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# GL-MS-011\_ Compliance with Requirements National Carbon Markets ( Exclusive Use) Jurisdictional - Brazil

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Developed By : Flávio Alfaro

## **Regulatory basis :**

CCPs (ICVCM), ICROA Code of Best Practice, CORSIA (ICAO), ISO 14064-2, Law No. 15.042/2024 (SBCE), Decree No. 12.046/2024 and Decree 17/10/2025 (Forest Concessions), Resolution No. 19/2025 (CONAREDD+)

## **Methodological integrations:**

GL-M-001 (REDD core) · GL-MS-002 (additionality/risk) · GL-MS-004 ( jurisdictional leakage ) · GL-MS-007 (legal compliance) · GL-MS-012 (MRV / data / QA-QC) · GL-GR-010 (data catalog) · GL-MS-003 ( safeguards and co- benefits opt-in)

## **Normative function:**

Higher-level standard for jurisdictional programs and projects, responsible for defining the rules of adherence. regulatory , precedence over the others Greenline Carbonsat methodologies and the conditions for national (SBCE) and international (CORSIA / UN MDS) accreditation. GL-MS-011 does not alter the content of the other methodologies, but imposes, justifies, and regulates their applicability in jurisdictional contexts.

## **Co- benefits :**

Evaluated in accordance with the CCB (Climate, Community & Biodiversity Standards), under the governance of the Greenline Institute (GLI).

GREENLINE CARBONSAT

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## Historical Version

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## 1. Introduction and Objective Jurisdictional

**GL -MS-011 – Compliance with National Carbon Market Requirements (Exclusive Jurisdictional Use – Brazil)** is part of the Greenline methodological system . Carbonsat as a regulatory compliance standard intended exclusively for Brazilian jurisdictional programs and projects.

Its purpose is to ensure that all greenhouse gas (GHG) mitigation actions developed under the scope of **GL-M-001** fully comply with the country's legal, institutional and technical requirements, guaranteeing credibility, uniqueness and traceability within the scope of the Brazilian Emissions Trading System (SBCE), public forest concessions and jurisdictional REDD programs recognized by Resolution No. 19/2025 – CONAREDD+.

### 1.1 Context and purpose

Brazil has consolidated, through Law No. 15,042/2024, the legal framework for the operation of the regulated carbon market (SBCE), recognizing verified emission reductions and removals (VERCs) as valid economic instruments for meeting climate targets and international exchange of mitigation results.

Simultaneously, Decree No. 12,046/2024 – and its amendment published on October 17, 2025 – regulated Law No. 11,284/2006 (Management of Public Forests), authorizing the use of recognized methodologies for carbon credit certification in federal and state forest concessions.

In light of this new regulatory landscape, **GL-MS-011** establishes the technical and legal roadmap for national adherence, guiding the coordinated application of Greenline methodologies. Carbonsat within Brazilian public structures, in order to:

- a) Ensure regulatory compliance with current Brazilian legislation (SBCE, CONAREDD+, Forest Code);
- b) Ensure international compatibility with recognized mechanisms (CORSIA, Article 6 of the Paris Agreement, MDS/UN);
- c) To standardize MRV procedures, compliance, leakage, and safeguards at the jurisdictional level;
- d) Establish a single roadmap for integrating the Greenline technical and legal modules. Carbonsat, allowing its adoption by Brazilian subnational entities in an auditable and transparent manner.

## 1.2 Scope and limitations of use

- a) This methodology applies exclusively to Brazilian jurisdictional programs and projects for reducing emissions from deforestation and forest degradation (REDD) in areas of native forest under public or collective ownership.
- b) It encompasses state and municipal public entities, intermunicipal consortia, and collective territories recognized by a competent authority, holding a legal mandate for environmental, climate, and territorial management.
- c) This does not apply to private projects owned by individuals, businesses, or corporations that lack a formal jurisdictional framework.
- d) In cases where private projects are nested within recognized jurisdictional programs, the application of this methodology will be determined by the competent jurisdictional entity, in accordance with the Gates J established in Section V.
- e) **GL -MS-011** – Brazil – fully observes the federal distribution of environmental responsibilities foreseen in the Federal Constitution (articles 23, 24 and 225), in Law No. 6,938/1981 – National Environmental Policy (Brazilian Environmental Code), in Law No. 12,651/2012 – Forest Code and in Law No. 11,284/2006 – Public Forest Management.
- f) Judicial actions must respect the territorial and administrative boundaries between the Federal Government, States, Municipalities, and Collective Territories, avoiding geographical overlaps, conflicts of ownership, or duplication of registrations between federative entities.
- g) All jurisdictional initiatives must be preceded by an analysis of competence and domain, proving through documentation that the proposing entity has

environmental and territorial authority over the area covered by the program or project.

- h) The **GL-MS-011** – Brazil – is valid exclusively within Brazil and should not be used outside of Brazilian territory without formal authorization from Greenline. Carbonsat .

### 1.3 Interoperability institutional and territorial foundations

The institutional interoperability defined in this methodology is based on the principles of the National Environmental Policy (Law No. 6,938/1981) and on the decentralized and cooperative environmental management established by the Federal Constitution and the Forest Code (Law No. 12,651/2012).

This interoperability ensures that jurisdictional programs operate in an integrated and auditable manner, respecting the environmental competencies of each federative entity and the legally established territorial limits, so that:

- a) Each jurisdictional entity shall act within its area of territorial and administrative competence, observing the environmental management instruments provided for by law (State and Municipal Environmental Plans, Climate Mitigation and Adaptation Plans, and Sustainable Forest Management Plans).
- b) The data, inventories, and records used for monitoring and verifying emissions and removals must come from official and auditable sources, compatible with the National Environmental Information System (SINIMA), IBAMA, CONAREDD+, INPE, and other recognized public databases.
- c) The integration between the Greenline registry The interaction between Carbonsat and public information systems (SBCE, B3-ACX, CONAREDD+, MDS/ONU) should be carried out in an interoperable and transparent manner, respecting the limits of competence and sovereignty established in the Brazilian legal system.

- d) All interoperability must be structured using URIs , APIs, and cryptographic hashes (SHA-256) according to the GL-MS-012 standards (QA/QC and Data), ensuring traceability, integrity, and uniqueness of REDD jurisdictional credits.

#### Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
CONAREDD+ — National Commission for REDD+ CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation  
MDS — Sustainable Development Mechanism (UN) GLI — Greenline VVB Institute — Validation and Verification Body  
URI / Hash — Uniform Resource Cryptographic Integrity Identifier / Signature SINIMA — National Environmental Information System IBAMA — Brazilian Institute of Environment and Renewable Natural Resources INPE — National Institute for Space Research CF — Federal Constitution of 1988 PNMA — National Environmental Policy (Law No. 6,938/1981)  
CFlo — Forest Code (Law No. 12,651/2012)  
GFP — Public Forest Management Law (Law No. 11,284/2006)

## 2. Structure and Applicability Jurisdictional

GL -**MS-011** – Compliance with Requirements National Carbon Markets ( Exclusive Use) Jurisdictional – Brazil ) establishes the structure hierarchical and the applicability criteria required for programs REDD jurisdictions in territory national .

Its purpose is to guarantee uniformity methodological , safety legal and interoperability institutional among entities public Brazilians and the rules Greenline Carbonsat techniques , respecting the entire legal system legal framework and the Brazilian Environmental Code.

### 2.1 Nature and scope of the application

a) This methodology is binding within the Greenline System Carbonsat is for any Brazilian jurisdictional program that intends to generate, verify, or register REDD carbon credits in public databases or under legal mandate.

b) **GL-MS-011** acts as a framework standard, determining the conditions for the validity and recognition of complementary methodologies ( **GL-MS-002, 004, 007, 012, etc.** ) in jurisdictional contexts.

c) Its use is mandatory when the applicant is a federative entity (State, Municipality, Federal District or intermunicipal consortium) or when the territory is under a collective public management regime recognized by the public authorities.

d) It does not apply to private, cooperative, or corporate initiatives without express legal delegation for jurisdictional action.

(e) In all cases, the framework must comply with the provisions of Law No. 6,938/1981 (PNMA), Law No. 12,651/2012 (Forest Code), Law No. 15,042/2024 (SBCE) and Law No. 11,284/2006 (Management of Public Forests).

## 2.2 . Eligibility of entities and territories

a) The following are eligible:

- I. State, District, and Municipal Governments with recognized environmental authority;
- II. Intermunicipal or regional consortia duly constituted;
- III. Collective territories (traditional communities, indigenous or quilombola lands) with government authorization or mediation;
- IV. State or federal environmental agencies with delegation for public forest management.

b) The jurisdictional territory must include:

- I. Official and recognized geospatial delimitation in public registries (SICAR, CNFP, IBGE);
- II. Competent environmental authority and current territorial or forest management plan;
- III. Environmental monitoring system or adherence to an institutional platform (GREENLINE, CONAREDD+, SBCE).

c) Jurisdictional programs may be structured at the state, municipal, or regional level, provided that there is proven no overlap between administrative boundaries and respect for the environmental competencies of other federative entities.

### 2.3 . Recognition criteria and mandate public

- a) Recognition of a jurisdictional program within the Greenline framework Carbonsat depends on proof of public mandate and territorial representation.
- b) The proposing entity must submit:
  - I. Regulatory act or legal instrument that enables it to carry out GHG mitigation actions;
  - II. Jurisdictional plan for climate change or forests, with goals and monitoring instruments;
  - III. Formal designation of the environmental authority responsible for the program;
  - IV. Letter of intent or inter-federative cooperation agreement when more than one entity is involved.
- c) No jurisdictional program may override another program in force or registered at a higher level (state ↔ federal), safeguarding the principle of federal coordination and the uniqueness of issuances within the national territory.

### 2.4 Normative hierarchy and methodological interdependence

- a) **GL-MS-011 – Brazil is the highest-level** standard in the Greenline system for jurisdictional projects.
- b) The technical methodologies ( **001, 002, 004, 007, 012, etc.** ) remain valid within their scopes, but their application will depend on the guidelines of this standard.
- c) In case of conflict between technical specifications and national legal requirements, **GL-MS-011** shall prevail, and a justified *note of precedence must be issued* .

- d) All replacements or adjustments must be documented in a traceability table (Annex II) containing the replaced item, legal basis, and new applicable guideline.

## 2.5 Substitution procedures and justification of precedence

a) The replacement of any methodological item must be formalized through a Precedence Resolution (GL-RP ) issued by Greenline. Carbonsat , with attached technical and legal opinion.

b) Each Resolution must include:

I. Identification of the affected methodology and the specific item;

II. National legal or regulatory basis justifying the replacement;

III. New guideline or procedure to be adopted;

IV. Traceability record ( hash /URI) and version in public catalog (Annex V).

(c) The substitution only takes effect after joint validation by Greenline. Institute (GLI) and publication in the platform's official repository.

### Legend of Abbreviations and References

PNMA — National Environmental Policy (Law No. 6,938/1981)

CFlo — Forest Code (Law No. 12,651/2012)

GFP — Public Forest Management Law (Law No. 11,284/2006) SBCE — Brazilian

Emissions Trading System GLI — Greenline Institute GL-RP —

Greenline Precedence Resolution

### 3. Fundamentals Legal and Regulatory

The present section establishes the framework regulatory and normative reference for the application of GL -**MS-011** – Brazil , without loss of updates legal , regulatory or techniques what come the occur during your Validity . References cited they are illustrative and not exhaustive , and should always be interpreted in light of the legislation. Brazilian and international current applicable to carbon markets and management jurisdictional forestry .

#### 3.1 Adhesion principle dynamics

- a) **GL-MS-011** is permanently bound by Brazilian climate, forestry and environmental legislation, including — but not limited to — the laws and regulations that establish the Brazilian Emissions Trading System (SBCE), the Forest Code, the National Environmental Policy and the rules for the management of public forests.
- b) The identification, numbering, and dates of the current regulations will be maintained in the Greenline Regulatory Catalog (Annex V / **GL-GR-010** ), which constitutes the sole and official source for updating the methodology.
- c) Any new law, decree, resolution or ordinance that alters the legal regime of the SBCE, forest concessions, jurisdictional programs or international carbon standards will automatically become part of the normative reference set of **GL-MS-011** , without the need for republication.

#### 3.2 Structure federal and environmental framework

- a) The methodology recognizes the Brazilian Environmental Code, comprised of the PNMA (National Environmental Policy), the Forest Code, the Public Forest Management Law, and the 1988 Federal Constitution, as the mandatory legal and territorial foundation for all jurisdictional operations.

b) The powers shared between the Union, States and Municipalities follow the division established in articles 23, 24 and 225 of the Constitution, with each entity acting within its environmental and administrative jurisdiction.

c) The methodology recognizes SISNAMA as the official environmental governance structure and CONAREDD+ as the national coordinating body for jurisdictional REDD programs.

### 3.3 Integration international and technical principles

a) GL-MS-011 adopts the following international benchmarks as technical and integrity references:

I. Paris Agreement (Articles 6.2 and 6.4);

II. CORSIA (ICAO);

III. Core Carbon Principles (ICVCM);

IV. ICROA Code of Best Practice ;

V. ISO 14064-2 / 14065 / 17029;

VI. GHG Protocol – Project Accounting .

b) These instruments must be interpreted in harmony with the national legal framework, in accordance with the guidelines of Article 5.5 of **GL-MS-011** , which regulates international adherence and digital interoperability.

### 3.4 Validity regulations and automatic updates

a) The legal and regulatory references applicable to **GL-MS-011** are subject to **dynamic validity: their update is automatic and linked to the** Greenline Regulatory Catalog (Annex V / **GL-GR-010** ), which constitutes the Single Source . of Truth (SSOT) for audit and verification purposes.

b) The catalog update will be made by decision of the Greenline Regulatory Governance Committee (CGR-BR), based on a technical-legal opinion and public hash /URI registration.

- c) VVBs , public entities, and institutional users must consult the catalog before applying the methodology, and are jointly responsible for ensuring compliance with current regulations.
- d) The absence of explicit citation in this methodology does not exempt compliance with subsequent legal norms of the same nature or higher hierarchy.

#### Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
CONAREDD+ — National Commission for REDD+ SISNAMA — National Environmental System  
CGR-BR — Regulatory Governance Committee Greenline – Brazil  
GL-GR-010 — Greenline Global Catalog of Data and Standards  
ICVCM — Integrity Council for the Voluntary Carbon Market  
ICROA — International Carbon Reduction and Offset Alliance  
CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation  
ISO — International Organization for Standardization  
PNMA — National Environmental Policy  
CFlo — Forest Code  
GFP — Public Forest Management Law CF — Federal Constitution of 1988

## 4. Governance and Institutional Roles

Governance jurisdictional of **GL-MS-011** – Brazil ensures what all you REDD programs under the scope of Greenline Carbonsat operate within a structure Clear definition of roles , responsibilities, and controls , while respecting the sovereignty of the entities. federative and the integrity of standards international GHG mitigation measures .

### 4.1 Greenline Carbonsat Governance Structure

a) Greenline Carbonsat is the central regulatory body responsible for issuing, maintaining, and auditing applicable methodologies, including this GL-MS-011 – Brazil.

Greenline is responsible Carbonsat :

- I. Ensure technical and legal consistency between this standard and other Greenline methodologies ;
- II. Manage the Regulatory Catalog (GL-GR-010) and the official registry of jurisdictional credits;
- III. Issue Precedence Resolutions (GL-RP) when national standards require the replacement of methodological items;
- IV. Ensure that all updates are accompanied by digital traceability (URI / hash / version).

c) Greenline operates in cooperation with federal and state public agencies, observing the limits of competence defined by the National Environmental Policy and the Forest Code.

## 4.2 Competencies of the entities public bodies federal

a) Public entities are co-participants in jurisdictional governance and must observe the following roles:

- I. Federal Government: normative coordination and international recognition of jurisdictional credits (via the Ministry of the Environment, the Ministry of Social Development, and the Ministry of Foreign Affairs);
- II. States: implementation of regional REDD policies and integration with CONAREDD+;
- III. Municipalities: local execution of mitigation plans and land use monitoring;
- IV. Federal agencies (IBAMA, INPE, SFB): provision of official data, technical validation, and integration with SISNAMA.

b) Coordination between federal levels will be formalized through technical cooperation agreements or inter-federative agreements, the records of which will form part of Annex IV – Jurisdictional Flow of Gates J.0–J.III.

c) In case of divergence between local and national regulations, the regulation with the broadest environmental and climate scope shall prevail, observing the precautionary principle and the integrity of the SBCE.

#### 4.3 Role of VVBs and the Greenline Institute (GLI)

- a) Validation and Verification Vehicle Validation Bodies ( VVBs ) are responsible for the technical validation and regulatory verification of jurisdictional programs in accordance with the rules of GL-MS-005 ( VVB Accreditation ).
- b) It is the responsibility of the VVBs :
- I. Verify the legal and territorial compliance of the program;
  - II. Audit the methodological conformity with Gates J.0 – J.III;
  - III. Issue a validation opinion for accreditation with SBCE.
- c) The Greenline The Institute (GLI) is the technical and scientific body responsible for:
- I. Manage socio-environmental safeguards and co-benefits ( **GL-MS-003** );
  - II. Supervise QA/QC processes and digital interoperability ( **GL-MS-012** );
  - III. Maintain a technical-jurisdictional database and integrity indicators.
- d) The GLI operates independently and is auditable, and must publish annual performance and jurisdictional compliance reports.

#### 4.4 Rules of transparency , auditing and review

a) All jurisdictional governance under **GL-MS-011** – Brazil must guarantee full public transparency, ensured by:

- I. Publication of technical reports and validation opinions;
- II. Making data and metadata available in a public registry (URI / hash );
- III. Adoption of corporate governance and anti-corruption standards in accordance with **GL-MS-007** (AML / ABC / KYC / KYB).

b) The methodology will be subject to a five-year review, coordinated by Greenline. Carbonsat is audited by GLI, and the cycle may be brought forward in the following cases:

- I. Relevant legislative change;
- II. Revision of international standards (CCP / CORSIA / ISO 14064-2);
- III. Inclusion of new types of environmental jurisdiction.

c) Compliance audits will be conducted in two stages:

- I. Primary Audit, by VVB;
- II. Secondary Audit, by sampling, conducted by GLI or CGR-BR (Regulatory Governance Committee – Brazil).

d) All audit and review results will be consolidated in the Annual Jurisdictional Governance Report (RAGJ), published on the Greenline portal. Carbonsat is available in the SBCE repository.

#### Legend of Abbreviations and References

GLI — Greenline VVB Institute  
— Validation and Verification Body  
CGR-BR — Regulatory Governance Committee Greenline – Brazil  
RAGJ — Annual Jurisdictional Governance Report SISNAMA — National Environmental System  
SBCE — Brazilian Emissions Trading System  
IBAMA — Brazilian Institute of Environment and Renewable Natural Resources  
INPE — National Institute for Space Research  
SFB — Brazilian Forest Service

## 5. Adherence Criteria Regulatory

You criteria defined in this section they assure what you programs jurisdictional REDD operate in compliance with the regulations legal Brazilian , with the standards international integrity climate and with the Greenline Carbonsat methodologies . This section It constitutes the core of accreditation , authorization , and compliance. regulatory , binding each program jurisdictional to the Brazilian Emissions Trading System (SBCE) and the Greenline Carbonsat governance .

### 5.1 National Accreditation and Authorizations ( LoA /CA)

- a) Accreditation of jurisdictional programs within the Greenline framework. Carbonsat requires:
  - I. Letter of Authorization ( LoA ), issued by a competent public authority, attesting to legal mandate and territorial ownership;
  - II. Certificate of Adherence (CA), issued by Greenline Carbonsat after technical, legal and regulatory verification;
  - III. Formal registration in the Regulatory Catalog (Annex V), with URI and integrity hash .
- b) The accreditation process will follow the stages of qualification, audit, and publication, as per Gates J.0 – J.III (Section 6).
- c) The LoA and CA are mandatory requirements for:
  - I. Registration and interoperability with the SBCE (CRVE / CBE);
  - II. Integration with federal programs (CONAREDD+) and international mechanisms (CORSIA / Art. 6 / UN MDS);
  - III. Guarantee of traceability and uniqueness of jurisdictional credits.
- d) Standardized templates are listed in Annex III – Authorization and Corresponding Adjustment Templates.

## 5.2 Compliance with SBCE and Official Registries

- a) Every jurisdictional program must be registered and operationally integrated into the Brazilian Emissions Trading System (SBCE), following the procedures for authorization, monitoring, and issuance of CRVEs ( Certificates of Emissions Receipt) .
- b) The Greenline registry will be synchronized with SBCE via secure APIs and public metadata (URI/ hash ), ensuring transparency and uniqueness.
- c) The programs must demonstrate additionality, permanence, environmental integrity, and independent verification, in accordance with the Core Carbon Principles (ICVCM) and the SBCE guidelines.
- d) Double counting or multiple recording of credits is prohibited in any national or international system.

## 5.3 Requirements for Grants Public Forests

- a) In accordance with Decree No. 12,046/2024 and the amendment of October 17, 2025, jurisdictional programs in public forest concessions must:
  - I. Submit authorization from the concession management body (SFB, state or municipal body);
  - II. Demonstrate compliance with Law No. 11.284/2006 – Public Forest Management; III. Adopt a methodology recognized by Greenline or the MMA, until the issuance of a specific national standard.
- b) The generation of credits is only permitted when it is demonstrated that there is no interference with the public, economic, and socio-environmental function of the forest.
- c) Compliance with these conditions will be verified by VVB's Legal Compliance department and ratified by Greenline. Carbonsat before CA issuance.

## 5.4 Connecting to Programs Jurisdictional (CONAREDD+)

- a) Jurisdictional programs must be integrated into CONAREDD+, the national body for coordinating REDD policies, following its guidelines and safeguards.
- b) Formal integration includes:
  - I. Registration of the program in the official CONAREDD+ registry;
  - II. Recognition of applicable safeguards and social policies;
  - III. Validation of emissions and inventory accounting according to **GL-MC-004** – Calculation Methodology ( CO<sub>2</sub>eT ) and its Leakage Annex (class → gate ).
- c) Membership in CONAREDD+ is a prerequisite for the recognition of jurisdictional credits at the federal and international levels.
- d) **GL-MS-003** – Social and Environmental Co-responsibility is mandatory in jurisdictional programs, under the supervision of Greenline. The Institute (GLI) is aligned with the CCB ( Climate , Community & Biodiversity Standards) and the safeguards of Resolution No. 19/2025 – CONAREDD+.

## 5.5 Legal Compliance and Governance Anti-corruption (Jurisdictional Adjustments)

- a) All jurisdictional programs are subject to integrity, AML/CFT and due diligence policies. Due diligence (KYC/KYB) of **GL-MS-007** – Legal Compliance, with the following adaptations.

b) In the public context, compliance verification will be conducted by VVB Legal Compliance, under the supervision of Greenline. Carbonsat .

c) The following requirements apply:

I. Integrity controls must comply with public legislation, including:

- Law No. 14,133/2021 (Bidding and Contracts);
- Law No. 12,846/2013 (Anti-Corruption Law);
- Law No. 8,429/1992 (Administrative Impropriety);
- Guidelines from the CGU and TCU.

II. The jurisdictional entity must establish an environmental integrity and compliance unit, with a designated technical manager and annual publication of the Jurisdictional Compliance Report (RCJ).

III. The Legal Compliance Department will assess the existence and effectiveness of these mechanisms, issuing a binding opinion as a prerequisite for the issuance or renewal of the CA.

d) A Greenline Carbonsat may suspend or revoke accreditation in case of fraud or non-compliance with integrity policies.

## 5.6 Verification Greenline Jurisdictional

a) GL-MS-005 VVB accreditation process does not apply .

*The verification is carried out by Greenline. Carbonsat , through its Regulatory Governance Committee (CGR-BR), in cooperation with VVB Legal Compliance and the competent public entity.*

b) The jurisdictional auditors are appointed by Greenline. Carbonsat , observing independence, time rotation, and technical impartiality.

c) The judicial review process comprises:

- I. Documentary and legal compliance audit;
- II. Technical verification of data and MRV according to **GL-MC-004** ;
- III. Assessment of socio-environmental safeguards according to **GL-MS-003** ;
- IV. Issuance of the Jurisdictional Verification Report ( **RVJ** ).

d) The RVJ is a public document and a mandatory condition for the issuance, renewal, or suspension of the CA.

#### Legend of Abbreviations and References

LoA — Letter of Authorization  
CA — Certificate of Adherence CRVE / CBE — Verified Emission Reduction or Removal Credit / Brazilian Emission Credit SFB — Brazilian Forest Service CONAREDD+ — National Commission for REDD+ GLI — Greenline CGR-BR Institute — Regulatory Governance Committee – Brazil RCJ — Jurisdictional Compliance Report RVJ — Jurisdictional Verification Report VVB — Legal Compliance Validation and Verification Body specializing in Legal Integrity  
KYC / KYB — Know Your Customer / Know Your Business  
AML/ABC — Anti-Money Laundering / Anti-Bribery and Corruption

## 6. Application Guidelines Methodological Jurisdictional (Gates J.0 – J.III)

This section defines the roadmap, technical and regulatory required for application of the methodology **GL-MS-011** – Brazil in programs REDD jurisdictions, from the protocol initial until recognition official credits.

The process is divided in four Gates (J.0 to J.III), each with functions, checks and results defined.

### 6.1 Gate J.0 – Protocol and Authorization

#### Objective:

Verify the legal, territorial, and institutional legitimacy of the requesting public entity before applying the methodology.

### **Minimum requirements:**

- a) Letter of intent and legal documentation of the entity (CNPJ, articles of incorporation and proof of territorial jurisdiction).
- b) Designation of a responsible environmental and legal expert.
- c) Preliminary identification of the jurisdictional areas under influence (administrative and land use polygons).
- d) Declaration of no overlap with other private REDD programs.
- e) Protocol for submitting a complaint to CONAREDD+, in accordance with Resolution No. 19/2025.

### **Verification:**

- Conducted by VVB Legal Compliance, with documentary support from Greenline. Carbonsat .

Result: Status J.0-Enabled (with registration code and URI).

## **6.2 Gate JI – Technical and Cadastral Consolidation**

### **Objective:**

To consolidate the technical-territorial framework and the official database of the jurisdictional program.

### **Minimum requirements:**

- a) Full registration in the Regulatory Catalog (Annex V) and integration with SBCE via API.
- b) Presentation of georeferenced territorial boundaries (P polygons) and their respective land use and land cover classes.
- c) Definition of the reference emissions and removals inventory, according to GL-MC-004 – Calculation Methodology ( CO<sub>2e</sub>T ).
- d) Indication of official data sources (INPE, IBAMA, MMA, CAR, SIGEF, or equivalent ).

- e) Land and environmental history record with public hash .

**Verification:**

- Conducted by Greenline Carbonsat , with technical verification of data integrity and consistency.
- Result: JI-Consolidated Status, with approved calculation basis and digital trail (URI/ Hash ).

### 6.3 Gate J.II – Validation Regulatory and Socio-environmental

**Objective:**

To confirm the legal, regulatory, and socio-environmental adherence of the jurisdictional program, ensuring its full compliance.

**Minimum requirements:**

- a) VVB's Legal Compliance opinion confirming the integrity of registration, land ownership, and title records.
- b) Compliance with the Forest Code, the Public Forest Management Law, and related state policies.
- c) Application and validation of **GL-MS-003** – Social and Environmental Co-responsibility, supervised by Greenline. Institute (GLI).
- d) Formal registration of integration with CONAREDD+ and recognition of socio-environmental safeguards.

- e) Demonstration of methodological alignment with the Core Carbon Principles (ICVCM) and SBCE requirements.

**Verification:**

- Conducted by Greenline Carbonsat , with a technical opinion from CGR-BR and a socio-environmental verification report issued by GLI.

Result: Status J.II-Validated (legal, technical and socio-environmental).

## 6.4 Gate J.III – Certification and Registration Official

**Objective:**

Issue the Certificate of Adherence (CA) and register the jurisdictional program in the Greenline → SBCE system, with international interoperability.

**Minimum requirements:**

- a) Completion of stages J.0 to J.II with all opinions approved.
- b) Issuance of the Jurisdictional Verification Report (RVJ) and the Jurisdictional Compliance Report (RCJ).
- c) Digital signature of the public entity and Greenline Carbonsat .
- d) Registration of the CA and final URI in the Regulatory Catalog (Annex V) and synchronization with SBCE / CBE.
- e) Generation of public metadata ( hash , version, date, coverage, uncertainty, *leakage class* , responsible party).

## Verification:

- Conducted by Greenline Carbonsat with participation from CGR-BR.

Result: Status J.III-Certificate (eligible for the generation of jurisdictional CO<sub>2</sub>eT credits ).

## 6.5 Traceability and Auditing of Gates

- All Gates (J.0 → J.III) have full traceability through URI and hash registered in the Greenline Regulatory Catalog (Annex V).
- Each gate generates a unique control metadata, linked to the cycle audit.
- Sampling audits and gate reviews are conducted every five years or as decided by CGR-BR, ensuring continuous compliance.
- Reviews and audits are recorded in Jurisdictional Governance Reports (RGJ) published on the Greenline portal. Carbonsat .

## Legend of Abbreviations and References

CGR-BR — Regulatory Governance Committee – Brazil

CA — Certificate of Compliance

LoA — Letter of Authorization

SBCE — Brazilian Emissions Trading System CBE — Brazilian Emissions Credit CRVE

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— Verified Emissions Reduction or Removal Credit GLI — Greenline Institute  
GL-MC-004 — Calculation Methodology – Quantification of Conserved Carbon Stock ( CO<sub>2</sub>eT )  
GL-MS-003 — Socio-environmental Co-responsibility RVJ — Jurisdictional Verification Report  
RCJ — Jurisdictional Compliance Report

## 7. Regulatory Framework and Compliance Crosswalk

This section establishes the framework for alignment between the requirements legal / regulatory and the modules Greenline Carbonsat methodological principles , ensuring Traceability and documentary evidence for accreditation and auditing.

### 7.1 Mapping National Regulation ↔ Greenline Carbonsat Modules

- a) Law No. 15.042/2024 (SBCE) → GL-MS-011 (chapters 5 and 6), GL-MS-007 (compliance), GL-MC-004 (calculations/inventory), GL-MS-012 (data/MRV).
- b) Law No. 11,284/2006 (Management of Public Forests) and Decree No. 12,046/2024 (as amended on 10/17/2025) → GL-MS-011 (5.3), GL-MS-007 (due due diligence ), GL-MC-004 (inventory), GL-MS-012 (interoperability).
- c) Law No. 12,651/2012 (Forest Code) and Law No. 6,938/1981 (PNMA) → GL-MS-011 (1.2–1.3; 2.2–2.3), GL-MS-007 (ownership/mandate), GL-MC-004 (use/cover), GL-MS-003 (safeguards).
- d) CONAREDD+ (Res. 19/2025) → GL-MS-011 (5.4), GL-MS-003 (socioenvironmental/CCB), GL-MS-012 (advertising and metadata).
- e) Grant rules (SFB/state/municipal) → GL-MS-011 (5.3), GL-MS-007 (contractual integrity), GL-MC-004 (technical parameters).

## 7.2 Mapping ↔ CORSIA / Art. 6 / MDS

- a) Paris Agreement – Art. 6.2/6.4 (corresponding adjustment/transfer) → GL-MS-011 (5.1; 9.2–9.3), GL-MS-012 (corresponding metadata).
- b) CORSIA (ICAO) → GL-MS-011 (5.1; 9.3), GL-MS-012 (labels/vintage/URI), GL-MC-004 (technical basis).
- c) MDS/UN → GL-MS-011 (5.1; 9.4), GL-MS-012 (interoperability), GL-MC-004 (quantification).
- d) ICVCM – CCP / ICROA / ISO 14064-2/14065/17029 → GL-MS-011 (3; 6), GL-MS-012 (QA/QC), GL-MC-004 (quantification).

## 7.3 Substitution and Equivalence Table (by requirement)

- a) Prevailing legal criterion: when a national requirement demands adjustment, GL-MS-011 issues a Precedence Resolution (GL-RP) replacing/adjusting the applicable methodological item (without altering the base text of the other methodology).
- b) Technical equivalence: when an international standard allows for multiple means of verification, the equivalence will be documented in Crosswalk (Annex II), indicating minimum evidence, Greenline module , and official source.
- c) Traceability: all substitutions/equivalences will have a URI and hash in the Regulatory Catalog – Annex V.

## 7.4 Update Criteria Regulatory and Five-Year Audit

- a) Dynamic adherence: the present methodology refers to the Regulatory Catalog (Annex V / GL-GR-010) as the sole source of regulatory updates.
- b) Five-year audit: review every 5 years or triggered by a relevant legal change; public report from CGR-BR.
- c) Compliance: failure to align with the Catalog implies a Gate barrier (J.0 or JI) until regularization.

## Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
CONAREDD+ — National Commission for REDD+  
SFB — Brazilian Forest Service  
CGR-BR — Regulatory Governance Committee – Brazil  
GL-RP — Greenline  
Precedence Resolution  
SSOT — Single Source of Truth (Single Source of Truth)  
Crosswalk — ICVCM Regulatory Correspondence Matrix — Integrity Council for the Voluntary Carbon Market  
ICROA — International Carbon Reduction and Offset Alliance  
ISO — International Organization for Standardization  
CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation  
MDS — Sustainable Development Mechanism (UN)  
LoA — Letter of Authorization  
CA — Certificate of Adherence  
URI — Uniform Resource SHA-256 Identifier — Secure Hash 256-bit algorithm

## 8. MRV and Digital Interoperability

This section defines the standards technical , data and metadata , that They ensure the transparency , uniqueness , traceability , and integrity of information. published in the context of the programs Greenline Carbonsat 's REDD jurisdictions .

### 8.1 Data and Metadata Standards (GL-MS-012)

a) All jurisdictional programs must fully adopt the MRV standards defined in GL-MS-012 – Data Management and QA/QC, considering:

- I. Calculation and quantification methodologies according to GL-MC-004;
- II. Uncertainty indicators, FTC factor and spatial/temporal coverage;
- III. Official data sources (INPE, IBAMA, MMA, CAR, SIGEF, SFB or equivalents);
- IV. Technical managers, collection dates and reference versions;
- V. Unique identification of each cycle and its link to the corresponding URI and hash .

b) The minimum required metadata includes:

- I. Identification of jurisdiction (Federal, State or Municipal);
- II. Geospatial boundaries (P polygons) and land use and land cover classes;
- III. Carbon stock conserved ( CO<sub>2</sub>eT ) and *leakage* factors ( Leakage Annex

of GL-MC-004);

IV. Reference to socio-environmental safeguards (GL-MS-003);

V. Cross-reference to the LoA and the Certificate of Adherence (CA).

## 8.2 APIs, URIs, and Registry Hashes (SHA-256)

- a) Each jurisdictional program record will have a public URI and SHA-256 cryptographic hash , ensuring the integrity and authenticity of the published data.
- b) The integration between Greenline ↔ SBCE ↔ B3-ACX ↔ CORSIA ↔ MDS\*\* will be performed through authenticated APIs, with timestamping and log recording.
- c) Any alteration, revision, or republication of data must generate a new chained hash , maintaining the digital audit trail.
- d) The interoperability system should allow cross-consultation ( Crosswalk Digital) between Greenline methodologies and integrated external platforms.

## 8.3 Publication and Transparency of Results

- a) The official reports for each program (RCJ and RVJ) should be published on the Greenline portal. Carbonsat , accompanied by metadata, hashes , versions, and key indicators.
- b) The mandatory minimum indicators include: climate integrity, additionality, permanence, safeguards (status), *leakage class* , risk ↔ response, uniqueness, and international use.

- c) The data must be accessible through a public dashboard, compatible with SBCE, B3-ACX and CORSIA.
- d) Classified or personal information must fully comply with the General Data Protection Law (LGPD).

#### 8.4 Integration with SBCE ↔ B3-ACX ↔ CORSIA ↔ MDS

- a) SBCE – Synchronization of CRVE/CBE via secure API; the CA is the primary validation document.
- b) B3-ACX – Mirroring and tracking of assets when applicable, ensuring uniqueness via URI/ hash .
- c) CORSIA (ICAO) – Export of required metadata (program, jurisdiction, vintage, LoA , CA and corresponding setting).
- d) MDS (UN) – Publication of internationally recognized verifications and results, with traceability links to retired units.
- (e) Interoperability is auditable by GL-MS-012, and all records must contain a digitally validated international Greenline ↔ SBCE ↔ code.

#### Legend of Abbreviations and References

- GL-MS-012 — Data Management and QA/QC
- GL-MC-004 — Calculation Methodology – CO<sub>2</sub>eT
- GL-MS-003 — Socio-environmental Co-responsibility SBCE — Brazilian Emissions Trading System B3-ACX — Brazilian Exchange ↔ AirCarbon Exchange
- CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation
- MDS — Sustainable Development Mechanism (UN)
- LoA — Letter of Authorization
- CA — Certificate of Adherence URI — Uniform Resource SHA-256 Identifier —

Secure Hash Algorithm 256-bit

FTC — Transparency and Reliability Factor RCJ — Jurisdictional Compliance Report RVJ

— Jurisdictional Verification Report API — Application Programming Interface

LGPD — General Data Protection Law (Law No. 13.709/2018)

## 9. Uniqueness , Adjustments Correspondents and Integrity Climate

This section defines the rules for control , traceability , and recognition. international mitigation results generated put programs Greenline Carbonsat jurisdictional guarantees uniqueness of credits , no pair counting and integrity climate complete as per the Paris Agreement (Art. 6).

### 9.1 Control of Duplicate and Unique Credits

- a) The issuance, transfer, or double retirement of the same credit is prohibited on any national or international platform.
- b) Each judicial credit will be identified by:
  - I. Unique URI;
  - II. cycle-linked SHA-256 hash ;
  - III. registration synchronized with SBCE and the Regulatory Catalog (Annex V);
  - IV. Public declaration of uniqueness linked to the CA.
- c) **GL -MS-012 will perform automatic reconciliation between** Greenline records . Carbonsat ↔ SBCE ↔ B3-ACX ↔ international.
- d) Duplication detection blocks the advancement of Gate (J.II or J.III) until full regularization.

### 9.2 Adjustment Statement Correspondent ( LoA ↔ CA)

- a) Whenever there is an international transfer of mitigation results (ITMO – Internationally Transferable Mobilization). Transferred Mitigation (Outcomes ),

the entity must issue a Corresponding Adjustment Statement, integrating the Budget Law and the Annual Adjustment Statement.

- b) The statement will contain:
  - I. Accounting period and credit cycle;
  - II. quantity of CO<sub>2</sub>e transferred or used;
  - III. Identification of the country of destination and intended use (CORSlA or Art. 6);
  - IV. National legal reference (SBCE and competent authority);
  - V. URI and public verification hash .
- c) The official form for the Corresponding Adjustment Declaration can be found in Annex III.
- d) The absence or inconsistency of the declaration implies the nullity of the transfer for international purposes.

### 9.3 Rules of International Correspondence (Art. 6 & CORSlA)

- a) Correspondence will follow the rules of Articles 6.2 and 6.4 of the Paris Agreement and CORSlA (ICAO), prioritizing transparency, integrity, and no double counting.
- b) All international transfers must be reported to SBCE and registered in the Regulatory Catalog with the corresponding URI and hash .
- c) CGR-BR will issue an international compliance opinion (CI) confirming the LoA ↔ CA ↔ Corresponding Adjustment link.
- d) Mitigation units will be recognized as CO<sub>2</sub>eT-BR (Adjusted) when transferred with formal authorization and a valid declaration.
- e) The reconciliation metadata will be stored in a chained hash and audited by **GL-MS-012**.

### 9.4 Recognition of Mitigation Results (UN MDS)

- a) Mitigation outcomes may be recognized in the MDS (UN) as jurisdictional reductions or removals, provided that digital uniqueness (URI and hash ) and valid jurisdictional verification (RVJ) are maintained.
- b) Internationally recognized units should be marked as "Withdrawn/Used" in both registries ( Greenline ↔ SBCE) to ensure full transparency.
- c) A Greenline Carbonsat will publish a quarterly list of jurisdictional programs with recognized status in the MDS.

- d) The recognition records will be stored in the Regulatory Catalog (Annex V) with referenceable metadata.

#### Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
B3-ACX — Brazilian Stock Exchange ↔ AirCarbon Exchange  
CGR-BR — Regulatory Governance Committee – Brazil  
LoA — Letter of Authorization  
CA — Certificate of Adherence URI — Uniform Resource SHA-256 Identifier —  
Secure Hash Algorithm 256-bit  
ITMO — Internationally Transferred Mitigation Outcome  
CO<sub>2</sub>eT — Tons of Carbon Dioxide Equivalent Preserved  
CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation  
MDS — Sustainable Development Mechanism (UN) CI — International Compliance

## 10. Compliance , Audit and Review

This section only defines the routing. jurisdictional compliance , audit and review , referring fully you integrity procedures and controls for GL -**MS-007** and the Data requirements /QA-QC to **GL-MS-012**.

### 10.1 Verification Referral ( referring to 007 and 012 )

- a) The regulatory verification of legal and registration integrity will be conducted by VVB's Legal Compliance department, in accordance with **GL-MS-007** .
- b) The verification of data, metadata, hashes , and publication will exclusively follow **GL-MS-012** .
- c) **GL-MS-011** is limited to defining when each check occurs in the J.0 → J.III flow and who decides (CGR-BR), without repeating procedures.

### 10.2 Triggers , Gates, and Judicial Decision

- a) Mandatory Gates:
  - IJO — institutional accreditation;
  - II. JI — technical/registration consolidation;
  - III. J.II — regulatory and socio-environmental validation;
  - IV. J.III — certification and registration.

- b) Gate Blockage: Any non-conformity identified by 007 or 012 halts progress until correction and revalidation.
- c) GL-RP (Precedence Resolution): if a legal standard changes, the CGR-BR deliberates on the GL-RP, and Resolution 011 will then require the new rule without rewriting Resolution 007/012.

### 10.3 Audits and Transparency ( without repeating 007/012)

- a) Sample or extraordinary audits may be determined by CGR-BR, with the scope defined in **GL-MS-007** (integrity) and **GL-MS-012** (data/QA-QC).
- b) Results are published with URI and hash according to **GL-MS-012** .
- c) Requests from regulatory bodies (e.g., SBCE/competent authority) follow the procedure outlined in **GL-MS-007** .

### 10.4 Revision Five- Year Regulatory Update

- a) **GL -MS-011** will be reviewed every 5 years or upon relevant legal trigger.
- b) Specific changes will be formalized via GL-RP and reflected in the GL-GR-010 Catalog (SSOT), without re-editing the procedural sections already standardized in 007/012.
- c) Public consultation and publication of the version follow the governance procedures of CGR-BR.

### 10.5 Compliance Measures ( without rewriting the sanctioning matrix)

- a) **GL-MS-007** matrix (warning, suspension, withdrawal).
- b) The suspension/resumption of CA depends on the updated RVJ (verification completed) and data reconciliation according to **GL-MS-012** .

#### Legend of Abbreviations and References

VVB — Validation and Verification Body  
GL-MS-007 — Legal Compliance GL-MS-012 — Data Management and QA/QC GL-RP  
— Greenline Precedence Resolution

### Compliance Checklist Jurisdictional

This checklist must be completed by VVB's Legal Compliance department and validated. by CGR-BR, according to the stage of advancement of the program. jurisdictional in Gates J.0–J.III. Each item must contain evidence verifiable and remission methodological correspondent .

**Table 1 – Adherence Checklist Jurisdictional ( by Gate)**

Item	Criteria / Requirement	Methodological Reference	Type of Verification	Primary Responsible Party
J.0.1	Existence of a regulatory act (Law, Decree or Ordinance) that establishes the jurisdictional carbon program.	GL-MS-011 – 5.1 / Law no. 15,042/2024 (SBCE)	Official Document	Jurisdictional Entity
J.0.2	Proof of ownership, dominion, or legal concession over the territory or public forest involved.	GL-MS-007 – 4.2 / GL-MS-011 – 5.3	Legal / Registry	VVB Legal Compliance
J.0.3	Appointment of a technical team and publication of an	GL-MS-011 – 5.2 / 10.1	Documentary	Jurisdictional Entity

Item	Criteria / Requirement	Methodological Reference	Type of Verification	Primary Responsible Party
	administrative act within the scope of authority.			
J.I1	Inventory of aboveground biomass and conserved stock ( CO <sub>2</sub> eT ).	GL-MC-004 – 5.2 / 5.4	Technical / Satellite Data	Technical Coordinator of the Program
J.I2	Inclusion of data in the MRV system (metadata, hash , and URI).	GL-MS-012 – 8.1 / 8.2	Digital / QA/QC	Greenline Carbonsat
J.I3	Analysis of socio-environmental safeguards ( opt-in ) and local public consultation.	GL-MS-003 – 4.1 / CCB	Socio-environmental / Participatory	GLI
J.II.1	Validation of legal, land, and contractual compliance ( due diligence ).	GL-MS-007 – 5.1 / 6.2	Legal / Compliance	VVB Legal Compliance
J.II.2	Review of regulatory integrity and credit traceability.	GL-MS-011 – 9.1 / 9.2	Regulatory / Digital	CGR-BR
J.III.1	Issuance of the Certificate of Adherence (CA) and publication of the RVJ Report.	GL-MS-011 – 10.1 / 9.2	Formal / Documentary	Greenline Carbonsat
J.III.2	Final registration in SBCE and synchronization with international databases (CORSIA / MDS).	GL-MS-011 – 8.4 / 9.3	Digital / Regulatory	Greenline Carbonsat

### Usage Guidelines

- The checklist should be updated at each five-year review cycle or whenever a relevant regulatory change occurs (GL-RP).
- All fields must have archived and traceable evidence via URI / SHA-256 hash .

- JI-J.III checks can only be carried out after document and land validation (J.0).
- CGR-BR is the final instance for approval and validation of results.

#### Legend of Abbreviations and References

CGR-BR — Governance Committee Regulatory – Brazil GL  
- MS-007 — Legal Compliance  
GL-MC-004 — Calculation Methodology – CO<sub>2</sub>eT  
GL-MS-003 — Co-responsibility Socioenvironmental  
GL-MS-011 — Compliance with Requirements National ( Jurisdictional – Brazil )  
GL-MS-012 — Data  
Management and QA/QC GLI — Greenline Institute VVB — Validation and Verification  
Body CA — Certificate of Compliance  
RVJ — Verification Report Jurisdictional SBCE — Brazilian  
Emissions  
Trading System CORSIA — Carbon Offsetting and Reduction Scheme for International  
Aviation MDS — Development Mechanism Sustainable (ONU)  
URI — Uniform Resource Identifier SHA-256 — Secure Hash Algorithm 256-bit

## Annex II – Crosswalk Matrix SBCE / CORSIA / Greenline

The present headquarters establishes the correspondence practice (crosswalk) between requirements regulatory national and international and the modules Greenline Carbonsat methodologies , indicating evidence Minimum , applicable gate , and equivalence observations . When applicable . update normative , a equivalence it will be maintained via GL-RP and Catalog GL-GR-010 (SSOT), without reissue of this attachment .

**Table 2 – Crosswalk Compliance ( by requirement )**

Regulatory Requirement	Regime	Greenline Module Applicable	Minimum Evidence (URI / Hash / Document)	Gate	Observations / Equivalence Note
Registration and authorization for the jurisdictional program	SBCE	GL-MS-011 (5.1, 6), GL-MS-012	Registration URI, official act, dossier hash	J.0	If there is a change to the SBCE form, apply GL-RP.
Proof of mandate and territorial ownership	SBCE	GL-MS-007 ( due diligence ),	Legal opinion from VVB,	J.0	It is equivalent to "legal right" . to

Regulatory Requirement	Regime	Greenline Module Applicable	Minimum Evidence (URI / Hash / Document)	Gate	Observations / Equivalence Note
		GL-MS-011 (2.3)	certificates/documents, URI		implement ” (ICVCM).
Basic inventory and historical series	SBCE	GL-MC-004 ( CO <sub>2</sub> eT , Leakage )	Dataset . geo /. csv , method, hash	JI	Uncertainty and classes according to GL-MS-012.
Jurisdictional additionality	SBCE	GL-MC-004 (parameters), GL-MS-011 (5.2)	Technical memo + base spreadsheet, URI	JI	Aligns CCP-ICVCM ( Additionality ).
Permanence / risk	SBCE	GL-MC-004 + GL-MS-012	Risk plan, buffer, hash	JI	Publish factors and buffers in the metadata.
Independent verification	SBCE	GL-MS-011 (5.6), GL-MS-007	RVJ signed, VVB Legal opinion, URI	J.III	VVB Juridica covers legal integrity; GLI covers socio-environmental issues (GL-MS-003).
Socio-environmental safeguards	CONAR EDD+	GL-MS-003, GL-MS-011 (5.4)	CCB plan/report, consultation minutes, URI	J.II	Mandatory for jurisdictional purposes (status and indicators).
Integration with CONAREDD+	CONAR EDD+	GL-MS-011 (5.4), GL-MS-012	CONAREDD+ Protocol/ID, metadata, URI	J.II	It blocks progress without a valid registration.
Forest concessions (art. 55, Dec. 12.046/2024 as amended 10/17/2025)	National	GL-MS-011 (5.3), GL-MS-007	SFB/state authorization, legal opinion, URI	JI	If a specific standard arises, apply GL-RP.

Regulatory Requirement	Regime	Greenline Module Applicable	Minimum Evidence (URI / Hash / Document)	Gate	Observations / Equivalence Note
CRVE/CBE registration and uniqueness	SBCE	GL-MS-011 (9.1), GL-MS-012	ID SBCE, reconciliation, chained hash	J.III	Automatic reconciliation Greenline↔SBCE
Public metadata and QA/QC	SBCE	GL-MS-012	Public page, schema , hashes by version	JI–J.III	Minimum transparency (mandatory indicators).
CORSIA rules (eligibility/labeling)	CORSIA	GL-MS-011 (7.2; 9.3), GL-MS-012	Export JSON/XML CORSIA, URI/vintage	J.III	Fields: program, jurisdiction, vintage, LoA /CA.
Art. 6 – Corresponding adjustment	Art. 6	GL-MS-011 (9.2–9.3), GL-MS-012	Adjustment Declaration (Annex III model), URI/ hash	J.III	ITMO: Publish inbound/outbound reconciliation.
Recognition by MDS/UN	MDS	GL-MS-011 (9.4), GL-MS-012	MDS ID, verification confirmation, URI	J.III	Mark the status as "Withdrawn/Used " in both records.
Anti-corruption compliance / AML/CFT	National	GL-MS-007, GL-MS-011 (5.5)	RCJ annual, VVB Jurídica opinion, URI	J.II	See CGU/TCU and Law 12.846/2013.
Data Protection (LGPD)	National	GL-MS-012	Privacy policy, controls, URI	J.I	Applicable to all datasets and dashboards.
Publication by RVJ and CA	SBCE/ Greenline	GL-MS-011 (5.6; 10), GL-MS-012	RVJ signed, current CA, links, hashes	J.III	A requirement for external interoperability.

Regulatory Requirement	Regime	Greenline Module Applicable	Minimum Evidence (URI / Hash / Document)	Gate	Observations / Equivalence Note
Five-year review and update	Greenline	GL-MS-011 (7.4; 10.4), GL-GR-010	GL-RP issued, new hash Catalog	—	Rules change via the Catalog (SSOT), without re-edition.

### Crosswalk usage notes

- Minimum evidence: always publish URI + SHA-256 hash for each document/dataset ; do not attach PDFs without metadata.
- Gate: indicates when the requirement must be met to advance in the flow J.0→J.III.
- Equivalence: when the regime requirement changes, issue GL-RP and update Catalog GL-GR-010 (SSOT); the table remains valid by reference.
- Conflicts: the national legal criterion prevails; international equivalence is recorded in an observation with the corresponding evidence.

### Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
CONAREDD+ — National Commission for REDD+ SFB — Brazilian Forest Service GL-GR-010 — Greenline Global Catalog of Data and Standards  
GL-MC-004 — Calculation Methodology – CO<sub>2</sub>eT GL-MS-003 — Socio-environmental Co-responsibility GL-MS-007 — Legal Compliance GL-MS-012 — Data Management and QA/QC GL-MS-011 — Compliance with National Requirements (Jurisdictional – Brazil)  
GL-RP —  
Greenline  
Precedence Resolution SSOT — Single Source of Truth  
Crosswalk — ICVCM Regulatory Correspondence Matrix —  
Integrity Council for the Voluntary Carbon Market  
CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation  
MDS — Sustainable Development Mechanism (UN)  
LoA — Letter of Authorization  
CA — Certificate of Adherence URI — Uniform Resource SHA-256 Identifier —  
Secure Hash Algorithm 256-bit  
RVJ — Jurisdictional Verification Report RCJ — Jurisdictional Compliance Report ITMO  
— Internationally Transferred Mitigation Outcome

## Annex III – Model of LoA / CA and Adjustment Declarations Corresponding

You forms to follow standardize the issuance , signing and registration of instruments jurisdictional mandatory for the recognition and export of mitigation results , as per the Paris Agreement (Art. 6 ) and the SBCE.

### A. LoA Template – Letter of Authorization

LOA No. [ \_ \_\_\_\_\_ \_ ]

1. Issuing Jurisdictional Entity: [Municipality / State / Autonomous Entity]
2. Legal Basis: [Law , Decree or Ordinance authorizing the jurisdictional carbon program]
3. Object: Formal authorization for the development, registration and commercialization of carbon credits (jurisdictional REDD – CO<sub>2</sub>eT ) within the scope of GL-MS-011.

4. Jurisdictional Area: [hectares / polygon / geographic coordinates]
5. Period of Validity: [ \_\_\_ / \_\_\_ / \_\_\_ to \_\_\_ / \_\_\_ / \_\_\_ ]
6. Signatory Authority: [Position / Name / CPF / Digital Signature ]
7. Observations: [additional information – licensing, concession, etc.]

Declaration: The undersigned entity acknowledges the authenticity of this authorization, taking responsibility for the veracity of the information provided and for compliance with the rules of GL-MS-011 and SBCE.

Location / Date: \_\_\_\_\_  
Digital Signature (ICP-Brasil): \_\_\_\_\_  
Hash (SHA-256): \_\_\_\_\_  
Registration URI: \_\_\_\_\_

## B. CA Model – Certificate of Adherence

CA no. [ \_ \_\_\_\_\_ \_ ] – Greenline Carbonsat

1. Jurisdictional Program: [ program name / acronym / state]
2. Holder / Authorized Entity: [as per LoA [Current]
3. Methodological Basis: GL-MS-011 (Brazil), GL-MC-004 ( CO<sub>2</sub>eT ), GL-MS-007 (Legal Compliance), GL-MS-012 (QA/QC).
4. Scope: [Mitigation / Preservation / International Transfer ]
5. Completion Gate: J.III
6. Issue Date: \_\_\_ / \_\_\_ / \_\_\_
7. Validity: [5 years or until new jurisdictional verification]
8. Signatures: Greenline Carbonsat | CGR-BR | VVB Legal | GLI ( Socio-Environmental Opt-In )

Note: The validity of this certificate is conditional upon the integrity of the metadata and the hash published in the GL-GR-010 Catalog (SSOT).

Hash (SHA-256): \_\_\_\_\_

Publication URI: \_\_\_\_\_

### C. Model of Corresponding Adjustment Declaration (Art. 6 / CORSIA)

DECLARATION No. [ \_ \_\_\_\_\_ \_ ]

1. Reference to LoA and CA: LoA No. \_\_\_\_\_ / CA No. \_\_\_\_\_

2. Responsible Jurisdiction: [Name of the entity]

3. Destination Country / Receiving Entity: [ \_ \_ \_ ]

4. Quantity of CO<sub>2</sub>e Transferred: [ \_ \_\_\_\_\_ tCO<sub>2</sub> e ]

5. Accounting Period: [ \_ \_ \_ \_ - \_ \_ \_ \_ ] 6. Legal Basis: Paris Agreement (Art.

6.2/6.4), CORSIA (ICAO), SBCE (Law 15.042/2024). 7. Confirmation: I declare

that the above quantities were taken from the

Greenline and SBCE records , without double counting, maintaining data uniqueness and integrity.

Digital Signatures: \_\_\_\_\_

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

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Hash (SHA-256): \_\_\_\_\_

Registration and Publication URI: \_\_\_\_\_

### **General Guidelines**

- All forms must be completed digitally and signed with an ICP-Brasil certificate or equivalent international mechanism.
- A Greenline Carbonsat will maintain uniqueness control via URI + hash chaining.
- Changes or additions must be registered in Catalog GL-GR-010 (SSOT) and associated with the current version of the CA.

### **Legend of Abbreviations and References**

LoA — Letter of Authorization

CA — GLI Adherence Certificate — Greenline CGR-BR Institute

— Regulatory Governance Committee – BrazilVVB — Validation and Verification Body

SBCE — Brazilian Emissions Trading System CORSIA — Carbon Offsetting and Reduction Scheme for International Aviation

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MDS — Sustainable Development Mechanism (UN) SSOT — Single Source of Truth  
SHA-256 — Secure Hash 256-bit algorithm

### Annex IV – Flow Jurisdiction of Gates J.0 – J.III

The present attachment describes the flow operational jurisdictional applicable to the REDD programs under GL-MS-011, from the enabling phase onwards . institutional (Gate J.0) up to final certification and registration (Gate J.III ) .

The model standardizes stages , deliverables and responsibilities , ensuring Traceability and integrity of decisions under the supervision of CGR-BR.

**Table 3 – Flow Operation of Jurisdictional Gates**

Gate	Stage / Objective	Key Deliverables	Applicable Methodologies	Responsible Instance	Expected Result
J.0	Institutional authorization and legal mandate	• Regulatory act (law/decreet/ordinance) • Signed Budget	GL-MS-011 (5.1 / 5.3)	Jurisdictional entity / VVB Jurídica	Program authorized and

Gate	Stage / Objective	Key Deliverables	Applicable Methodologies	Responsible Instance	Expected Result
		Law • Land tenure verification	GL-MS-007 (4.2)		recognized by SBCE.
JI	Technical structuring and basic inventory	CO <sub>2</sub> eT Inventory (GL-MC-004) • Metadata (GL-MS-012) • Public consultation (GL-MS-003 opt-in )	GL-MC-004 GL-MS-012 GL-MS-003	Technical Coordination / GLI	Official data published with /URI hash .
J.II	Validation of regulatory and socio-environmental integrity	• Due Legal due diligence • CCB safeguards • VVB opinion • RCJ report	GL-MS-007 GL-MS-003 GL-MS-011 (5.4)	VVB Jurídica / CGR-BR	Validation and compliance report issued.
J.III	Certification, registration and interoperability	• CA issued • RVJ published • SBCE registration • Corresponding adjustment (Art. 6)	GL-MS-011 (9 / 10) GL-MS-012 GL-MS-007	Greenline Carbonsat / CGR-BR	Certified and registered program (SBCE ↔ CORSIA ↔ MDS)

### Sequential Textual Flow (Operational Summary)

Gate J.0 – Institutional Qualification → Publication of the local regulatory act ↔ issuance of the LOA ↔ land verification (Legal VVB).

**Result: Jurisdiction qualified to operate carbon programs under the SBCE.**

Gate JI – Technical Inventory and Initial MRV → Preparation of the CO<sub>2</sub>eT inventory (GL-MC-004) ↔ metadata upload (GL-MS-012) ↔ CCB query (GL-MS-003).

**Result: Technical database validated and published with hash /URI.**

Gate J.II – Regulatory Validation and Safeguards → Legal audit (GL-MS-007) ↔ Socio-environmental verification (GL-MS-003) ↔ Issuance of the RCJ.

**Result: legal, institutional and environmental compliance verified.**

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Gate J.III – Certification and Registration → CA Issuance ↔ RVJ Publication ↔ Integration with SBCE ↔ Corresponding Adjustment Declaration (Art. 6 / CORSIA).

Result: Complete and Interoperable Registration ( Greenline ↔ SBCE ↔ MDS).

### **Guidelines**

- Each Gate depends on the formal approval of the previous one and the absence of pending issues in GL-MS-007 and 012.
- Blockages or inconsistencies are reported via GL-RP and archived in the GL-GR-010 Catalog (SSOT).
- All records must have a URI and SHA-256 hash published on the Greenline portal .
- Data reconciliation with SBCE is automatic after Gate J.III.

### Legend of Abbreviations and References

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Greenline  
Precedence Resolution CGR-BR — Regulatory Governance Committee – BrazilGLI —  
Greenline Institute  
CA — Certificate of Adherence; RCJ — Jurisdictional Compliance Report; RVJ —  
Jurisdictional Verification Report

## Appendix V – References Legal and Regulatory Consolidated

This attachment consolidates the references legal , regulatory and technical what GL **-MS-011** – Compliance with Requirements is the basis for this standard. National Carbon Markets ( Exclusive Use) Jurisdictional – Brazil ).

The sources here listed they are controlled for the Catalog **GL-GR-010** (SSOT) and revised by CGR-BR every cycle five-year or when issued a GL-RP ( Precedence Resolution ) .

### Table 4 – References Legal and Regulatory Consolidated

Category	Instrument / Standard	Number / Year	Issuing Authority / Origin	Relevant Content / Application in GL-MS-011
Federal Legislation – Carbon Market	Brazilian Emissions Trading System Law	Law No. 15.042/2024	National Congress / MMA	It creates the Brazilian Emissions Trading System and defines federal responsibilities and registration criteria.
Federal Legislation – Carbon Market	SBCE Regulatory Decree	Decree No. 12,677/2025	Presidency of the Republic / MMA / ME	It details governance, accreditation, and interoperability between jurisdictional programs and the SBCE.
Forestry and Land Legislation	Public Forest Management Law (GFM)	Law No. 11.284/2006	National Congress / SFB	It defines the rules for forest concessions and sustainable management of public forests.
Forestry and Land Legislation	GFP Regulatory Decree (as amended 10/17/2025)	Decree No. 12,046/2024	Presidency of the Republic / SFB / MMA	Amends Article 55, authorizing carbon credits linked to public and private forest concessions.
Forestry and Land Legislation	Brazilian Forest Code	Law No. 12,651/2012	National Congress / MMA	Define Permanent Preservation Areas (APPs), Legal Reserve, land use, and reforestation obligations.
Forestry and Land Legislation	National Environmental Policy (PNMA)	Law No. 6,938/1981	National Congress / MMA	It establishes SISNAMA and the general framework for federal environmental management.
Complementary Legislation	Corporate Anti-Corruption Law	Law No. 12.846/2013	CGU / Presidency of the Republic	Establishes strict liability for acts against public administration; reference GL-MS-007.

Category	Instrument / Standard	Number / Year	Issuing Authority / Origin	Relevant Content / Application in GL-MS-011
Complementary Legislation	General Data Protection Law (LGPD)	Law No. 13.709/2018	National Congress / ANPD	Regulates the processing of personal data and mandates security and consent mechanisms (GL-MS-012).
REDD/Jurisdictional Policies and Regulations	CONAREDD+ Resolution	Resolution No. 19/2025	MMA / CONAREDD+	Defines national guidelines for jurisdictional REDD programs, integrating SBCE and the federal registry.
International Standards – Recognition and Transfer	Paris Agreement (Articles 6.2 and 6.4)	2015	UN / UNFCCC	It establishes the basis for international transfer of mitigation results ( ITMOs ) and corresponding adjustments.
International Standards – Recognition and Transfer	CORSIA – Carbon Offsetting and Reduction Scheme for International Aviation	2018 / Updates 2023	ICAO / ICAO	Defines eligibility and transfer rules for carbon credits in the aviation sector.
International Standards – Recognition and Transfer	MDS – Sustainable Development Mechanism (UN)	2023 (post-CDM)	UNFCCC / UN	ex-post jurisdictional projects and outcomes for GHG mitigation.
International Standards – Recognition and Transfer	CCPs – Core Carbon Principles	ICVCM (2023)	Integrity Council for the Voluntary Carbon Market	Greenline methodologies .
International Standards – Recognition and Transfer	ICROA Code of Best Practice	ICROA (2022)	International Carbon Reduction and Offset Alliance	Guidelines for best practices in the generation, trading and use of carbon credits.

Category	Instrument / Standard	Number / Year	Issuing Authority / Origin	Relevant Content / Application in GL-MS-011
International Standards – Recognition and Transfer	ISO Standards – Quantification and Verification of Greenhouse Gas Emissions	ISO 14064-2/14065/17029 (2020–2022)	International Organization for Standardization	Defines requirements for quantification, verification, and accreditation of validation/verification bodies ( VVBs ).
Technical and Internal Standards – Greenline Carbonsat	GL-RP	Greenline Precedence Resolution	Instrument for updating official methodological and regulatory guidelines.	

### Regulatory Update and Audit Procedures

- The GL-GR-010 Catalog (SSOT) is the single source of normative truth, where the above references are stored, versioned , and digitally signed ( SHA-256 hash ).
- Whenever there is a relevant legal or regulatory change, CGR-BR will issue a GL-RP (Precedence Resolution) automatically updating the affected methodologies.
- This appendix is auditable every five years and must be retained as a mandatory appendix in all public and registered versions of GL-MS-011.
- Regulatory audits must verify the validity and effectiveness of the aforementioned regulations, ensuring continued adherence to the Brazilian legal system and international integrity standards.

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## Legend of Abbreviations and References

SBCE — Brazilian Emissions Trading System  
GFP — Public Forest Management CONAREDD+ — National Commission for REDD+  
SFB — Brazilian Forest Service MMA — Ministry of Environment and Climate Change  
ICVCM — Integrity Council for the Voluntary Carbon Market  
ICROA — International Carbon Reduction and Offset Alliance  
ISO — International Organization for Standardization  
CORSA — Carbon Offsetting and Reduction Scheme for International Aviation MDS —  
Sustainable Development Mechanism (UN) GL-RP —  
Greenline  
Precedence Resolution GL-GR-010 — Global Catalogue of Data and Standards (SSOT)  
SSOT — Single Source of Truth  
SHA-256 — Secure Hash Algorithm 256-bit  
CGR-BR — Regulatory Governance Committee – Brazil AML/CFT — Anti-Money  
Laundering and Counter-Terrorism Financing VVB — Validation and Verification Body