId=c7d

⁶ https://www.gov.br/receitafederal/pt-br/servicos/cadastro/rural

⁷ https://coletorcafir.receita.fazenda.gov.br/coletor/consulta/consultaCafir.jsf





8.3. DATA AND CHARACTERISTICS OF THE PROJECT LAND AREA

8.3.1. LAND USE MAP

- a. Present georeferenced maps or sketches of the property and the project land area, in the DATUM (SIRGAS 2000) cartographic representation.
- b. Cartography should include, when applicable:
 - Native and planted vegetation cover.
 - Springs.
 - Watercourse.
 - APP (Permanent Preservation Areas), RL (Legal Reserve), and other legally protected areas.
 - Buildings.
 - Land area framework.

8.3.2. ENVIRONMENTAL ASPECTS

Present the environmental aspects of the property and the project area. This information can be derived from literature:

- Geology[°];
- Geomorphology¹⁰;
- Pedology (soil classification)¹¹;
- Biome¹²;

¹⁰ https://bdiaweb.ibge.gov.br/#/consulta/geomorfologia

- ¹¹ https://bdiaweb.ibge.gov.br/#/consulta/pedologia
- ¹² https://www.ibge.gov.br/apps/biomas/#/home



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⁹ (TN: this set of links guides the interested parties to check the official website of the Brazilian Government that allows access to BDIA, Banco de Dados e Informações Ambientais, which could be translated to Database and Environmental Information, this contains official geographical and environmental information updated regularly) https://bdiaweb.ibge.gov.br/#/consulta/geologia





• Vegetation (Phyto ecological classification)¹³.

8.4. PROJECT QUALIFICATION

8.4.1. GENERAL DESCRIPTION AND OBJECTIVES

Concisely describe the project implementation site; the main activity and secondary activities conducted in the land area or organization; the project duration; the sources of GHG emission, removal or reduction; the objectives of the activities conducted by the project; as well as the expectations of potential results to be generated.

Any changes occurring in the project area, in titling or development, and in the described procedures should be immediately reported to LuxCS, justifying, and rectifying the necessary information. Failure to justify or rectify may result in the disqualification of the project in the certification process.

8.4.2. CHARACTERISTICS AND CONDITIONS PRIOR TO THE START OF THE PROJECT

Detail the existing conditions in the land area before the start of the project. If the baseline scenario is the same as the conditions existing before the start of the project, it is not necessary to repeat its description; the description should be expanded in the baseline scenario section.

8.4.3. TIMELINE

Supply the project timeline, detailing the start and end dates, according to the validated methodology:

¹³ https://bdiaweb.ibge.gov.br/#/consulta/vegetacao







- a. Duration of project execution.
- b. Duration of the application of each methodology used.
- c. Accreditation and certification period.
- d. Period for inspections, surveys, and monitoring.

8.5. APPLICABILITY OF METHODOLOGY

The methodology is indicated by the project developer in the feasibility analysis and must be validated by the third-party auditor before project development.

The project developer may also submit a new methodology for analysis, requesting its validation and inclusion in the LuxCS scope. This new methodology should be proposed according to the specific terms of reference, available at luxcs.org.

Furthermore, methodologies from other standards endorsed by ICROA can also be submitted for analysis.

8.5.1. ELIGIBILITY

Describe the criteria and eligibility conditions that the project meets in relation to the validated methodology.

The project holder or legal representative must prove that they have not registered and will not register the project (even partially) under other standards or carbon credit generation certification programs, as per section 8.2.1.g.







8.5.2. ADDITIONALITY

Demonstrate that the project removes GHGs, citing the ecosystem services provided, or reduces GHG emissions, citing the optimization of processes that occurred, according to the validated methodology.

8.5.3. PROJECT SCENARIOS

8.5.3.1. Baseline Scenario

Identify and justify the baseline scenario and the procedures for determining it, following the validated methodology and considering the following when applicable.

- a. GHG emission sources, reservoirs, and/or sinks.
- b. Types, activities, and technologies of existing and alternative programs or projects that provide an equivalent type and level of activity of products and/or services to the project.
- c. Availability of data, its reliability, and limitations.
- d. Other relevant information about current or future conditions, such as regulations or laws under which it is governed, assumptions or technical, economic, sociocultural, environmental, geographic, site-specific, and temporal projections.

Furthermore, the justification of the baseline scenario and additionality should consider the future behavior (GHG emission sources, reservoirs, and sinks) to adhere to the principle of conservatism.







8.5.3.2. Project Scenario and Externalities

Delimit and justify the project scenario and its externalities; and provide a description of the project activity, the means used to achieve GHG emission removals or reductions, and the procedures used for these quantifications, according to the validated methodology.

8.5.4. SOURCES OF GHG EMISSION, REMOVAL, AND REDUCTION

8.5.4.1. GHG Emission Sources

List the activities that are a source of emission and each type of GHG that the project considers, in both the baseline and project scenarios. Describe the criteria and procedures used to quantify these emissions, separating each emission source, and converting the amount of GHG into tons of CO2 equivalent (ton CO2 equivalent), according to the validated methodology.

8.5.4.2. Reservoirs and Sinks

List and quantify the reservoirs and sinks included in the project in both the baseline and project scenarios, as per the validated methodology.

8.5.4.3. Leakages and Losses

If applicable, identify and estimate project leakages, and describe the procedure used, addressing the tools, equations, and standard values included in the calculation. Leakage emission sources are generated only in the project scenario.

Present the intention to mitigate leakages generated on the property, enterprise, or organization.







8.5.5. METHODOLOGICAL DEVIATIONS

If the project requires a methodological deviation, fill in the specific form available at luxcs.org.

8.5.6. ACCREDITATION PERIOD

The accreditation period should be defined according to the validated methodology and can be renewed up to two times, for an equal period.

Furthermore, the baseline scenario and its analysis period should be presented, according to the validated methodology, and there should be at least one new analysis of the baseline scenario during the accreditation period.

8.5.7. MONITORING PLAN

The monitoring plan should address the procedures implemented to measure or estimate, record, compile, and analyze relevant data and information to quantify GHG emissions, removals, or reductions for the project scenario; it should also include a schedule for these activities.

The elements that the monitoring plan should include are described in each methodology, however, the following should be considered:

- a. List of parameters, data, and information to be measured or controlled, including units of measure.
- b. Data source.
- c. Monitoring methods (including estimation, modeling, measurement, calculation, and uncertainty approaches).
- d. Frequency of monitoring.
- e. Supervision of all those involved in the monitoring process.



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f. Controls that include internal verification of input, transformation, and output data, and procedures for corrective actions.

8.6. SOCIAL ASPECTS

Address the social benefits that the project's implementation will bring to local communities or vulnerable populations, such as infrastructure development, job creation, environmental education projects, among others. Describe the benefits and detail the social and socio-environmental programs to be implemented.

8.7. GUARANTEE FUND

Following international parameters, it is necessary for the certifier to ensure the liquidity of the issued credits, through an emergency fund called a guarantee fund. Its main function is to safeguard carbon credits in case of any risks that may affect the permanence, development, and effectiveness of the projects.

General guidelines vary according to each methodology, where the percentage of the issued credits that will be retained is defined. These are held by an independent financial institution during the project duration and while not fully retired.

8.8. LEGAL AND DOCUMENTARY ASPECTS

Include information regarding legal aspects and pertinent documents, as per specific notices for project calls, available at luxcs.org.







8.9.INFORMATION MANAGEMENT

By registering on the electronic platform and applying the Triple C Protocol standard, the user accepts all terms of use, publicity, and transparency defined by LuxCS, in accordance with the General Data Protection Law and any relevant legislation on the subject.

8.10. PROJECT REGISTRATION AND PUBLICITY

Upon the completion of each stage of the certification process, the relevant documentation will be fully available for consultation at luxcs.org.

The project must also be properly registered in the property's records as determined by the validated methodology, to ensure no double counting and transparency. The application model for registration is available at luxcs.org.

8.11. REFERENCES

List the references used in the development of the project, all of which should be available for consultation.

9. APPLIED LEGISLATION AND LITERATURE

9.1. TECHNICAL STANDARDS

TN: the technical standards in Brazil are determined by a non-profit association called Associação Brasileira de Normas Técnicas, often mentioned as ABNT in Portuguese, they are a founding member of the International Organization for Standardization. This is their website <u>https://abnt.org.br/</u> for reference.







Associação Brasileira de Normas Técnicas. (2015). Environmental management systems – Requirements with guidance for use (ABNT NBR ISO 14001:2015).

Associação Brasileira de Normas Técnicas. (2022). GHG Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (ABNT NBR ISO 14064-1:2022).

Associação Brasileira de Normas Técnicas. (2022). GHG. Part 2: Specification and guidance for projects on quantification, monitoring, and reporting of greenhouse gas emission reductions or removal enhancements (ABNT NBR ISO 14064-2:2022).

Associação Brasileira de Normas Técnicas. (2007). GHG. Part 3: Specification and guidance for the validation and verification of greenhouse gas assertions (ABNT NBR ISO 14064-3:2007).

Associação Brasileira de Normas Técnicas. (2015). Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation and other forms of recognition (ABNT NBR ISO 14065:2015).

Associação Brasileira de Normas Técnicas. (2017). Project auditing – Guidelines for development and execution (ABNT NBR 16277:2017).

Associação Brasileira de Normas Técnicas. (2016). Conformity assessment – Requirements for bodies providing audit and certification of management systems Part 1: Requirements (ABNT NBR ISO/IEC 17021-1:2016).

Associação Brasileira de Normas Técnicas. (2022). Conformity assessment - Requirements for bodies providing audit and certification of management







systems. Part 2: Competence requirements for auditing and certification of environmental management systems (ABNT NBR ISO/IEC 17021-2:2022).

Associação Brasileira de Normas Técnicas. (2021). Conformity assessment – Requirements for bodies providing audit and certification of management systems. Part 3: Competence requirements for auditing and certification of quality management systems (ABNT NBR ISO/IEC 17021-3:2021).

Associação Brasileira de Normas Técnicas. (2015). Conformity assessment – Requirements for bodies providing audit and certification of management systems. Part 5: Competence requirements for auditing and certification of asset management systems (ABNT ISO/IEC TS 17021-5:2015).

Associação Brasileira de Normas Técnicas. (2021). Conformity assessment – Requirements for bodies providing audit and certification of management systems. Part 9: Competence requirements for auditing and certification of anti-bribery management systems (ABNT ISO/IEC TS 17021-9:2021).

Associação Brasileira de Normas Técnicas. (2021). Conformity assessment – Requirements for bodies providing audit and certification of management systems. Part 11: Competence requirements for auditing and certification of facility management (FM) systems (ABNT ISO/IEC TS 17021-11:2021).

Associação Brasileira de Normas Técnicas. (2022). Conformity assessment – Requirements for bodies providing audit and certification of management systems. Part 13: Competence requirements for auditing and certification of compliance management systems (ABNT ISO/IEC TS 17021-13:2022).

Associação Brasileira de Normas Técnicas. (2017). General requirements for the competence of testing and calibration laboratories (ABNT NBR ISO/IEC 17025:2017).







Associação Brasileira de Normas Técnicas. (2018). Guidelines for auditing management systems (ABNT NBR ISO 19011:2018).

Associação Brasileira de Normas Técnicas. (2019). Guidelines for auditing management systems - Amendment 1 (ABNT NBR ISO 19011:2018/Er1:2019).

9.2. APPLIED LEGISLATION

TN: to make the Brazilian legislative documents easy to access, the original reference names of Brazilian Laws were kept under the translation after the word "original". The website for official updated federal legislation in Brazil is, as of 2023, <u>https://www4.planalto.gov.br/legislacao</u>. Using the name and number reference as provided in Portuguese, the search function will allow access to all legal information related and applicable within Brazil.

Inter-American Court of Human Rights. (2017). Advisory Opinion OC-23/17 on Environment and Human Rights: State Obligations in relation to the environment in the context of the protection and guarantee of the rights to life and to personal integrity. Retrieved from https://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf.

United Nations. (2022). 76th Session. Resolution No. 76/300 of July 28, 2022. The human right to a clean, healthy, and sustainable environment. Retrieved from https://documents-dds-ny.un.org/doc/UNDOC/GEN/N22/442/77/PDF/N22 44277.pdf.

Brazil. (1981). Federal Law No. 6,938 of August 31, 1981. National Environmental Policy Act.

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Original: Lei Federal nº 6.938, de 31 de Agosto de 1981. Dispõe sobre a Política Nacional do Meio Ambiente, seus fins e mecanismos de formulação e aplicação, e dá outras providências.

Brazil. (1988). Constitution of the Federative Republic of Brazil of 1988. Chapter VI - Environment.

Original: Constituição da República Federativa do Brasil de 1988. Capítulo VI - Do Meio Ambiente.

Brazil. (1994). Federal Law No. 8,929 of August 22, 1994. Establishes the Agricultural Product Note and other measures.

Original: Lei Federal nº 8.929, de 22 de Agosto de 1994. Institui a Cédula de Produto Rural, e dá outras providências.

Brazil. (1998). Federal Decree No. 2,652 of July 1, 1998. Promulgates the United Nations Framework Convention on Climate Change, signed in New York, on May 9, 1992.

Original: Decreto Federal nº 2.652, de 1º de julho de 1998. Promulga a Convenção-Quadro das Nações Unidas sobre Mudança do Clima, assinada em Nova York, em 9 de maio de 1992.

Brazil. (2009). Federal Law No. 12,187 of December 29, 2009. Establishes the National Policy on Climate Change - PNMC and provides other measures.

Original: Lei Federal nº 12.187, de 29 de dezembro de 2009. Institui a Política Nacional sobre Mudança do Clima - PNMC e dá outras providências.

Federal Law No. 12.651, of May 25, 2012. Provides for the protection of native vegetation; amends Laws No. 6.938, of August 31, 1981, 9.393, of









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December 19, 1996, and 11.428 of December 22, 2006; repeals Laws No. 4.771, of September 15, 1965, and 7.754, of April 14, 1989, and Provisional Measure No. 2.166-67, of August 24, 2001; and provides other measures.

Original: Lei Federal nº 12.651, de 25 de maio de 2012. Dispõe sobre a proteção da vegetação nativa; altera as Leis n.º 6.938, de 31 de agosto de 1981, 9.393, de 19 de dezembro de 1996, e 11.428, de 22 de dezembro de 2006; revoga as Leis n.º 4.771, de 15 de setembro de 1965, e 7.754, de 14 de abril de 1989, e a Medida Provisória nº 2.166-67, de 24 de agosto de 2001; e dá outras providências.

Federal Decree No. 9.073, of June 5, 2017. Promulgates the Paris Agreement under the United Nations Framework Convention on Climate Change, signed in Paris on December 12, 2015, and signed in New York on April 22, 2016

Original: Decreto Federal nº 9.073, de 5 de junho de 2017. Promulga o Acordo de Paris sob a Convenção-Quadro das Nações Unidas sobre Mudança do Clima, celebrado em Paris, em 12 de dezembro de 2015, e firmado em Nova Iorque, em 22 de abril de 2016.

Federal Law No. 14.119, of January 13, 2021. Establishes the National Policy for Payment for Environmental Services.

Original: Lei Federal nº 14.119, de 13 de janeiro de 2021. Institui a Política Nacional de Pagamento por Serviços Ambientais.

Federal Decree No. 10.828, of October 1, 2021. Regulates the issuance of the Rural Product Bill, related to activities for the conservation and recovery of native forests and their biomes, as provided for in item II of § 2 of art. 1 of Law No. 8.929, of August 22, 1994.







Original: Decreto Federal nº 10.828, de 1º de outubro de 2021. Regulamenta a emissão de Cédula de Produto Rural, relacionada às atividades de conservação e recuperação de florestas nativas e de seus biomas, de que trata o inciso II do § 2º do art. 1º da Lei nº 8.929, de 22 de agosto de 1994.

Federal Law No. 14.653, of August 23, 2023. Amends Laws No. 12.651, of May 25, 2012, and 14.119, of January 13, 2021, to regulate intervention and the implementation of facilities necessary for the recovery and protection of springs.

Original: Lei Federal nº 14.653, de 23 de agosto de 2023. Altera as Leis nºs 12.651, de 25 de maio de 2012, e 14.119, de 13 de janeiro de 2021, para disciplinar a intervenção e a implantação de instalações necessárias à recuperação e à proteção de nascentes.

