

Greenline Carbonsat Methodology GL-M-001 (v2)



GREENLINE CARBONSAT

**Conservation REDD – Ex-Post Credits for
Conserved Stock (CO₂eT)**

Public Consultation – 45 days | October–November 2025

Brazilian standard for integrity, traceability, and independent governance,
based on a modular methodology (GL-MS/GL-MC/GL-GR).

www.greenlinewy.com

Who is Greenline Carbonsat?

Institutional Scope

National platform for the standardization and registration of carbon credits, featuring a complete modular architecture.

- Methodological program
+ public digital registry with interoperability
- Modular architecture: GL-M-001 (main)
+ GL-MS-002/003/007/011/012
+ GL-MC-004 + GL-GR-010

Global Compatibility

- CCP (ICVCM) – Core Carbon Principles
 - ICROA – International Offsetting
 - ISO 14064-2/-3 – Technical Standard
 - CORSIA – Civil Aviation
- Full transparency: MRV, verification, issuance, transfer, and retirement, all auditable.



Purpose of the Public Consultation

45-day period open for qualified contributions



Technical Adherence

Test the consistency of formulas, processes, and methodology with the specialized community.



Qualified Contributions

Receive feedback from VVBs, universities, corporate buyers, and regulators.



CCP Governance

Demonstrate openness, traceability, and documented responses to all contributions.

The outcome will consist of version v2.1 and the Technical Analysis Report (RAT), with full traceability (hash / URI), forming the dossier for international CCP / ICROA validation.

Project Scope and Boundary



Application

REDD conservation projects in preserved forests, focusing on live above-ground biomass. Applicable to any Brazilian biome with continuous and intact coverage.

Metric


CO₂eT (conserved stock) – annual ex-post credits, without retroactive reversal. Standardized geospatial delimitation (GeoJSON / Shapefile; GIS; GL-GR-010).

Exclusions

Does not cover reforestation, active regeneration, or productive management. Exclusive focus on the conservation of intact forests.

Regulatory Integration

Via GL-MS-011 (SBCE / Article 6 of the Paris Agreement; LoA / CA / vintage).





Technical Fundamentals

Pillars of Integrity

Environmental Integrity

CO₂eT = actual preserved stock, not projections. Annual MRV with auditable primary data.

+ Additionality

Demonstrated lack of effective protection and infeasibility of voluntary conservation.

↻ Permanence


No retroactive buffer; losses reduce the current cycle. Continuous monitoring.

⚖ Conservativeness

Transparency and Correction Factor (FTC) + QA/QC (GL-MS-012) ensure conservative estimates.

Leakage: Qualitative checklist (Appendix 3.4-A).

Safeguards: Do No Harm principle; co-benefits via GL-MS-003 (CCB opt-in).



Quantification and Calculation

Module GL-MC-004 – Reproducible Standardization



Stratification

Forest cover classification by type and density



CO₂e

Conversion to metric tons of CO₂ equivalent



Primary Data

Remote Sensing (NASA / ESA)
Publicly auditable sources
Indicators fR / fP (risk / permanence)



Biomass

Calculation of live aboveground biomass by stratum



QA/QC + FTC

Quality control and conservative correction

Five-year review of parameters with full traceability (hash / logs).
Baseline is for information only and does not count toward the credit volume.



MRV – Monitoring, Reporting, and Verification

Monitoring

100% remote, annual, with extraordinary triggers (fire, intrusion).

Publication

URI, version, hash, dates, coverage, uncertainty, responsible party.



Reporting

Stocks, variations, uncertainty, FTC, comparative loss %

Verification

Independent VVB, rotation, reproducible audit

Public APIs (CSV / JSON) ensure transparency and uniqueness. Public metadata available per verification cycle.

Legal and Land Tenure Eligibility

Without legal integrity, there is no credit.

Mandatory Documentation

- Updated property registration
- Assignment documents and debt clearance certificates
- SIGEF / INCRA georeferencing
- Exclusive right over the carbon

FPIC / CLPI

Free, Prior and Informed Consent when applicable to traditional communities.

Social Safeguards

Ombudsman mechanisms and protection of local community rights.

Revalidation

Annual, with automatic suspension in case of outdated documentation.

Governance and Digital Registry



Imparciality

VVBs on rotation (max. 5 cycles)
with guaranteed independence
and graduated sanctions for
non-conformities



Uniqueness

Unique token per credit: Project
Polygon-Vintage-Series-Hash –
no duplication possible



Transparency

Public APIs and social auditing
with interoperable real-time data.

- Credit generated after VVB verification
- Traceable transfer between holders
- Documented final use of the credit
- Administrative use when necessary

Access to Greenline Methodologies and Submission of Contributions.

Methodologies available for public consultation

- GL-M-001 – REDD Conservation Methodology: Main basis of the Greenline Carbonsat program
- GL-MS-002 – Additionality Assessment
- GL-MS-003 – Safeguards and Co-benefits
- GL-MC-004 – CO₂eT Calculation
- GL-MS-007 – Legal Compliance
- GL-MS-012 – QA/QC and FTC (MRV)

Consultation Governance

- Greenline Carbonsat Governance Committee
- Independent Observer (accredited VVB)
- Greenline Institute (GLI) – socio-environmental oversight

How to access

Portal: www.greenlinebr.com

E-mail: metodologia@greenlinewy.com

Technical Contribution Form: available on the website (chapter, item, proposal, justification).



The collaborative development of robust and transparent methodologies is what ensures the integrity and credibility of Brazilian carbon credits.

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