

CeCicle Environmental Reductions — Consolidated Methodological Standard

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1. Purpose and Scope

1.1 Purpose

The CeCicle Environmental Reductions Methodological Standard (“CER Methodological Standard” or “Standard”) establishes the methodological rules and requirements for the identification, assessment, quantification, monitoring, verification, and certification of environmental reductions and climate-related impacts generated by eligible projects.

The purpose of the Standard is to establish a consistent, evidence-based, and traceable framework through which environmental outcomes may be assessed and, when the applicable requirements are met, formally certified by CeCicle.

The Standard is intended to ensure that a certified environmental claim is:

- supported by identifiable evidence;
- based on defined methodological boundaries;
- derived from documented and reproducible calculations, where quantification is applicable;
- subject to the appropriate treatment of uncertainties and risks;
- monitored in accordance with the applicable requirements;
- subject to independent assessment through the applicable verification process; and
- traceable to the project documentation and certification registry.

Accordingly, the Standard establishes the methodological basis used by CeCicle to assess whether an environmental outcome may be recognized and certified within a defined project scope.

1.2 Scope

This Standard applies to environmental projects that meet the eligibility requirements established by the applicable CeCicle methodology and certification system.

Depending on the project category, the Standard may be applied to environmental outcomes related to, among other applicable parameters:

- the conservation of environmental assets;

- the prevention of environmental degradation or conversion;
- the maintenance or improvement of ecological conditions;
- carbon-related environmental reductions;
- reductions associated with land-use change or environmental management; and
- other environmental outcomes expressly recognized by the applicable CeCicle methodology.

The specific applicability conditions, eligibility criteria, calculation parameters, factors, equations, monitoring requirements, and risk-treatment mechanisms shall be determined in accordance with the applicable methodology and its controlled version.

1.3 Methodological Scope

The Standard establishes general methodological requirements applicable to eligible projects.

Project-specific information shall not be incorporated into the general methodological rules. Instead, each project shall document the application of the Standard's requirements through the applicable project-specific documentation, which may include:

- Project Design Document;
- baseline assessment;
- additionality assessment;
- monitoring documentation;
- calculation records;
- evidence records;
- verification documentation; and
- certification records.

The methodology establishes the rules. Project documentation demonstrates their application. The verification process assesses compliance with those rules. The certification decision recognizes the verified outcome within the applicable scope.

1.4 Environmental Claims Covered by the Standard

A claim shall be recognized as a certified environmental reduction only when the applicable methodological requirements have been met.

The existence of an environmental activity, environmental condition, or environmental benefit, by itself, does not constitute a certified environmental reduction.

Certification requires a documented relationship between:

Environmental Condition or Action



Evidence



Assessment



Quantification, where applicable



Verification



Certification



Traceable Certification Record

The certified outcome shall therefore be limited to the environmental outcome demonstrated within the applicable methodological boundaries and verification scope.

1.5 Certification Limitations

Certification under this Standard shall not be interpreted as a general certification of the project's environmental, social, financial, or operational performance.

Unless expressly included in the applicable methodology and verification scope, certification does not constitute a statement that:

- all environmental impacts associated with the project have been assessed;
- all environmental benefits generated by the project have been quantified;
- the project is free from environmental, legal, operational, or financial risks;
- all project activities are independently certified;
- any co-benefit has been independently certified; or
- the certified outcome may be used outside the defined certification scope.

Certification shall correspond exclusively to the claims, parameters, period, geographic boundaries, methodology, and evidence assessed in the applicable certification process.

1.6 Relationship to Project-Specific Methodologies

This Standard establishes the overarching methodological framework.

Where a project category is subject to a CeCicle project-specific methodology, the project shall comply with both:

the requirements of this Standard; and

the requirements of the applicable project-specific methodology.

Where a project-specific methodology establishes a more detailed rule for a particular parameter, that specific rule shall prevail for that parameter within its defined scope.

All project documentation shall identify the methodology applied and its corresponding version.

1.7 Methodology Version

All assessments, calculations, monitoring activities, and certification decisions shall be associated with a defined methodological version.

Changes to eligibility requirements, definitions, equations, coefficients, conversion factors, monitoring requirements, risk treatment, or verification requirements shall be subject to the governance and version-control procedures established by this Standard.

The methodological version applicable to the project shall be identified in the project documentation and certification record.

1.8 Objectives

The objectives of the CER Methodological Standard are to:

- establish consistent methodological requirements for eligible environmental projects;
- define the conditions under which environmental outcomes may be assessed;
- establish requirements for project eligibility and methodological boundaries;
- establish requirements for baseline and additionality assessments, where applicable;
- provide a controlled framework for environmental quantification;
- establish requirements for addressing leakage, permanence, reversal risk, and uncertainty;
- establish monitoring, reporting, and verification requirements;
- preserve the evidentiary basis of environmental claims;
- provide traceability among evidence, calculations, verification, and certification;
- establish controlled certification procedures and recordkeeping; and

- provide a consistent framework for the governance and development of the CeCicle methodology.

1.9 Principle of Methodological Limitation

CeCicle shall not certify an environmental outcome beyond the scope supported by the applicable methodology, evidence, and verification process.

Where evidence is insufficient to support a particular claim, that claim shall be excluded, limited, adjusted, or otherwise treated in accordance with the applicable methodological and certification rules.

The absence of sufficient evidence shall not be interpreted as evidence that an environmental reduction exists.

1.10 Interpretation

This Standard shall be interpreted together with the applicable CeCicle methodology, certification protocol, project documentation, and controlled technical references.

Where a technical parameter, equation, coefficient, limit, or other methodological requirement is expressly reserved for a specific CER methodology or a controlled technical document, that requirement shall be applied in accordance with the version formally approved for the corresponding project.

No project-specific assumption, factor, or calculation shall modify the general requirements of this Standard, unless such modification is expressly permitted by the applicable methodology.

1.11 Mandatory Records

To demonstrate compliance with this chapter, the project record shall identify, as applicable:

- project identification;
- applicable project category;
- applicable methodology;
- methodology version;
- certification scope;
- geographic boundary;
- temporal boundary;
- environmental outcome that is the subject of the claim;
- applicable project documentation;
- applicable verification documentation; and

- certification record and related public records.

These records shall form part of the project's controlled evidence and certification record.

2. Core Methodological Principles

2.1 Fundamental Principle

An environmental claim shall be recognized as a certified environmental outcome only when supported by evidence that is identifiable, attributable, verifiable, and traceable within the applicable methodological boundary.

This principle governs CeCicle's entire certification system. It establishes that environmental certification is not based solely on the existence of an activity, intervention, condition, or declared environmental benefit. A certified outcome must be demonstrated through a structured evidentiary and methodological process capable of connecting the underlying environmental condition or action to the quantified and verified outcome.

2.2 CeCicle Evidentiary Chain

CeCicle's methodological framework establishes the following chain:

Environmental Action or Condition



Evidence



Validation



Quantification



Verification



Certification



Digital Traceability

Each element in this chain performs a distinct methodological function. No element shall be presumed to replace another.

2.2.1 Environmental Action or Condition

The environmental action or condition represents the underlying circumstance from which an environmental outcome may potentially arise.

Depending on the applicable project methodology, this may include:

- conservation;
- avoided environmental conversion;
- environmental restoration;
- changes in land management;
- maintenance of environmental conditions;
- emissions reductions;
- maintenance or improvement of environmental stocks;
- protection of environmental assets; or
- another eligible environmental activity or condition.

The existence of an environmental action or condition establishes the subject of the assessment. It does not, by itself, establish the quantity or certification of an environmental reduction.

2.2.2 Evidence

Evidence consists of information capable of supporting the existence, characteristics, magnitude, timing, or other relevant attributes of the environmental action or condition.

Evidence may include, as applicable under the methodology:

- geospatial information;
- satellite imagery;
- field observations;
- technical reports;
- official databases;
- legal and documentary records;
- historical records;
- monitoring data;
- photographs;
- measurements;
- analytical results;
- project records; and

- other approved sources.

Evidence shall be sufficiently identifiable to allow its origin and relevance to be determined.

2.2.3 Validation

Validation is the methodological assessment of whether the available information and evidence are suitable for application within the applicable methodological framework.

Validation may address:

- source reliability;
- relevance;
- completeness;
- consistency;
- temporal applicability;
- geographic applicability;
- methodological applicability;
- data integrity; and
- other requirements established by the applicable methodology.

Validation does not constitute certification. Its purpose is to determine whether the evidence may appropriately be used in the subsequent methodological assessment.

2.2.4 Quantification

Quantification converts validated project information into a measurable environmental outcome in accordance with the applicable methodology.

Where the environmental outcome is expressed quantitatively, the calculation shall use:

- verified project-specific inputs;
- approved equations;
- applicable conversion factors;
- defined assumptions;
- applicable deductions;
- risk adjustments; and
- other parameters established by the applicable methodology.

The calculation shall be documented sufficiently to allow a technically qualified reviewer to reproduce the result from the underlying inputs and methodological parameters.

2.2.5 Verification

Verification is the independent assessment of whether the project documentation, evidence, calculations, monitoring results, and claimed outcome comply with the applicable methodological requirements.

Verification may assess:

- eligibility;
- project boundary;
- baseline;
- additionality;
- data;
- calculations;
- monitoring;
- leakage;
- permanence;
- reversal risk;
- uncertainty;
- risk treatment; and
- other applicable requirements.

Verification determines compliance. It does not create the environmental outcome and does not replace the underlying evidence.

2.2.6 Certification

Certification is CeCicle's formal recognition, following the applicable verification process, that a defined environmental claim has met the applicable methodological and certification requirements.

Certification shall identify the scope within which the claim was assessed. A certification decision shall therefore be understood as a conclusion concerning a defined environmental claim, not as an unrestricted representation regarding the project as a whole.

2.2.7 Digital Traceability

Digital traceability establishes the connection between the certified outcome and the records supporting its certification.

The digital traceability layer may include:

- evidence identifiers;
- document identifiers;
- hashes;
- timestamps;
- certification identifiers;
- methodology versions;
- monitoring periods;

- registry records; and
- other approved digital records.

Digital traceability strengthens the integrity and accessibility of the certification record. It does not replace environmental analysis, methodological assessment, verification, or professional judgment.

2.3 Principle of Attribution

A certified environmental outcome shall be attributable to the project and to the intervention, condition, or circumstance assessed under the applicable methodology.

Attribution requires the project documentation to establish a reasonable, evidence-supported relationship among:

Project → Environmental Intervention or Condition → Observed Environmental Outcome
→ Quantified Outcome

The stronger the methodological dependence among these elements, the stronger the evidentiary basis of the claim.

Where the relationship cannot be sufficiently demonstrated, the corresponding outcome shall not be certified beyond the level supported by the evidence.

2.4 Principle of Identifiability

Every material element supporting a certification claim shall be identifiable.

Identifiability requires that the relevant evidence, data, calculation, decision, or record can be distinguished from unrelated information.

Material records shall, where applicable, contain:

- an identifier;
- source;
- date;
- geographic reference;
- applicable project;
- applicable methodology;
- methodology version; and
- relationship to the certified claim.

The purpose of identifiability is to ensure that the evidentiary basis for a certification can be reconstructed.

2.5 Principle of Verifiability

A material environmental claim shall be capable of independent assessment.

Verifiability requires that the information supporting the claim be documented sufficiently to allow a technically qualified reviewer to determine whether the applicable methodological requirements have been met.

A claim shall not be considered verifiable merely because information has been submitted. The information shall be sufficiently complete, consistent, and relevant to support the asserted conclusion.

2.6 Principle of Traceability

Traceability requires that material inputs, assumptions, calculations, decisions, and certification outcomes be connectable through a documented chain of records.

CeCicle's traceability structure shall, where applicable, allow the following relationship to be established:

Claim → Evidence ID → Source → Validation → Input → Calculation → Outcome →
Verification → Certification → Certification Record

Traceability shall be maintained throughout the applicable certification life cycle.

2.7 Principle of Reproducibility

A quantified environmental outcome shall be reproducible from the documented inputs and methodological parameters.

Reproducibility requires the project record to contain sufficient information regarding:

- input data;
- units;
- sources;
- applicable factors;
- equations;
- assumptions;
- deductions;
- adjustments;
- methodology version; and
- calculation results.

An outcome that cannot reasonably be reconstructed from the documented methodological record shall not be treated as adequately reproducible.

2.8 Principle of Methodological Consistency

Projects subject to the same applicable methodological requirements shall be assessed consistently.

Methodological consistency requires equivalent circumstances to be assessed using the same:

- definitions;
- eligibility criteria;
- calculation rules;
- conversion factors;
- monitoring requirements;
- risk treatment;
- verification requirements; and
- decision rules,
- unless a documented methodological provision expressly permits differentiated treatment.

Project-specific circumstances may affect the application of a rule where such differentiation is supported by the applicable methodology. Any such differentiation shall be documented and justified.

2.9 Principle of Transparency

The methodology shall require disclosure of material assumptions, limitations, uncertainties, exclusions, and methodological decisions relevant to the certified outcome.

Transparency requires a certification record to provide sufficient information to understand:

- what was assessed;
- what was not assessed;
- which methodology was applied;
- which methodology version was used;
- which evidence supported the assessment;
- how the outcome was quantified;
- which deductions or adjustments were applied;
- which risks were identified; and

- what scope was actually certified.

Transparency does not require disclosure of confidential or commercially sensitive information where such disclosure is not necessary for methodological assessment or verification.

2.10 Principle of Conservatism

Where material uncertainty exists and the applicable methodology permits alternative approaches, CeCicle shall apply the approach that avoids systematic overestimation of the environmental benefit.

Conservatism may be applied through:

- conservative assumptions;
- approved uncertainty treatment;
- risk deductions;
- buffer mechanisms;
- exclusion of unsupported data;
- use of lower-bound estimates where required; or
- other mechanisms established by the applicable methodology.

Conservatism shall be applied under defined methodological rules and shall not be used as an arbitrary adjustment.

2.11 Principle of Scope Limitation

A certification shall remain limited to the environmental outcome and methodological scope actually assessed.

Accordingly, certification shall identify, where applicable:

- project;
- geographic boundary;
- temporal period;
- environmental outcome;
- methodology;
- methodology version;
- quantified amount;
- verification scope; and

- certification date.

An environmental claim outside the defined scope shall not be represented as certified by CeCicle.

2.12 Principle of Evidentiary Precedence

Where multiple information sources address the same material parameter, the applicable methodology shall determine the hierarchy or preference among the available sources.

Evidence reliability shall be assessed based on factors including, where applicable:

- authority of the source;
- methodological relevance;
- temporal relevance;
- geographic relevance;
- completeness;
- consistency;
- measurement quality; and
- independent corroboration.

Where material conflicting evidence exists, the conflict shall be documented and resolved in accordance with the applicable methodological requirements.

Unsupported selection of favorable evidence shall not be permitted where material contradictory evidence is available.

2.13 Principle of Controlled Assumptions

Assumptions used in the project assessment or quantification shall be explicitly identified.

Each material assumption shall, where applicable, state:

- its purpose;
- its source;
- its methodological basis;
- its applicability;
- its limitations; and
- its effect on the outcome.

Project-specific assumptions shall not be treated as methodological standards unless expressly authorized by the applicable methodology.

2.14 Principle of Separation of Functions

The CeCicle framework distinguishes among:	Function
Definition	Methodology
The rules under which an environmental outcome is assessed.	Project Documentation
The factual and technical evidence demonstrating how the rules apply to a specific project.	Verification
The independent assessment of compliance with the applicable rules.	Certification
Formal recognition of the verified claim within the defined scope.	Digital Traceability

Technological preservation and linkage of records supporting certification.

These functions shall remain conceptually distinct even when related parties perform operational responsibilities.

2.15 Principle of Non-Substitution

No individual component of the CeCicle framework shall be treated as a substitute for another required component.

In particular:

- evidence does not replace quantification;
- quantification does not replace verification;
- verification does not replace evidence;
- digital records do not replace scientific or technical assessment;
- certification does not replace monitoring; and
- environmental activity does not automatically establish additionality or a certified reduction.

Each requirement shall be met in accordance with its applicable methodological function.

2.16 CeCicle Certification Logic

CeCicle's methodological framework may be summarized as follows:	Step
Description	1 — Identify
Determine which environmental action,	2 — Establish

condition, or outcome is being assessed.	
Demonstrate the relevant facts through appropriate evidence.	3 — Validate
Determine whether the evidence is suitable for methodological application.	4 — Quantify
Calculate the environmental outcome using the applicable methodology.	5 — Adjust
Apply applicable deductions, risk treatments, uncertainty treatments, leakage adjustments, and buffer mechanisms.	6 — Verify
Independently assess compliance with applicable requirements.	7 — Certify
Issue the certification decision within the verified scope.	8 — Trace

Preserve the relationship among the claim, evidence, calculation, verification, and certification record.

2.17 CeCicle Core Rule

The principles set out in this Chapter apply throughout the CER Methodological Standard.

Accordingly:

No environmental outcome shall be certified merely because an environmental activity or condition exists. The certified outcome shall be the product of a documented methodological process connecting evidence, assessment, quantification, verification, and certification within a defined scope.

This rule constitutes the fundamental methodological principle of the CeCicle Environmental Reductions framework.

3. Methodological Framework

CeCicle Environmental Reductions — CER V2 establishes the methodological framework, principles, requirements, and procedures applicable to the identification, eligibility, quantification, monitoring, review, and certification of environmental benefits arising from demonstrated projects, activities, actions, or environmental conditions.

CER V2 constitutes an integrated, multi-criteria methodological framework developed by CeCicle through the integration, harmonization, and technical adaptation of different methodologies, standards, norms, scientific references, and national and international regulatory frameworks, according to the nature and purpose of the certification.

The methodology has been structured to allow application to different project categories while maintaining common requirements for environmental integrity, transparency, traceability, methodological consistency, and verifiability.

3.1 Integrated Methodological Basis

CER V2 integrates different environmental assessment perspectives, as applicable to the project, including:

- greenhouse gas emissions and removals;
- land use, land-use change, and forestry (LULUCF);
- environmental conservation and restoration;
- natural resources;
- environmental performance and efficiency;
- biodiversity;
- socio-environmental impacts;
- governance and sustainable development; and
- other quantifiable and eligible environmental benefits.

The methodological framework allows different approaches to be combined within a single project, provided they are technically compatible, clearly delineated, and do not result in double counting of the same environmental benefit.

CER V2 does not represent the isolated application of a single external standard. References are selected, harmonized, and adapted according to the project's scope, purpose, applicability, and characteristics.

3.2 Methodological, Technical, and Regulatory References

CER V2 may use national and international references as the technical, scientific, or regulatory basis for its procedures.

Depending on the nature of the project, references relating to the following may be considered:

- greenhouse gas accounting and reporting;
- land use, land-use change, and forestry;
- environmental management and performance;
- sustainability and disclosure;
- technical standards;
- applicable laws and regulations;
- recognized methodologies and protocols;

- scientific literature and technical studies.
- Use of an external reference does not imply certification, validation, approval, or automatic compliance with the organization responsible for that reference.

Application of external references shall always comply with applicable law, CER V2, and the corresponding methodological module.

3.3 Hierarchy of Requirements

Application of CER V2 shall follow the following hierarchical structure:

1. applicable laws and regulatory requirements;
2. general CER V2 requirements;
3. requirements of the applicable methodological module;
4. project-approved technical procedures and documents;
5. external technical standards, norms, and references used as a basis; and
6. scientific literature and other technical sources used for substantiation.

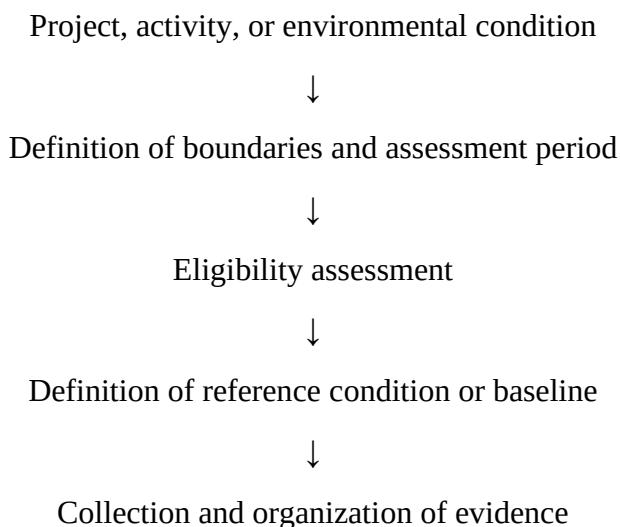
No CER V2 procedure may be used to justify an activity that conflicts with an applicable legal requirement.

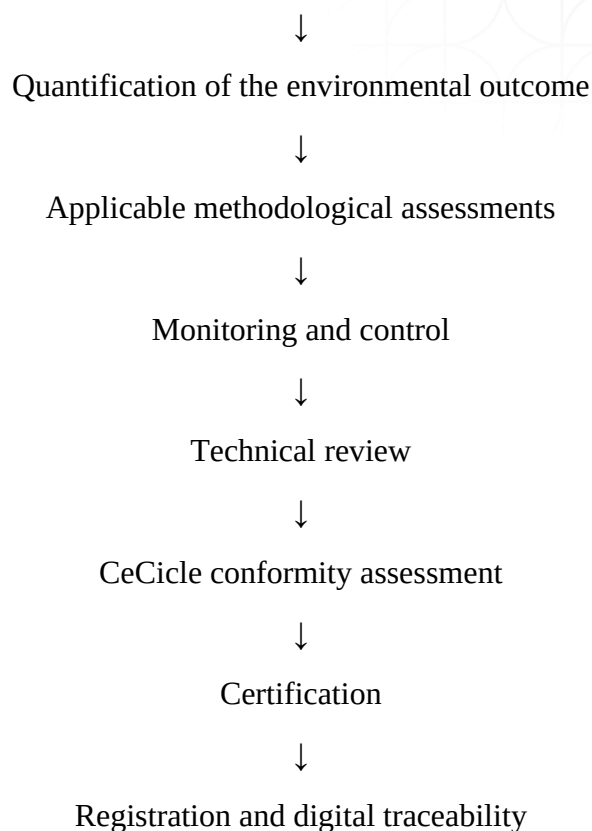
Where different references are relevant to the same procedure or parameter, the technically most appropriate approach for the project shall be adopted, taking into account representativeness, data quality, applicability, transparency, and environmental integrity.

3.4 General Certification Process Framework

Application of CER V2 shall establish a demonstrable relationship between the project, activity, or condition assessed and the certified environmental benefit.

In general, the process comprises:





The sequence and depth of the stages may vary according to the project category, provided that the mandatory requirements of CER V2 and the applicable methodological module are met.

3.5 Participant Responsibilities

CER V2 establishes distinct responsibilities for the proponent, inventory preparer, and CeCicle to preserve information traceability and segregation among project implementation, production of technical data, and assessment for certification.

3.5.1 Proponent

The proponent shall:

- provide true, complete, and up-to-date information;
- make necessary documents and evidence available;
- allow access to relevant areas, facilities, systems, and records;
- implement and maintain the planned activities;
- fulfill commitments undertaken;
- maintain activity records;
- report relevant changes;

- report events capable of affecting certified benefits; and
- avoid incompatible claims or certification of the same benefit through another mechanism, where applicable.

3.5.2 Inventory Preparer

Depending on the nature of the project, the inventory preparer shall:

conduct surveys, inventories, and data collection;

- apply the established technical procedures;
- process and analyze data;
- perform calculations and estimates;
- prepare maps, databases, and technical reports;
- substantiate parameters, models, equations, and assumptions;
- assess and report uncertainties;
- conduct applicable monitoring;
- identify and quantify changes, losses, or reversals, where applicable; and
- maintain records and evidence that allow results to be reproduced.

The inventory preparer is responsible for producing, processing, calculating, and technically substantiating the information submitted for certification.

3.5.3 CeCicle

CeCicle shall:

- establish the general requirements of CER V2;
- establish or approve methodological modules;
- define eligibility and applicability criteria;
- establish minimum measurement, monitoring, and documentation requirements;
- assess the sufficiency and consistency of evidence;
- review methodological application;
- assess submitted calculations, assumptions, and results;
- assess applicable methodological requirements;
- determine project conformity;

- request supplements or corrections where necessary;
- certify results that meet applicable requirements;
- maintain records of decisions; and
- ensure traceability of certified environmental benefits.

CeCicle does not replace the inventory preparer in producing primary data or preparing technical calculations, unless a specific procedure expressly provides otherwise. Its role is to technically assess and evaluate the conformity of information submitted for certification purposes.

3.6 Modular Application

CER V2 shall be applied through methodological modules developed according to the characteristics and needs of each project category.

Each module shall establish, as applicable:

- eligibility conditions;
- boundaries and unit of analysis;
- reference condition or baseline;
- parameters and data sources;
- measurement procedures;
- quantification methods;
- uncertainty and conservatism criteria;
- additionality requirements;
- leakage criteria;
- permanence and risk requirements;
- monitoring procedures;
- treatment of reversals; and
- requirements for certification and issuance of environmental assets.

Where a project involves different activities or benefits, more than one module may be applied, provided that interfaces between modules are technically defined and do not result in double counting.

3.7 Eligibility of the Environmental Benefit

The existence of a positive environmental condition, a natural-resource stock, or an environmentally desirable activity does not, by itself, constitute a certifiable environmental benefit.

For a benefit to be eligible for certification, the following shall be demonstrated, as applicable:

1. the existence of the condition or activity;
2. its area, unit, or reference system;
3. a methodologically appropriate reference condition or baseline;
4. an environmental outcome attributable to the project;
5. a compatible quantification method;
6. sufficient and verifiable evidence;
7. absence of double counting;
8. compliance with additionality criteria, where applicable;
9. assessment of leakage, where applicable; and
10. compliance with the other requirements of the methodological module.

Certification shall be based on demonstration of an eligible environmental outcome attributable to the project, not merely on the existence or maintenance of an environmental condition.

3.8 Methodological Integrity Principles

Application of CER V2 shall observe, at a minimum, the following principles:

- Environmental integrity: certified benefits shall represent environmentally relevant and technically demonstrated outcomes.
- Transparency: methods, sources, assumptions, limitations, and results shall be documented.
- Traceability: data, calculations, decisions, and results shall be linked to the corresponding evidence.
- Reproducibility: procedures shall allow a technically qualified professional to reproduce the results.
- Conservatism: procedures shall avoid overestimating environmental benefits.
- Verifiability: results shall be supported by evidence sufficient for technical assessment.

- Uncertainty management: the principal sources of uncertainty shall be identified and addressed.
- Prevention of double counting: the same environmental benefit shall not be incompatibly accounted for or certified through different mechanisms.
- Accountability: each participant shall be responsible for information and activities within its remit.
- Traceability of changes: relevant changes after certification shall be recorded and linked to the corresponding asset or project.

The principles set out in this item are elaborated in Chapter 2 of this Standard.

3.9 General Quantification Framework

Quantification shall establish the relationship between the reference condition and the outcome attributable to the project.

Conceptually:

$$\text{Eligible Environmental Benefit} = \text{Project Outcome} - \text{Reference Condition} \pm \text{Applicable Methodological Adjustments}$$

Depending on the module, adjustments may include:

- non-additional effects;
- leakage;
- uncertainties;
- overlaps or double counting;
- ineligible areas or outcomes; and
- other applicable methodological adjustments.

This expression represents the general logic of CER V2 and does not constitute a universal calculation equation. Each module shall establish the equations, parameters, units, conversion factors, sampling procedures, uncertainty criteria, and other elements required to quantify the specific benefit.

Depending on the nature of the project, quantification may be structured in terms of:

- stocks;
- stock changes;
- flows;
- avoided emissions;

- removals;
- reductions in consumption;
- materials recovery;
- resource conservation; or
- other quantifiable environmental outcomes.

3.10 Methodology Versioning and Application

CER V2 and its methodological modules shall be subject to formal version control, identifying changes, effective dates, and transition rules.

Project documentation shall record the CER V2 version and applicable module used in the assessment.

Subsequent changes shall follow CeCicle's transition rules and shall identify, where applicable, their effects on projects under development, submitted projects, and projects already certified.

CER V2 shall be applied at three levels:

- Level 1 — CER V2: general requirements and principles applicable to the program;
- Level 2 — Methodological module: technical requirements specific to the project category;
- Level 3 — Technical procedures and documents: instructions, forms, monitoring plans, calculation templates, and other documents necessary for practical application.

In the event of a discrepancy, applicable law shall prevail, followed by CER V2 requirements and the corresponding methodological module, subject to versioning and transition rules.

4. Governance and Separation of Functions

The CeCicle system is structured in four connected but distinct layers that organize methodological rules, their application, project-specific information, and certification traceability:

1. Methodological Standard — general rules applicable to eligible projects;
2. Certification Protocol — procedures for assessment, verification, and certification decisions;
3. Project Documentation — project-specific information, evidence, calculations, and records; and

4. Digital Record and Certification Evidence — identifiers and records ensuring traceability of the certified outcome.

Each layer has its own function and does not replace the others.

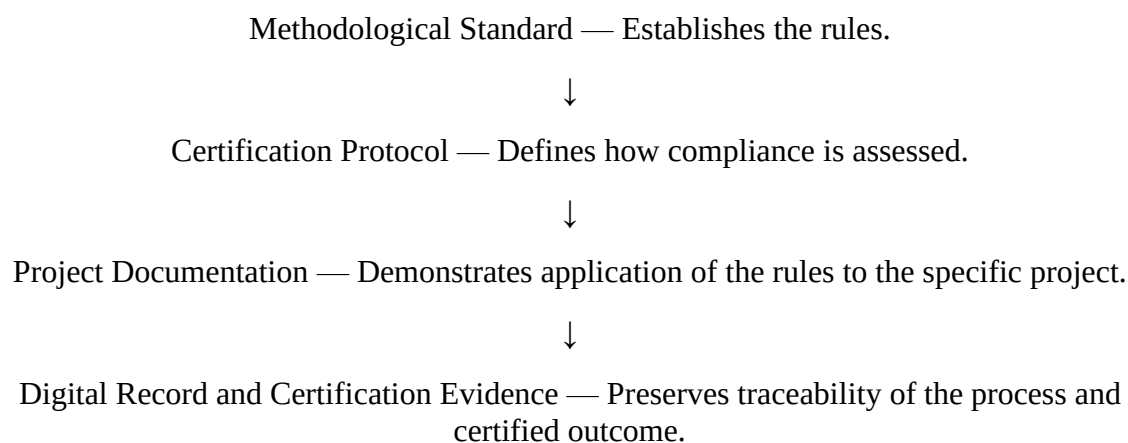
4.1 System Architecture

CER V2 constitutes an integrated methodological system in which the different layers maintain documented and controlled relationships.

The architecture distinguishes:

- which rules must be met;
- how compliance with those rules is assessed;
- which information and evidence demonstrate their application to the project; and
- how the certified outcome is recorded and traced.

The functional relationship among the layers is:



The four layers shall remain conceptually distinct while maintaining sufficient documentary links to allow reconstruction of the assessment chain.

4.2 Methodological Standard

The Methodological Standard establishes the general rules applicable to eligible projects under CER V2.

As applicable, it establishes:

- definitions and principles;
- eligibility criteria and methodological boundaries;
- baseline and additionality requirements;
- quantification rules;

- approved factors, parameters, equations, and methods;
- treatment of leakage, uncertainty, permanence, and reversal risk;
- buffer requirements;
- data quality and monitoring requirements;
- evidence requirements; and
- governance and methodological control rules.

The Methodological Standard establishes what must be met.

Where a project category or environmental outcome requires specific rules, they shall be established in the applicable specific methodology, module, annex, or controlled technical document.

A project shall not establish its own methodological rules solely on account of its particular characteristics.

4.3 Certification Protocol

The Certification Protocol establishes the operational procedures used to assess a project's and its environmental outcome's conformity with applicable methodological requirements.

As applicable, it may establish requirements concerning:

- assessment planning and execution;
- competence and independence of those responsible for the assessment;
- sampling and materiality;
- review of evidence and calculations;
- identification and treatment of nonconformities;
- corrective actions and reassessment;
- certification decision;
- conditions, suspension, or withdrawal of certification; and
- appeal or challenge procedures.
- The Protocol establishes how compliance is assessed.

Certification procedures shall not alter the substantive requirements of the methodology, unless expressly authorized through the methodological governance process.

4.4 Project Documentation

Project Documentation brings together the factual, technical, documentary, and evidentiary information needed to demonstrate application of CER V2 to the specific project.

As applicable, it may include:

- project identification documentation;
- proof of title, possession, rights, or control;
- geographic and temporal boundaries;
- environmental characterization;
- Project Design Document;
- baseline and additionality assessment;
- calculations and calculation records;
- risk, leakage, and uncertainty assessments;
- monitoring plans and reports;
- technical reports;
- supporting evidence; and
- records related to assessment and certification.

Project documentation demonstrates what occurred or was determined in the specific project and how the rules were applied.

Project-specific circumstances shall not modify the general CER V2 requirements, except as expressly provided by the applicable methodology.

Any material methodological interpretation or authorized deviation shall be formally documented and justified.

4.5 Evidence, Verification, Certification, and Digital Record

The concepts of methodology, evidence, verification, certification, and digital record are distinct:

- **Methodology ≠ Certification:** the methodology establishes the applicable criteria. Certification takes place only after completion of the assessment process and formal issuance of the certification decision.
- **Evidence ≠ Certification:** documents, satellite imagery, measurements, technical reports, calculations, and other records constitute evidence used in the assessment but do not, by themselves, represent a certified outcome.

- Verification $\neq$ Certification: verification is the assessment of the project and claimed outcome's conformity with applicable requirements. Certification is the formal decision recognizing the verified outcome within the defined scope.
- Digital Record $\neq$ Environmental Validation: a digital record may preserve the integrity, origin, existence, and traceability of documents, calculations, and decisions at a given time, but does not replace the scientific, methodological, or professional analysis necessary to validate the environmental outcome.

Digital infrastructure shall support traceability without replacing:

- environmental evidence;
- methodological analysis;
- scientific analysis;
- quantification;
- verification; or
- professional judgment.

4.6 Document Hierarchy and Control

CER V2 shall maintain a controlled document hierarchy.

In general:

- Level 1 — Methodological Standard: general methodological requirements.
- Level 2 — Specific Methodologies or Modules: rules applicable to particular project categories or environmental outcomes.
- Level 3 — Technical Procedures and Protocols: procedures for applying specific methodological requirements.
- Level 4 — Project Documentation: application of the rules to the specific project.
- Level 5 — Evidence and Records: information supporting claims, calculations, decisions, and certifications.

This document hierarchy does not replace the system's four functional layers. The four layers define system functions; the five levels define the hierarchy of its documents.

No lower-level document may replace or contradict a higher-level requirement, unless expressly authorized by the higher-level document.

4.7 Controlled Technical Parameters

Certain technical elements may be maintained in documents controlled separately from the main body of CER V2, including, as applicable:

- emission and conversion factors;
- ecological parameters;
- coefficients and equations;
- remote-sensing specifications;
- uncertainty parameters;
- risk categories;
- buffer criteria or percentages; and
- monitoring frequencies.

These elements shall have an identifier, version, and effective date.

The project shall use the version applicable to the period and rules governing the relevant assessment.

4.8 Change Management and Version Control

Changes to material methodological requirements shall be subject to a formal change-control process.

Elements subject to control include:

- definitions;
- eligibility;
- baseline;
- additionality;
- quantification methods;
- equations and coefficients;
- conversion factors;
- monitoring;
- uncertainty;
- leakage;
- permanence;
- reversal risk;
- buffer;

- verification; and
- certification rules.

Changes shall be documented and associated with an identifiable methodological version and effective date.

The applicable version shall appear in the relevant documentation and certification records.

Subsequent changes to external references shall not automatically modify projects already certified, unless required by applicable law or CER V2 governance rules.

4.9 General Application Sequence

Application of CER V2 to a project shall generally follow this sequence:

1. Selection of the applicable methodology and version;
2. Eligibility assessment;
3. Definition of geographic, temporal, and methodological boundaries;
4. Establishment of the reference condition or baseline;
5. Additionality assessment, where applicable;
6. Quantification of the environmental outcome;
7. Application of uncertainty, leakage, permanence, reversal-risk, and buffer treatments, where applicable;
8. Monitoring and maintenance of required evidence;
9. Conformity verification;
10. Certification decision; and
11. Registration and preservation of digital traceability.

Specific stages, criteria, parameters, and responsibilities shall be established in the corresponding chapters and modules of CER V2.

4.10 Architectural Integrity and Records

Certification shall not be issued where the necessary methodological chain cannot be adequately reconstructed.

The controlled project record shall allow identification, as applicable, of:

- what was claimed;
- which evidence supported the claim;
- which methodology and version were applied;

- how the outcome was calculated;
- which adjustments were applied;
- how conformity was assessed;
- what was actually certified; and
- where the certified outcome is recorded.

Digital identifiers used shall remain associated with the corresponding documents, evidence, calculations, and records throughout the applicable retention period.

The integrity of the CER V2 system depends on the controlled interaction of its layers, maintaining the following fundamental relationship:

1. Rules establish the methodology.
2. Procedures establish how compliance is assessed.
3. Documentation demonstrates application.
4. Evidence supports claims.
5. Verification assesses compliance.
6. Certification recognizes the verified outcome.
7. The digital record preserves traceability of that relationship.

5. Project Eligibility

A project shall be eligible for certification under CeCicle Environmental Reductions — CER V2 when it meets the general requirements established in this methodology and the specific requirements of the applicable methodological module.

Eligibility shall be assessed before quantification and certification of environmental benefits and shall demonstrate that the project has sufficient identification, boundaries, rights, documentation, and methodological conditions to proceed in the certification process.

Approval of eligibility does not constitute certification of the environmental benefit and does not, by itself, represent final approval of the baseline, additionality, quantification, permanence, or issuance of environmental assets.

5.1 General Eligibility Requirements

As applicable, the project shall demonstrate:

1. unambiguous project identification;
2. geographic delineation and definition of its boundaries;

3. identification of the proponent, inventory preparer, and other responsible parties;
4. rights, authorizations, or control necessary to implement the activity and fulfill the commitments undertaken;
5. compliance with applicable laws and regulatory requirements;
6. relevant technical, environmental, land-tenure, institutional, and administrative documentation;
7. classification under an applicable project category or methodological module;
8. a defined and documented start date;
9. existence of a reference condition compatible with the nature of the project;
10. compliance with additionality requirements, where applicable;
11. assessment of relevant territorial or methodological overlaps; and
12. compliance with the specific requirements of the corresponding methodological module.

Meeting the eligibility requirements does not, by itself, establish the environmental benefit to be certified.

5.2 Project Identification, Boundaries, and Rights

Each project shall have a unique identification and sufficiently defined boundaries to distinguish it unequivocally from other activities, areas, or projects.

The following shall be identified, as applicable:

- project name and location;
- proponent and responsible parties;
- category and methodological module;
- project area or unit;
- start date;
- applicable period;
- documents evidencing title, possession, authorization, concession, contract, or other relevant right.

Delineation shall be compatible with the nature and scale of the project and may use maps, coordinates, georeferenced polygons, satellite imagery, cadastral databases, land records, and other suitable geospatial information.

Where there are multiple properties, production units, or implementation areas, these shall be individually identified.

The proponent shall demonstrate the rights, authorizations, or forms of control necessary to implement, monitor, and maintain the certified activity and, where applicable, attribute the corresponding environmental benefits.

Ownership, possession, or another legal instrument shall not be presumed sufficient for all project categories. Specific requirements shall be established by the applicable methodological module.

5.3 Legal Compliance and Documentation

The project shall identify and demonstrate compliance with legal and regulatory obligations directly related to the certified activity.

As applicable, the following may be considered:

- licenses and authorizations;
- water-use grants and registrations;
- environmental and territorial registrations;
- conservation obligations;
- land-use restrictions;
- land-tenure requirements;
- requirements relating to protected areas;
- contracts, commitment instruments, and other applicable legal instruments.

Documentation shall be sufficient to demonstrate compliance with eligibility requirements and shall be compatible with the nature of the project.

Where necessary, CeCicle may request additional information or documents to resolve material gaps or demonstrate mandatory requirements.

5.4 Methodological Classification and Reference Condition

Before quantification begins, the project shall be classified under a methodological module compatible with its activity and the environmental benefits it intends to certify.

The inventory preparer shall identify:

- the activity to be certified;
- the applicable module;
- the intended environmental benefits;
- applicability boundaries and conditions;
- the specific requirements to be met.

Projects involving different activities or benefits may use more than one module, provided their application is technically compatible and does not result in double counting.

Eligibility shall preliminarily assess the existence of a methodologically plausible reference condition compatible with the nature of the project and capable of characterization using verifiable data or evidence.

Approval of eligibility does not replace detailed baseline determination, which shall follow the procedures established in the applicable methodological module.

5.5 Start Date

Each project shall have a defined and documented start date corresponding to the point established by the methodological module as the beginning of the activity, intervention, or condition underlying certification.

The date shall be supported by verifiable evidence, such as contracts, operational records, environmental documents, field records, historical imagery, financial documents, or other records contemporaneous with the start of the activity.

The date on which the project documentation is prepared or certification is contracted shall not, by itself, be sufficient to determine the start date.

Where applicable, the methodological module shall establish the maximum period between the start date and project submission, as well as transition rules for projects that commenced earlier.

5.6 Legal Obligations and Additionality

Where the activity or environmental outcome is related to a pre-existing legal, regulatory, contractual, or administrative obligation, a specific assessment shall determine:

1. the nature and scope of the obligation;
2. which activities or outcomes are mandatory;
3. which outcomes would result from compliance with the obligation; and
4. which activities or outcomes, if any, may be attributed to additional and voluntary project actions.

Compliance with an existing obligation shall not automatically be considered an additional environmental benefit.

Where only part of an activity is subject to an obligation and another part is voluntary or additional, the corresponding components shall be differentiated under the criteria of the methodological module.

Detailed additionality analysis, including financial, common-practice, or other applicable tests, shall follow the procedure established for the project category.

5.7 Overlap and Double Counting

Before eligibility is approved, potential territorial or methodological overlaps shall be assessed with respect to:

- other environmental projects or assets;
- carbon projects or programs;
- jurisdictional programs;
- conservation units and legally protected areas;
- offset mechanisms;
- easements and environmental restrictions; and
- other instruments that may generate claims or accounting for the same environmental benefit.
- Territorial overlap does not automatically determine ineligibility.

The assessment shall consider the nature of the overlap, rights affecting the area, existing legal obligations, and the possibility of preventing double counting or incompatible claims.

Where overlap affects additionality, baseline, permanence, ownership, or attribution of the environmental benefit, its treatment shall be detailed in the applicable methodological module.

5.8 Ineligibility Criteria and Decision

A project shall be deemed ineligible where an essential CER V2 requirement or a requirement of the applicable methodological module cannot be demonstrated, including, as applicable:

- insufficient mandatory documentation;
- unidentifiable project boundaries;
- absence of necessary rights or authorizations;
- incompatibility with applicable legal requirements;
- absence of a compatible methodological module;
- absence of an applicable methodological reference condition;
- inability to meet minimum additionality requirements, where applicable;
- double counting that cannot be eliminated or controlled;
- false, materially inconsistent, or unverifiable information; or

- any other condition preventing compliance with mandatory requirements.

Where a deficiency can be corrected, CeCicle may request supplementation or correction before a final decision.

The assessment shall result in one of the following decisions:

- (a) Eligible: mandatory requirements demonstrated;
- (b) Eligible subject to supplementation: correctable deficiencies exist that do not undermine the nature or classification of the project; or
- (c) Ineligible: one or more essential requirements have not been met or cannot be demonstrated.

The decision shall be documented, including the project, CER V2 version, applicable module, requirements assessed, evidence reviewed, any deficiencies, technical justification, date, and person responsible for the assessment.

Approval of eligibility does not authorize issuance of environmental assets. Issuance depends on completion of the subsequent quantification, monitoring, review, and certification stages.

5.9 Modular Application and Version Control

Specific eligibility requirements shall be established in the respective methodological modules, including, as applicable;; the environmental and activity criteria;

- boundaries and scale;
- legal requirements;
- documentation;
- ownership or control;
- start date;
- reference condition;
- additionality;
- overlap;
- exclusions; and
- other specific conditions.

Values, quantitative limits, time periods, and specific tests shall not be established through interpretation during a project assessment where they have not been formally established in CER V2 or the applicable module.

The assessment shall record the CER V2 and methodological module versions used, submission date, start date, assessment date, and any applicable transition rules.

Subsequent methodology changes shall follow CeCicle's versioning and transition rules.

6. Project Boundaries and Stratification

Projects submitted under CER V2 shall define geographic, temporal, and environmental boundaries sufficient to unequivocally identify the areas, units, activities, environmental conditions, and benefits included in certification.

Delineation shall distinguish, as applicable:

- a) total area associated with the project;
- b) area submitted for certification;
- c) area actually quantified;
- d) excluded areas;
- e) areas subject to restrictions or overlaps; and
- f) areas actually monitored.

Inclusion of an area within the project's overall boundary does not automatically make that area eligible for accounting or certification.

6.1 Geographic Boundaries

The geographic boundary shall represent the spatial extent over which project-related activities and environmental conditions are assessed.

Delineation shall use suitable georeferenced information, including, as applicable, coordinates, polygons, maps, vector files, satellite imagery, property boundaries, land records, environmental registries, administrative boundaries, and conservation units.

The project shall independently and clearly identify the total area, certified area, quantified area, and excluded areas, and justify any differences.

Overlaps with conservation units, public lands, protected areas, other projects, jurisdictional programs, or relevant territorial instruments shall be spatially delineated and quantified.

Overlap does not automatically imply inclusion or exclusion of an area; eligibility shall be determined according to applicable legal requirements, ownership, additionality, accounting, double counting, and other criteria.

6.2 Temporal Boundaries

Relevant assessment periods shall be defined, including, as applicable:

- a) project start date;
- b) historical period used to characterize the reference condition;
- c) baseline period;
- d) monitoring period;

- e) quantification period; and
- f) permanence period or certification validity period, where applicable.

Historical sources, imagery, time series, inventories, and other data used shall be compatible with the periods analyzed and contain sufficient information for traceability.

6.3 Environmental Boundaries and Characteristics

The environmental boundary shall represent the physical, ecological, or operational characteristics relevant to the benefit to be certified.

The following may be considered, as applicable:

- vegetation and phytophysiology;
- land use and land cover;
- degradation condition;
- successional stage;
- biomass and carbon stock;
- productivity;
- soil and climate characteristics;
- hydrology;
- productive activity; and
- other characteristics capable of materially influencing the outcome.

The definition shall be compatible with the nature of the benefit and the applicable methodological module.

6.4 Stratification

Where environmental, ecological, structural, or operational differences may materially influence quantification, the project shall use stratification to adequately represent such heterogeneity.

Stratification is the division of an area into units or classes that are relatively homogeneous with respect to characteristics relevant to quantification.

Use of a single average value for the entire area shall be avoided where it could materially distort the certified benefit or associated uncertainty.

Stratification criteria shall be technically substantiated and applied consistently across the assessed area.

6.5 Criteria and Identification of Strata

Strata shall be defined based on characteristics capable of explaining relevant differences in the environmental benefit.

For forestry and land-use projects, the following may be considered, as applicable:

- phytophysiology and vegetation structure;
- land use and land cover;
- successional stage;
- vegetation cover and height;
- biomass and carbon stock;
- degree and history of degradation;
- soil and climate characteristics;
- relief and hydrology;
- occurrence of wetlands; and
- other environmentally relevant variables.

Identification may use remote sensing, satellite imagery, historical data, thematic maps, field surveys, inventories, and other technically justifiable evidence.

The classification adopted shall be compatible with the technical references used and the conditions actually observed in the area.

6.6 Validation and Sampling

Stratification shall be validated using field data or equivalent technical evidence, in accordance with the requirements of the methodological module.

Validation shall assess, as applicable:

- a) correspondence between the classification and observed conditions;
- b) within-stratum homogeneity;
- c) differentiation among strata;
- d) spatial representativeness of samples; and
- e) potential classification errors or relevant changes.

Where quantification depends on field data, the sampling plan shall adequately represent each stratum, taking into account its area, variability, spatial distribution, sampling intensity, precision, and other criteria defined in the applicable module.

Strata with material differences shall not be treated as a single sampling population without technical justification.

6.7 Quantification by Stratum

Where applicable, relevant parameters shall be determined separately for each stratum before the results are aggregated.

Depending on the nature of the project, the following may be considered:

- area;
- biomass;
- carbon stock;
- growth;
- NPP;
- emissions;
- removals;
- cover changes; and
- uncertainty.

Use of the same parameters for different strata shall be technically justified where potentially relevant differences exist.

Results shall be aggregated only after stratum-specific calculations and adjustments have been performed, in accordance with the applicable methodological module.

6.8 Excluded Areas and Changes

Areas that do not meet certification requirements shall be spatially identified, excluded from accounting, and supported by a justification.

As applicable, areas may be excluded where they are:

- outside the methodological scope;
- unsupported by sufficient evidence;
- subject to an incompatible overlap;
- without the necessary right or authorization;
- without an adequately established reference condition;
- subject to double-counting risk; or
- unable to be quantified with adequate reliability.

During monitoring, relevant changes in land use, degradation, fires, regeneration, biomass changes, climate events, or other changes capable of materially affecting the outcome shall be assessed.

Where necessary, stratification and boundaries shall be updated, and the corresponding effects incorporated into quantification and monitoring.

6.9 Traceability and Modular Application

Documentation shall allow reconstruction of the delineation and stratification used in each certification period, including, as applicable:

- maps and geospatial files;
- areas and strata;
- imagery and acquisition dates;
- classification criteria;
- validation data;
- sampling plan;
- excluded areas;
- parameters used; and
- versions of databases and maps.

The minimum traceability chain shall allow the following relationship to be established:

Project → Area → Stratum → Unit of Analysis → Parameters → Calculation → Outcome
→ Certified Environmental Asset

CeCicle shall assess the sufficiency of boundaries and stratification for certification purposes and may request adjustments where it identifies a risk of material overestimation, loss of representativeness, or inadequate treatment of heterogeneity.

Methodological modules may establish additional criteria for stratum classes, minimum size, homogeneity, sampling, validation, updating, and aggregation of results.

In the absence of a specific requirement, the inventory preparer shall provide technical justification for the approach adopted.

6.9.1 GHG Boundary Table (SSR)

For projects involving greenhouse gas accounting, a table shall be maintained identifying relevant sources, sinks, and reservoirs (SSRs), with documented justification for inclusion or exclusion.

SSR / Parameter	Included?	Unit	Source	Monitoring	Justification
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed

7. Baseline and Additionality

7.1 General Principle

The baseline represents the environmental condition, trajectory, or scenario that would reasonably be expected in the absence of the certified activity.

It shall be established in a plausible, technically substantiated, conservative, verifiable manner and be compatible with the project's characteristics, taking into account, as applicable, environmental, historical, legal, economic, social, and territorial aspects.

Only outcomes additional to the condition that would occur in the absence of the project may be certified, subject to this methodology and the applicable module.

7.2 Baseline Construction

The inventory preparer shall establish and document the baseline before quantifying the benefit, using sufficient evidence to demonstrate the most plausible scenario in the absence of the certified activity.

The following shall be considered, as applicable:

- (a) history and environmental condition of the area;
- (b) land use and occupation and their change processes;
- (c) ecological characteristics and observed trends;
- (d) productive activities and economic factors;
- (e) legal and regulatory requirements;
- (f) practices commonly adopted in the region or sector;

- (g) growth, regeneration, or natural evolution;
- (h) programs, investments, or interventions by third parties; and
- (i) other factors capable of significantly altering the environmental trajectory.

Selection of the scenario shall be accompanied by technical justification and verifiable evidence compatible with the nature and scale of the project.

7.3 Reference Scenarios

Where more than one scenario is plausible, the inventory preparer shall identify and assess them before selecting the baseline.

Depending on the project's characteristics, the following may be considered:

- (a) continuation of the current condition;
- (b) natural regeneration or evolution;
- (c) degradation or stock loss;
- (d) conversion or land-use change; and
- (e) other technically plausible scenarios.

The selected scenario shall conservatively represent the most likely trajectory in the absence of the project, avoiding extreme scenarios unsupported by sufficient evidence.

7.4 Conservation and Natural Evolution

For conservation projects, the baseline shall not automatically assume total stock loss, full area conversion, or absence of vegetation cover.

Where the benefit relates to maintenance or prevention of losses, the plausible trajectory of loss, degradation, or change that would occur in the absence of the project shall be demonstrated.

Likewise, where growth, regeneration, or natural evolution of environmental stocks occurs, that component shall be identified and, where applicable, separately quantified or estimated.

The observed outcome may be conceptually represented as follows:

$$\text{Observed Outcome} = \text{Expected Evolution in the Absence of the Project} + \text{Additional Outcome Attributable to the Project.}$$

Evolution that would occur independently of the certified activity shall not be attributed to the project.

7.5 Additionality

Additionality demonstrates that the certified environmental outcome is attributable to the project activity and would not occur, or would not occur to the same extent, in the absence of that activity.

The assessment shall use objective criteria and verifiable evidence, considering, as applicable:

- (a) legal and regulatory requirements;
- (b) common practice;
- (c) implementation barriers;
- (d) economic and financial conditions;
- (e) need for incentives associated with the environmental benefit;
- (f) circumstances independent of the project;
- (g) overlapping programs or initiatives; and
- (h) the possibility of achieving the same outcome without the certified activity.

The mere existence of a positive environmental outcome does not demonstrate additionality.

7.6 Legal Obligations and Pre-existing Outcomes

Outcomes arising exclusively from compliance with pre-existing legal, regulatory, administrative, or contractual obligations shall not be considered additional.

Where an obligation is only partially related to the certified outcome, the following shall be distinguished:

- (a) the outcome required independently of the project; and
- (b) the additional outcome resulting from the certified activity.

The existence of a legal obligation related to the territory or environmental resource does not automatically make the project ineligible; the degree of overlap between the obligation and the outcome actually certified shall be assessed.

7.7 Common Practice and Independent Circumstances

Common-practice analysis shall assess whether the certified activity or outcome already occurs under conditions sufficiently comparable to those of the project.

The methodological module shall define, where applicable, the reference population, geographic area, period, comparability criteria, data sources, sampling, calculation method, and decision criterion.

The mere existence of similar activities in the region does not, by itself, establish a lack of additionality. Scale, characteristics, economic conditions, legal obligations, and implementation circumstances shall be considered.

Outcomes arising from circumstances independent of the certified activity shall also be identified, such as natural, regulatory, economic, technological, or market changes, public programs, or third-party interventions, where applicable.

7.8 Financial Additionality

Where applicable, the economic and financial viability of the activity shall be assessed in the absence of revenue or recognition associated with the environmental benefit.

The assessment may consider:

- investment and operating costs;
- revenues and cash flow;
- NPV and IRR;
- payback period and break-even point;
- opportunity cost;
- alternative sources of financing; and
- sensitivity scenarios.

Financial parameters and assumptions shall be documented and compatible with the nature and scale of the project, allowing assessment of whether the activity would be implemented and maintained without the certified environmental benefit.

7.9 Determination of the Additional Benefit

The quantification shall distinguish, where applicable:

I — Baseline: condition or trajectory expected in the absence of the project;

II — Observed Outcome: condition actually measured or estimated;

III — Attributable Outcome: portion of the result exceeding, or avoiding loss relative to, the baseline;

IV — Applicable Adjustments: deductions arising from methodological factors provided for in CER V2; and

V — Certifiable Benefit: final outcome eligible for certification.

Conceptually:

Certifiable Benefit = Observed Outcome – Baseline Outcome – Applicable Adjustments

The operational formula, parameters, periods, and calculation criteria shall be defined by the corresponding methodological module.

7.10 Evidence, Responsibilities, and Modular Application

The baseline and additionality shall be supported by verifiable evidence, which may include historical data, satellite imagery, inventories, field surveys, maps, land-use records, legal documents, economic data, feasibility studies, investment records, common-practice information, and other technically relevant sources.

The inventory preparer is responsible for constructing and documenting the baseline, assessing scenarios, demonstrating additionality, performing calculations, and presenting the evidence and assumptions used.

CeCicle is responsible for establishing methodological requirements, reviewing the consistency of scenarios and assumptions, assessing the demonstration of additionality, and validating the outcome before certification.

Methodological modules shall establish specific requirements for historical periods, scenarios, parameters, common practice, financial additionality, natural growth, data sources, calculation methods, and other applicable matters.

The baseline shall be reviewed where a material change occurs in the conditions underlying its determination, in accordance with the criteria and frequency established by the applicable module.

8. Environmental and Carbon Accounting

8.1 General Principle

CER V2 adopts an integrated approach to environmental accounting, combining field data, spatial and temporal information, remote sensing, modeling, and other technically applicable sources, according to the nature and requirements of each project.

Accounting shall distinguish:

(a) the existing environmental stock or condition; (b) observed flows, variations, or changes; (c) the reference condition or trajectory; (d) the portion attributable to the project; (e) applicable methodological adjustments; and (f) the environmental outcome eligible for certification.

No variable or information source shall, in isolation, be treated as an automatic representation of the environmental benefit.

8.2 Data, Methods, and Integration of Information

Field inventories, remote sensing, satellite imagery, spectral indices, plant productivity data, environmental models, climate and soil data, historical information, land use and occupation, and economic or operational data may be used, as applicable.

Selection of data and methods shall consider representativeness, spatial and temporal scale, quality, accuracy, uncertainty, traceability, and ability to be validated.

Where applicable, field data and remote sensing shall be used complementarily, allowing spatial characterization, temporal monitoring, calibration, validation, and extrapolation of information.

Remote sensing does not automatically replace field inventory where the latter is necessary to determine or validate the certified parameter.

8.3 NPP and Vegetation Dynamics

Net Primary Productivity (NPP) may be used as an indicator of vegetation productivity, dynamics, and evolution, especially in conservation, restoration, and land-use projects.

NPP is not, by itself, equivalent to carbon stock, permanent CO₂ removal, or a carbon credit. Where used in accounting, it shall be associated with parameters and evidence that establish its relationship to biomass, carbon stock, or another certifiable environmental outcome.

Its use shall be accompanied by identification of the source, method of acquisition or processing, spatial and temporal resolution, period analyzed, unit, model or algorithm, limitations, uncertainties, and calibration or validation procedures, where applicable.

8.4 Carbon Stocks, Flows, and Reservoirs

CER V2 shall distinguish carbon stocks from carbon flows or changes.

A stock is the quantity of carbon stored in a reservoir at a given time or over a reference period. A flow is carbon entering, leaving, being emitted, removed, or changing over time.

Where applicable, accounting shall consider the carbon reservoirs relevant to the project, as defined by the methodological module, which may include above- and below-ground biomass, soil organic carbon, dead wood, and litter.

Inclusion or exclusion of reservoirs shall be technically justified, considering their relevance, measurability, data availability, double-counting risk, and potential for change resulting from the certified activity.

The existence of a carbon stock or an increase in biomass or productivity does not, by itself, imply an additional certifiable benefit.

8.5 Accounting by Stratum and Benefit Quantification

Where material environmental heterogeneity exists, parameters shall be determined by stratum or unit of analysis, as applicable, before results are aggregated.

Accounting may include, among other things:

(a) avoided emissions; (b) increase or change in stock; (c) removals; (d) maintenance or conservation of stock; and (e) other outcomes defined in a specific module.

Each mechanism shall have its own reference, quantification, monitoring, and benefit-attribution criteria.

The certifiable outcome shall represent only the portion demonstrated, quantified, and attributable to the project, after application of the relevant methodological adjustments.

8.6 Conservation and Prevention of Losses

For conservation projects, the benefit may relate to maintaining or preventing the loss of existing environmental stocks, provided it is demonstrated that the loss, degradation, or change considered in the reference condition would be plausible in the absence of the project.

Accounting shall compare the observed condition with the applicable reference trajectory, taking into account additionality, uncertainty, leakage, permanence, double counting, and other methodological requirements.

8.7 Uncertainty, Conversion, and Conservatism

Estimates of stock, flow, emission, removal, or other environmental benefit shall account for relevant uncertainties associated with data, measurements, sampling, models, equations, conversion factors, remote sensing, and extrapolation.

Procedures for quantification, propagation, and treatment of uncertainty shall be defined by the applicable methodological module. Where uncertainty cannot be adequately quantified, conservative procedures compatible with the risk of overestimation shall be adopted.

Where expressed as GHG reductions or removals, outcomes shall be converted to tCO₂e using the factors, global warming potentials, units, and procedures defined by the applicable module.

8.8 Double Counting and Traceability

Accounting shall prevent double counting of stocks, flows, reductions, removals, or other environmental benefits, including where there is overlap with projects, programs, inventories, jurisdictional systems, conservation units, or other environmental recognition mechanisms.

Calculations shall allow reconstruction of the outcome from the data source through to the certified environmental asset:

Source → Data → Processing → Parameter → Unit/Stratum → Calculation →
Adjustments → Environmental Outcome → Certifiable Outcome → Environmental Asset

Where spatially applicable, the outcome shall be linked to its geographic location.

8.9 Monitoring and Responsibilities

Relevant parameters shall be monitored at intervals compatible with the nature of the project and the expected dynamics of the benefit, allowing identification of relevant changes, losses, reversals, and changes in reference conditions.

The inventory preparer is responsible for collecting and processing data, conducting applicable inventories, selecting and justifying methods and parameters, performing calculations, estimating uncertainties, and submitting traceable calculation records.

CeCicle is responsible for establishing methodological requirements, assessing the suitability of methods and data, reviewing calculation consistency, checking consistency among the reference, observed outcome, and certifiable benefit, and validating the outcome before certification.

8.10 Modular Application

This Chapter establishes the general accounting framework of CER V2. Each methodological module shall define, according to the nature of the project, applicable parameters, reservoirs, quantification methods, data sources, field and remote-sensing procedures, equations, models, frequency, uncertainty, conversion, aggregation, and other applicable adjustments.

Requirements for baseline, additionality, leakage, permanence, reversal, and asset issuance shall be observed in accordance with the relevant chapters and modules of CER V2.

The selected method shall be compatible with the physical and environmental nature of the outcome to be certified; a single parameter shall not be used as a universal substitute for its measurement.

9. Quantification

9.1 General Principle

Quantification shall objectively, reproducibly, verifiably, and traceably determine the amount of environmental benefit attributable to the project and eligible for certification.

Calculations shall use project-representative data, parameters, equations, models, conversion factors, and uncertainty procedures compatible with CER V2 and the applicable methodological module.

Generic estimates shall not replace project-specific data where such data are required or available and technically necessary.

9.2 Data, Parameters, and Sources

Data used shall be representative of project conditions and the accounting period.

Depending on the project category, data may include field data, measurements, remote sensing, laboratory data, operational histories, area, biomass, carbon stocks, productivity, resource consumption, production, waste, emissions, energy, volume, mass, and other relevant parameters.

The source, unit, period, method of acquisition, and person responsible for relevant data shall be documented.

Where different technically applicable sources exist, preference shall be given to the source with greater representativeness, quality, traceability, and suitability for the parameter, subject to the module's requirements.

Secondary data and default values shall be used only where technically justifiable or expressly permitted.

9.3 Equations, Models, and Conversion Factors

Quantification shall use equations, models, and conversion factors compatible with the benefit assessed and the method's domain of applicability.

Each relevant model or equation shall have an identified source, input parameters, units, coefficients, domain of application, and known limitations.

External models or equations may be used where authorized by the methodological module and technically justified.

Conversion factors shall have a source or technical justification, including, where applicable, source and target units, version or reference period, and selection criterion.

9.4 Quantification by Stratum

Where the project is stratified under Chapter 6, parameters and outcomes shall be calculated by stratum whenever differentiation is necessary to adequately represent project heterogeneity.

Use of a single average shall not materially distort the outcome.

Final aggregation shall occur after completion of stratum-specific calculations, taking into account the respective areas, parameters, uncertainties, and applicable adjustments.

9.5 Determination of the Quantifiable Benefit

Quantification shall relate the reference condition, observed outcome, and portion attributable to the project, applying the relevant methodological adjustments.

Conceptually:

$$\text{Quantifiable Benefit} = \text{Observed Outcome} - \text{Reference Condition} \pm \text{Applicable Adjustments}$$

The mathematical structure shall vary according to the nature of the benefit and may include, among other things:

- Reduction or avoided emission: difference between baseline emissions and observed emissions;
- Removal: net increase in stored carbon, taking into account the baseline and relevant reservoirs;
- Stock change: change in stock between measurement periods;

- Conservation: stock loss or avoided benefit relative to the reference trajectory.

Application of any such structure shall comply with the baseline, additionality, project-boundary, attribution, and other requirements established in CER V2 and the corresponding module.

Outcomes already included in the baseline, not attributable to the project, unsupported by sufficient evidence, outside defined boundaries, or subject to double counting shall not be accounted for.

9.6 Uncertainty and Adjustments

Uncertainties associated with relevant data, measurements, models, equations, and parameters shall be identified and treated in accordance with applicable methodological requirements.

Where provided for by the module, uncertainty may be quantified, propagated to the outcome, or used as an adjustment factor or conservatism criterion.

Before determining the certifiable outcome, applicable methodological adjustments shall be applied, including, as applicable:

- uncertainty;
- leakage;
- double counting;
- non-additional portions;
- territorial exclusions;
- baseline changes;
- conservatism factors; and
- other adjustments defined by the module.

Each adjustment shall be identifiable and supported by calculation records.

Quantification adjustments are distinct from the reversal buffer, the purpose and application of which are addressed in Chapter 17.

9.7 Outcome and Calculation Records

Documentation shall distinguish, as applicable:

Gross Outcome → Methodological Adjustments → Adjusted Outcome → Certifiable
Quantity.

The outcome shall be expressed in the unit corresponding to the environmental benefit or asset. Carbon credits shall be expressed in tCO_{2e} in accordance with applicable conversion criteria.

Calculations shall be documented sufficiently to allow reproduction by a technically qualified professional, including:

Source → Data → Unit → Parameter → Equation → Outcome → Adjustments → Final Outcome.

Where computational models, spreadsheets, spatial files, or scripts are used, the versions necessary to reproduce the outcome shall be retained.

Rounding shall occur only at the stage defined by the methodological module or when determining the final outcome, avoiding distortion from repeated rounding.

9.8 Review and Modular Application

Quantification shall undergo technical review in accordance with the CER V2 certification workflow, including, as applicable, verification of data integrity, units, parameters, equations, conversion factors, stratification, uncertainties, adjustments, and final outcome.

The inventory preparer is responsible for collecting, processing, calculating, and documenting data and outcomes.

CeCicle is responsible for establishing methodological requirements, reviewing the application of methods, and validating the quantity eligible for certification.

Methodological modules shall define specific quantification procedures, including parameters, equations, factors, sampling design, data sources, estimation methods, uncertainty treatment, adjustments, aggregation criteria, and determination of the certifiable outcome.

For technical matters specific to a module, the procedure established in that module shall prevail over the general rule in this Chapter, provided it has been formally established by CeCicle.

10. Emission and Conversion Factors

CeCicle shall maintain a controlled table of emission and conversion factors identifying, for each factor:

- the factor itself;
- the unit;
- the source;
- applicability;
- version and date; and
- geographic or methodological limitations.

Default factors may be used only where permitted by the applicable methodology.

Each factor shall have a source or technical justification, including, where applicable:

- source and target units;
- version or reference period; and
- selection criterion.

The factor table shall be maintained as a controlled technical document under item 4.7 of this Standard, with an identifier, version, and effective date.

The project shall use the factor version applicable to the period and rules governing the relevant assessment.

11. Leakage, Permanence, and Reversal Risk

11.1 General Principle

CER V2 establishes mechanisms to identify, assess, and address risks that may reduce, displace, or reverse certified environmental benefits.

Depending on the category and characteristics of the project, the following shall be assessed:

- leakage;
- permanence of the benefit;
- reversal risk;
- measures for prevention, monitoring, and response; and
- protection mechanism for the certified benefit.

Specific criteria and procedures shall be defined in the applicable methodological module.

11.2 Leakage

Leakage is the displacement of an activity, emission, impact, or environmental pressure beyond the project boundaries as a result of the certified activity.

The inventory preparer shall identify potentially relevant leakage mechanisms and assess their materiality, considering, as applicable:

- displacement of productive activities or land use;
- displacement of deforestation, degradation, or resource extraction;
- displacement of emissions;
- changes in supply, demand, or production;
- displacement to areas outside the project; and

- other environmentally relevant mechanisms.

Where applicable, leakage shall be quantified and deducted from the certifiable outcome in accordance with the methodological module.

Absence of leakage shall not be presumed solely from the nature of the project. Where a mechanism is considered inapplicable or immaterial, that conclusion shall be technically justified.

11.3 Permanence

Permanence is the maintenance of the certified environmental benefit during the period defined for the relevant project category.

The project shall undertake a formal commitment to maintain the benefit during the applicable period, consistent with:

- the nature and magnitude of the benefit;
- project category;
- risk of loss;
- certification period;
- monitoring obligations;
- mechanisms for responding to reversals; and
- applicable contractual or legal instruments.

Where necessary, the commitment shall establish responsibilities in the event of transfer of ownership, possession, control, or management, so as to preserve the obligations undertaken during the permanence period.

The permanence period shall be defined by the corresponding methodological module and transparently stated in the project documentation.

11.4 Monitoring and Prevention

Maintenance of the benefit shall be monitored in proportion to the risk and nature of the project.

The following may be used, as applicable:

- remote sensing and satellite imagery;
- inventories and field inspections;
- operational records;
- climate data;

- alert systems;
- fire records;
- land-use and occupation information; and
- other technically suitable means.

For conservation, restoration, or vegetation-cover maintenance projects, remote sensing may be used to detect deforestation, degradation, fires, land-use conversion, fragmentation, and other events capable of affecting the certified benefit.

Detection of a change does not automatically constitute a reversal; the event shall be subject to technical assessment.

The project shall adopt preventive measures proportionate to identified risks, which may include territorial protection, fire prevention and control, inspection, environmental management, monitoring, contractual instruments, insurance, and contingency plans.

11.5 Reversal Risk

A reversal is the total or partial loss of an environmental benefit previously recognized or certified.

Risk assessment shall consider, as applicable:

- natural risks: fires, droughts, extreme weather events, pests, disease, and mortality;
- land-tenure and territorial risks: changes in ownership, possession, or control, conflicts, occupation, and land-use change;
- operational risks: failures in monitoring, maintenance, management, or fulfillment of obligations;
- regulatory and institutional risks: legal, administrative, or institutional changes; and
- other factors relevant to the nature of the project.

Risk shall be determined through a documented and reproducible procedure, taking into account the probability and potential magnitude of loss and the project's specific exposure.

Classification criteria, weights, categories, and thresholds shall be defined by CER V2 or the applicable methodological module.

The assessment shall be reviewed periodically and whenever a material change occurs in the project's risk conditions.

11.6 Reversal Buffer

Where applicable, CER V2 establishes a Reversal Protection Reserve (Buffer Pool) intended exclusively to address future losses of certified environmental benefits.

Assets allocated to the buffer shall:

- be effectively generated and verified;
- remain segregated from marketable assets;
- have their own records and traceability;
- not be counted as a net quantity available for sale; and
- be used only under the conditions established by CER V2.

The quantity allocated to the buffer shall be determined according to the project's reversal risk; no universal percentage shall apply to all categories.

The buffer shall not be used to compensate for:

- calculation errors;
- lack of additionality;
- unaccounted leakage;
- insufficient data;
- methodological noncompliance; or
- other inconsistencies that do not constitute a recognized reversal.

Where a confirmed reversal occurs, use, cancellation, and any replenishment of the buffer shall follow the procedures defined in the applicable module. This parameter applies to all projects subject to reversal risk under CER V2.

The values established herein (5% minimum, 60% maximum) are CeCicle-controlled parameters and may be revised in accordance with methodology governance.

The specific risk-assessment methodology (matrix, weights, criteria) shall be detailed in a supplementary controlled technical document.

Projects with risk above 60% are ineligible to issue assets but may be restructured and reassessed.

11.7 Identification, Quantification, and Treatment of Reversals

Potential reversal events may be identified through remote sensing, field inventories, inspections, proponent notifications, official records, or other reliable evidence.

A reversal shall be characterized by assessing its:

- existence;
- location and period;
- probable cause;
- extent;

- permanence or temporary nature; and
- amount of benefit affected.

The inventory preparer shall quantify the reversal using the methods defined in the methodological module and submit applicable evidence, data, calculation records, and uncertainties.

CeCicle shall analyze and technically validate the reversal, including its characterization, quantification, methodological classification, and any use of the buffer.

CeCicle shall act as a second layer of technical review independent of the proponent, without replacing the inventory preparer's responsibility for producing data and calculations.

Once a reversal is confirmed, the following may be adopted, as applicable:

- use of the buffer;
- cancellation of corresponding units;
- replenishment of the buffer;
- additional monitoring;
- updated risk classification;
- corrective measures; and
- review of protection measures.

Every confirmed reversal shall remain recorded in the project history, including evidence, affected quantity, technical decision, units used or canceled, and measures adopted.

11.8 Responsibilities and Modular Application

Inventory preparer: responsible, where applicable, for identifying and quantifying leakage, conducting monitoring, assessing risks, identifying and quantifying reversals, maintaining evidence, and reporting relevant events.

Proponent: responsible for fulfilling permanence obligations, maintaining the conditions necessary to conserve the benefit, allowing monitoring and verification, and implementing established preventive and corrective measures.

CeCicle: responsible for establishing methodological criteria for leakage, permanence, and risk; defining the buffer mechanism; analyzing and validating reversals; authorizing its use; maintaining records; and ensuring traceability of events and corresponding assets.

The requirements in this Chapter constitute the general CER V2 rules. Each methodological module shall establish, where applicable, leakage mechanisms, materiality criteria, permanence period, risk matrix and classification, buffer quantity, review frequency, and specific monitoring, reversal, and replenishment procedures.

12. Uncertainty and Data Quality

Material inputs shall be subject to appropriate data-quality and uncertainty treatment.

The final methodology shall define:

- accepted data sources;
- uncertainty ranges;
- procedures for missing data;
- conservative assumptions; and
- sensitivity analysis.

Uncertainties associated with relevant data, measurements, models, equations, and parameters shall be identified and treated in accordance with applicable methodological requirements.

Where provided for by the module, uncertainty may be quantified, propagated to the outcome, or used as an adjustment factor or conservatism criterion.

Where uncertainty cannot be adequately quantified, conservative procedures compatible with the risk of overestimation shall be adopted.

13. Monitoring, Reporting, and Verification (MRV)

CER V2 establishes a general Monitoring, Reporting, and Verification (MRV) framework, the specific requirements of which shall be defined according to the project category, environmental outcome assessed, and applicable methodology or module.

For environmental assets subject to ex post issuance, future or projected outcomes do not, by themselves, constitute issuable assets. Issuance shall occur only after monitoring and verification of the relevant period in accordance with applicable requirements.

13.1 MRV Framework

MRV may integrate, as applicable:

- remote sensing;
- geospatial analysis;
- field inventories and measurements;
- environmental and operational data;
- technical documentation;
- administrative records; and

- other technically approved evidence.

The combination of methods shall be defined according to the nature of the environmental outcome, materiality of parameters, data quality, and requirements of the applicable methodology.

13.2 Carbon Inventory

For carbon methodologies requiring a field inventory, such inventory shall be a mandatory component of the MRV process.

The inventory shall follow the stratification criteria, sampling design, field procedures, equations, factors, parameters, and minimum requirements established by the applicable methodology or protocol.

Where remote sensing or other techniques are used together with field data, compatibility among sources and their application in quantification or validation of the outcome shall be demonstrated.

13.3 Monitoring Parameters and Records

Each monitored parameter shall have, as applicable:	Element
Requirement	Parameter
Variable or indicator monitored	Method
Procedure used to obtain or determine it	Frequency
Measurement interval or event	Responsible Party
Party responsible for collecting, processing, or maintaining the data	Evidence
Record demonstrating the result obtained	Verification

How the data or result is assessed

Records shall allow identification of the data source, reference period, method used, and corresponding verification status.

13.4 MRV Plan by Project or Methodology

Each project category shall have MRV requirements compatible with its environmental outcomes and methodological risks.

CER V2 establishes the general principles and requirements for MRV, while the applicable methodology, module, or protocol shall define, where necessary:

- monitored parameters;
- methods and procedures;
- monitoring frequency;
- responsibilities;
- data-quality requirements;
- required evidence;
- control and validation criteria; and
- verification procedures.

Accordingly, each project shall have an MRV plan applicable to its scope; a single monitoring template need not be used for every project category.

13.4.1 Project MRV Table

Parameter	Method	Frequency	Responsible Party	Evidence	Verification
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed
To be completed	To be completed	To be completed	To be completed	To be completed	To be completed

To be completed

13.5 Monitoring and Verification Chain

CeCicle shall maintain a documentary chain allowing the following relationship to be established:

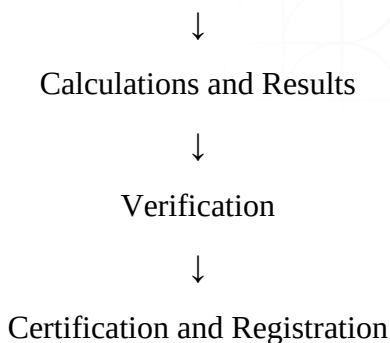
Initial Condition / Reference Assessment



Periodic Monitoring



Data and Evidence



Information used in quantification and certification shall remain traceable to the relevant monitoring period and supporting evidence.

13.6 Ex Post Issuance and Control of Results

Where applicable, only environmental outcomes actually monitored and subject to verification may support issuance of environmental assets.

Projected, potential, or estimated outcomes for future periods may be used for planning, feasibility analysis, or projection purposes, but shall not be treated as verified outcomes or issuable assets until they meet the applicable monitoring, quantification, and verification requirements.

Issuance shall be linked to the monitored period, applicable methodology and version, verified outcome, and corresponding certification record.

14. Evidence, Data Integrity, and Traceability

Environmental claims shall be supported by identifiable and traceable evidence within the geographic, temporal, and methodological boundaries defined for the project.

14.1 Evidence Requirements

Evidence used to support material environmental claims shall, as applicable:

- have an identifiable source;
- be associated with the relevant period;
- be preserved in a controlled record;
- have verifiable integrity; and
- be linked to the calculation, conclusion, or decision it supports.

The nature, quality, origin, and level of control of evidence shall be compatible with the materiality and requirements of the environmental outcome assessed.

14.2 Digital Integrity and Traceability

CeCicle's digital architecture may use blockchain, cryptographic records, hashes, timestamping, and other technological mechanisms to strengthen the integrity, provenance, and traceability of evidence, documents, calculations, and certified outcomes.

Blockchain registration constitutes an integrity and traceability layer and does not replace:

- environmental measurements and data;
- documentary evidence;
- scientific analysis;
- methodological assessment;
- calculations;
- verification; or
- professional judgment.

A digital record demonstrates the existence and integrity of the associated record at a given time, but does not, by itself, establish the truth or environmental validity of its content.

14.3 Chain of Evidence

The CER V2 chain of evidence shall allow the following relationship to be established, as applicable:

Claim → Evidence → Source → Assessment → Calculation → Outcome → Verification
→ Certification → Digital Record → Disclosure

This chain shall allow reconstruction of the relationship between the environmental claim, supporting data, procedures used, outcome obtained, and corresponding certification decision.

Each certified outcome shall have sufficient identification and records to allow traceability to the project, applicable methodology and version, monitored period, evidence used, and corresponding certification record.

14.4 Data Control and Preservation

Data, documents, evidence, and records used in the certification process shall be retained in an appropriate format and for the applicable retention period.

Relevant changes to data or records shall be controlled and, where applicable, retain sufficient history to identify the prior version, change made, justification, and person responsible for the record.

Data integrity shall be assessed in a manner compatible with its origin, purpose, materiality, and use in the certification process.

14.5 Certification Traceability

The record structure shall allow the following relationship to be established:

Project → Methodology → Period → Data → Evidence → Calculations → Verification → Certified Outcome → Identifier

Use of digital technology or blockchain does not alter the methodological requirements applicable to the project or, by itself, confer environmental validity on the recorded outcome.

Traceability mechanisms may evolve technologically without compromising continuity, integrity, or reconstruction of historical records.

15. Verification and Certification

Verification is the assessment of the conformity of project documentation, evidence, monitoring records, data, and calculations with the applicable methodology and certification requirements.

15.1 Verification

Verification shall assess, as applicable:

- compliance with the methodology and its applicable version;
- compliance with eligibility criteria and defined boundaries;
- consistency of submitted evidence and data;
- application of applicable methods, parameters, equations, and factors;
- consistency of calculations and outcomes;
- compliance with monitoring and traceability requirements; and
- application of relevant methodological treatments.

The assessment shall be conducted with technical independence from the proponent, using competence, impartiality, and conflict-of-interest safeguards compatible with the certification process.

15.2 CeCicle Responsibilities

Under the CER V2 system, CeCicle may be responsible, as applicable, for:

- establishing and maintaining technical and methodological criteria;
- assessing conformity of the methodology and its application;
- conducting technical review of data supplied by the inventory preparer;

- assessing submitted evidence, calculations, and outcomes;
- conducting the conformity assessment and verification process;
- determining or reviewing the outcome eligible for certification;
- issuing the certification decision; and
- registering and maintaining traceability of certified outcomes.

CeCicle shall not replace the inventory preparer in producing primary data, conducting the inventory, or preparing technical calculations where those activities are assigned to the inventory preparer under the applicable methodology.

15.3 Certification

Certification is the formal decision recognizing the verified environmental outcome within the scope and criteria actually assessed.

Certification shall not imply environmental performance beyond the aspects assessed.

15.4 Verification and Certification Protocol Requirements

The final verification and certification protocol shall establish:

- verifier competence and independence;
- materiality;
- sampling;
- treatment of findings and nonconformities;
- corrective actions;
- certification decision;
- conditions, suspension, or withdrawal of certification; and
- appeal or challenge procedures.

Certification procedures shall not alter the substantive requirements of the methodology, unless expressly authorized through the methodological governance process.

16. Environmental Co-benefits and Multi-Criteria Approach

16.1 General Principle

CER V2 adopts a multi-criteria approach, allowing identification, quantification, and monitoring of environmental outcomes and, where applicable, social outcomes in addition to GHG-related outcomes.

Accounting for each benefit shall be supported by criteria, indicators, calculation methods, and evidence compatible with its nature. The existence of a benefit does not, by itself, imply its certification or its establishment as an independent environmental asset.

Indicators shall be selected according to the benefit-generation mechanism and the impacts actually produced by the project.

16.2 Environmental Indicators and Metrics

Depending on the nature of the project, the following may be assessed, among others:

- water preserved or saved;
- energy saved or embodied;
- fuel or oil avoided;
- waste diverted or landfill space avoided;
- materials recycled or reused;
- vegetation cover conserved or restored;
- equivalent trees preserved or restored;
- reduction of air emissions;
- conservation of natural resources, soil, and biodiversity;
- recovery of degraded areas; and
- other outcomes defined by the methodological modules.

Each indicator shall have a definition, unit, reference condition, assessment period, data source, measurement and calculation method, conversion factors, relevant uncertainties, evidence, and validation criteria, as applicable.

16.3 Reference Condition and Quantification

Where the outcome depends on a comparison between conditions, a technically justifiable reference condition shall be established. It may represent the pre-project situation, the expected condition in the absence of the project, conventional performance, or another condition suitable for the mechanism assessed.

The reference shall not be defined so as to artificially overstate the benefit attributed to the project.

Conceptually:

Benefit = Observed Outcome – Reference Condition

Where applicable, losses, efficiency, quality, conversion factors, uncertainties, portions not attributable to the project, and other adjustments defined by the module shall also be considered.

Where the benefit depends on a baseline and additionality, the requirements of Chapter 7 shall be observed.

16.4 Evidence, Monitoring, and Traceability

Declared outcomes shall be supported by verifiable evidence and allow traceability of the following chain:

Activity → Data → Indicator → Method → Outcome → Evidence → Recognized or Certified Outcome.

Evidence may include measurements, operational records, inventories, laboratory analyses, official documents, images, sensor data, field surveys, contracts, and other technically relevant records.

Indicators shall be monitored according to their nature and the frequency defined by the module, allowing identification of maintenance, improvement, or loss of the benefit and the need to update calculations.

Relevant uncertainty shall be identified and, where applicable, quantified and treated under the specific methodological criteria.

16.5 Social Co-benefits and SDGs

Where applicable, social outcomes related to the project may be recognized, such as job creation, training, local development, productive inclusion, improved working conditions, community participation, and environmental education, provided they are supported by suitable indicators and evidence.

Outcomes may also be linked to the United Nations Sustainable Development Goals (SDGs) by demonstrating the relationship between:

Activity → Measured Outcome → Indicator → Related Target/SDG.

Association with an SDG shall arise from a demonstrable outcome or impact and shall be presented as the project's contribution, not as certification of full achievement of the SDG.

Potential or expected outcomes shall be clearly distinguished from those actually observed, measured, validated, or certified.

16.6 Multi-Criteria Approach and Double Counting

Different outcomes from the same activity may be accounted for simultaneously where they represent conceptually distinct, measurable, and technically demonstrable benefits.

Duplicate accounting or claims for the same outcome shall be avoided among:

- environmental indicators;

- environmental assets;
- credits or certificates;
- environmental programs;
- corporate inventories; and
- recognition systems or other mechanisms.

Where a causal relationship exists among indicators, it shall be documented, preserving the distinction between the physical outcome generated and its different forms of representation.

16.7 LULUCF and Carbon Accounting

Where applicable, projects relating to forests, land use, land-use change, conservation, restoration, rehabilitation of degraded areas, or ecosystem management shall observe accounting principles associated with the Land Use, Land-Use Change and Forestry (LULUCF) sector.

Accounting shall distinguish, according to the nature of the project:

- carbon stocks and changes in stocks;
- CO₂ removals;
- emissions resulting from land-use changes;
- emissions associated with project activities;
- flows among reservoirs; and
- other relevant sources and sinks.

Carbon reservoirs shall be defined according to their relevance, measurability, and module requirements and may include above- and below-ground biomass, dead organic matter, litter, soil organic carbon, wood products, and other relevant reservoirs.

For conservation projects, existing carbon stock shall be distinguished from the additional benefit attributable to the certified activity. The mere existence of forest stock does not, by itself, constitute removal or a carbon credit. The outcome shall arise from comparison between the observed condition and the applicable baseline, subject to additionality criteria and other CER V2 adjustments.

Remote sensing may be integrated with field data to characterize and monitor land cover and use, cover changes, degradation, regeneration, fragmentation, fires, vegetation dynamics, and other relevant variables.

Adoption of LULUCF principles does not imply automatic eligibility to generate carbon credits.

16.8 Modular Application and Responsibilities

The requirements in this Chapter constitute CER V2's general framework for multi-criteria assessment. Methodological modules shall establish, according to project type, applicable indicators, quantification methods, data sources, conversion factors, frequency, uncertainties, evidence, validation criteria, certification requirements, and registration rules.

The inventory preparer is responsible for identifying and measuring applicable outcomes, collecting and organizing data, performing calculations, submitting evidence, and maintaining traceability.

The proponent is responsible for providing information, allowing data collection, implementing actions related to declared outcomes, maintaining records, and reporting relevant changes.

CeCicle is responsible for establishing methodological criteria, assessing the suitability of metrics and evidence, reviewing calculations, assessing consistency of claims, validating outcomes where applicable, and determining which outcomes meet requirements for recognition or establishment as environmental assets.

Indicators and procedures shall be applied only within their domain of applicability, taking into account the environmental, territorial, and operational characteristics of each project.

17. Issuance, Buffer, and Asset Governance

17.1 General Principle

CER V2 distinguishes among projected outcomes, monitored outcomes, verified outcomes, certified and issued assets, assets allocated to a buffer, and assets transferred, retired, or canceled.

Projected or estimated outcomes do not constitute issued assets and shall not be presented as existing certified assets.

Issuance shall occur only after applicable methodological, monitoring, and review requirements for the relevant period have been met.

17.2 Verification and Determination of Issuable Quantity

For each certification period, the following shall be assessed, as applicable:

- project boundaries and conditions;
- monitoring data and observed outcomes;
- baseline and additionality;
- leakage;
- uncertainties and other methodological adjustments;

- permanence and reversal risk;
- double counting;
- quantity allocated to the buffer; and
- net quantity eligible for issuance.

The issuable quantity shall result from application of the criteria in the corresponding methodological module.

Conceptually:

Gross Outcome → Methodological Adjustments → Eligible Net Outcome → Buffer → Net Issuable Quantity.

The buffer shall be treated separately from adjustments for uncertainty, leakage, double counting, lack of additionality, or insufficient evidence, and shall not be used to compensate for methodological failures.

17.3 Reversal Buffer

CER V2 establishes a Reversal Reserve Mechanism (CER Reversal Buffer) for managing future losses of certified environmental benefits subject to reversal risk.

Assets allocated to the buffer shall be effectively generated and verified, have their own identification and records, and remain segregated from assets available for sale.

The quantity or percentage allocated to the buffer shall be determined according to reversal risk under the applicable methodological module; CER V2 does not establish a universal percentage for all project categories.

Assets held in the buffer shall not be sold while they remain in that status.

17.4 Reversal and Use of the Buffer

A potential reversal shall be identified, documented, and technically assessed. Once confirmed, the loss shall be quantified and subject to the applicable review by CeCicle.

Treatment may include, in accordance with the module's rules:

- use or cancellation of buffer assets;
- cancellation of affected assets;
- replenishment of the buffer;
- updated risk level;
- additional monitoring; and
- preventive or corrective measures.

- Every occurrence shall remain recorded, including its cause, extent, affected assets, treatment adopted, and any replenishment of the buffer.

Use of the buffer does not eliminate the need to investigate the cause of the reversal and implement measures to prevent or correct it.

17.5 Asset Identification and Traceability

Each issued asset shall have a unique, non-reusable identifier.

The record shall allow traceability, as applicable, to:

- project and proponent;
- inventory preparer;
- methodology and version;
- applicable module;
- generation period;
- location or spatial unit of origin;
- quantity issued and quantity allocated to the buffer;
- verification and issuance dates;
- ownership;
- transfers;
- retirement, cancellation, or withdrawal from circulation;
- use for a declared environmental purpose; and
- relevant changes during the asset life cycle.

The traceability chain shall allow reconstruction of:

Project → Monitoring → Verification → Issuance → Record → Transfer → Retirement/Cancellation.

17.6 Digital Registry and Governance

CeCicle shall maintain a digital registry of certified assets and relevant events, ensuring:

- uniqueness;
- integrity;
- traceability;
- transparency;

- prevention of double issuance and double counting;
- buffer segregation;
- ownership control; and
- preservation of history.

Where applicable, blockchain technology may be used as an additional layer for registration, integrity, and traceability.

The digital record or blockchain does not replace technical documentation, calculations, evidence, or review and validation procedures.

Issuance of an asset does not guarantee price, liquidity, sale, or acceptance by any particular market, program, or jurisdiction.

17.7 Transfer, Retirement, and Cancellation

Transfer of ownership shall be recorded, preserving the asset's identification and history.

Retirement or withdrawal from circulation shall prevent subsequent use for another environmental or commercial purpose.

Cancellation shall be recorded when required by the methodology or arising from events such as reversal, material error, duplication, regulatory requirement, or another event provided for by applicable rules.

17.8 Correction of Errors

Where a material error is identified after issuance, CeCicle shall assess its impact on affected assets and adopt appropriate measures, which may include correcting a record, adjusting a balance, cancellation, supplementary issuance, or notifying affected holders.

Correction shall preserve the history and traceability of events without deleting relevant prior records.

17.9 Responsibilities and Modular Application

Inventory preparer: produce and organize technical data, conduct monitoring, calculate outcomes, submit evidence, and identify and quantify any reversals.

Proponent: provide information, maintain conditions necessary to execute the project, fulfill commitments, report relevant events, and implement preventive or corrective measures.

CeCicle: establish issuance and buffer criteria, review documentation and outcomes, validate the eligible quantity, allocate to the buffer, issue and register assets, and control subsequent events.

CeCicle's role shall remain technically separate from that of the proponent, preserving analytical independence from the expected economic outcome.

Methodological modules shall establish project-category-specific requirements for issuance, certification period, verification, calculation, buffer, reversal, replenishment, cancellation, transfer, and retirement.

18. Methodology Governance

18.1 Control and Versioning

CER V2 shall be maintained under a controlled version system, ensuring that changes to the methodological framework are recorded, traceable, and consistent.

Material changes to equations, factors, eligibility criteria, monitoring requirements, permanence, verification, or certification criteria shall be formally documented, assessed, and approved before application.

18.2 Identification of Applied Version

Each certification shall unequivocally identify the methodology version used, including, as applicable, modules, procedures, or specific requirements applied to the project.

The version used shall remain linked to the corresponding technical records, evidence, calculations, outcomes, and certification documents.

18.3 Nomenclature and Classification Control

Historical nomenclature or incorrect classifications identified in prior materials shall not be reproduced in the application of CER V2.

Project classification shall follow the category, methodology, or module approved and actually applicable to the project, maintaining consistency among technical documentation, certification records, and communications of results.

19. References and Technical Basis

19.1 Integrated Methodological Basis

CER V2 — CeCicle Environmental Reductions is an independent, integrated, multi-criteria methodological framework developed by CeCicle through the integration, harmonization, and technical adaptation of different methodologies, standards, norms, scientific references, and national and international regulatory frameworks.

This approach allows different perspectives on greenhouse gas accounting, land use and forestry (LULUCF), environmental conservation, natural resources, sustainability, environmental performance, socio-environmental impacts, governance, and sustainable development to be combined within a single methodological framework, according to the nature and applicability of each project.

CER V2 does not, therefore, represent the isolated application of a single external standard. References are selected, made compatible, and adapted according to purpose, scope,

applicability, and version, forming a single methodology for identifying, quantifying, monitoring, verifying, and certifying environmental outcomes.

Use of external references as a technical basis does not imply certification, validation, or full adoption of the respective standards.

19.2 Hierarchy and Application of References

Application of CER V2 shall follow the following order of precedence:

- applicable laws and regulations;
- CER V2 requirements;
- applicable methodological module;
- CeCicle technical procedures and documents;
- recognized technical standards, norms, and references; and
- scientific literature and verifiable technical data.

In the event of a conflict, applicable law shall prevail. The reference used for each project shall be identified by purpose, version, and applicability, allowing its use in the certification process to be traced.

19.3 Principal International Technical References

Depending on the category and applicable methodological module, CER V2 may incorporate IPCC references, including guidelines and guidance relating to greenhouse gas accounting, land use, land-use change, forestry, and AFOLU.

GHG Protocol references may also be used, particularly to harmonize GHG accounting and reporting concepts and practices, subject to the scope actually covered by each standard and its applicable version.

For sustainability and disclosure, references from GRI, SASB, ISSB/IFRS S1 and S2, ESRS/EFrag, TCFD, and OECD may be considered where relevant to the project.

These references serve as complementary technical bases for CER V2 and do not replace its own methodological criteria and requirements.

19.4 Brazilian References and Regulatory Framework

Application of CER V2 shall comply with Brazilian law applicable to the project, including, according to its nature:

Federal Constitution;

- Law No. 9,985/2000 — National System of Conservation Units (SNUC);
- Law No. 14,119/2021 — National Policy for Payment for Environmental Services;

- Law No. 15,042/2024 — Brazilian Emissions Trading System (SBCE);
- applicable environmental, forestry, land-tenure, and water-resources legislation;
- rules relating to the Rural Environmental Registry (CAR), protected areas, environmental licensing, and other relevant obligations; and
- regulations applicable to the Green Rural Product Certificate (CPR Verde), where used as a legal instrument for the project.

Applicable laws and regulations shall be verified and updated in accordance with the legal framework in force.

19.5 Scientific References and Technical Parameters

Methods, equations, models, emission factors, conversion factors, biomass data, environmental parameters, and other technical elements used in quantification shall have a verifiable source and demonstrated applicability.

Selection shall consider, as applicable:

- scientific relevance;
- geographic and ecological applicability;
- compatibility with the project;
- data quality and representativeness;
- limitations and uncertainties; and
- currency of the reference.

Where relevant, the author or institution, publication, year, version, source, purpose of use, and other information necessary for traceability shall be recorded.

19.6 Control and Updating of the Methodological Basis

CeCicle shall maintain a procedure for reviewing and updating the technical and legal basis of CER V2, taking into account legislative changes, methodological updates, scientific advances, new technical references, verification results, methodological risks, and developments in market practices.

Changes that materially affect certification criteria shall be incorporated through formal version control, defining their applicability to existing and future projects.

An update to an external reference shall not automatically change the requirements applicable to a project already certified, unless required by law or a specific provision of CER V2 or the applicable methodological module.

19.7 Project References and Traceability

Each project shall identify the principal references actually used in its design, quantification, monitoring, and verification.

Where applicable, the following relationship shall be traceable:

Reference → Purpose → Parameter or Procedure → Application in the Project → Evidence.

Documentation shall clearly distinguish among CER V2 methodological requirements, legal requirements, technical references, observed data, estimated data, hypotheses, parameters, and methodological decisions, ensuring transparency, auditability, and traceability of certified outcomes.

Appendix A — Project Documentation Architecture

Layer	Document / Function	Primary Responsibility
1	Methodological Standard	CeCicle
2	Certification and Verification Protocol	CeCicle / Approved Verification Function
3	Project Design Document (PDD)	Project / Inventory Developer
4	Monitoring Report / MRV Records	Inventory Developer / Project
5	Verification Record	Independent Verification Function / CeCicle Ce
6	Certification Record and Public Registry	CeCicle
7	Digital Evidence Registry / Blockchain	CeCicle Digital Infrastructure

This architecture keeps generic methodological rules separate from project-specific facts, preventing any individual project from effectively becoming the definition of the methodology.

Layers 1 through 4 correspond to the system's four functional layers described in Chapter 4. Layers 5 through 7 provide further operational detail on the functions of verification, certification, and digital traceability.

Appendix B — Parameters Pending Confirmation Against CER 2026

The following items remain pending confirmation against the official CER 2026 methodology. No value has been estimated or invented in this document.

Pending Item
Official names and definitions of all methodological criteria (including CeCicle’s “six mitigation criteria,” if applicable)
Exact equations and numerical coefficients for each quantification pathway
Minimum stratification and sampling design requirements
Baseline and additionality tests, and required evidence
Approved emission and conversion factors, and source hierarchy
Formal treatment of uncertainty and data quality
Leakage calculation or conservative treatment
Risk-based buffer formula, categories, minimums, and maximums
Detailed reversal compensation rules
Specific 40-year permanence provisions and contractual requirements
Verifier competence, independence, materiality, and sampling requirements
Issuance, transfer, retirement, and cancellation rules
Specific blockchain network, hashing, storage, and registry specifications
Eligibility thresholds and legal requirement tests
Monitoring frequencies and remote sensing requirements

Appendix C — CeCicle Methodological Identity

Component	CeCicle Position
Accounting	Hybrid flow + stock approach
Carbon reservoirs	AGB, BGB, SOC, dead wood, and litter
Spatial analysis	Evidence-based stratified assessment
Baseline	Counterfactual assessment of conservation/conversion
Additionality	Environmental outcome attributable to the project
MRV	Remote sensing + field inventory + documentary evidence
Verification	Ex post verification for issuance
Permanence	Long-term commitment + monitoring + buffer + applicable insurance
Multi-criteria approach	Carbon + quantified environmental co-benefits
Traceability	Blockchain, timestamping, and cryptographic integrity of records
Governance	Separation among owner, inventory preparer, and certifier

This appendix is a summary of positioning and does not replace the Standard’s operative requirements.

Appendix D — Reversal Buffer

1. Basis

The buffer is mandatory for projects subject to reversal risk and is intended exclusively to address future losses of certified environmental benefits.

2. Application Range

Parameter	Value
Mandatory minimum buffer	5% (five percent)
Maximum permissible buffer	60% (sixty percent)
Buffer above 60%	Project ineligible to issue assets
Fixed universal percentage	Not applicable — the buffer is calculated by project based on risk

2.1 Rationale for Limits

5% minimum:

- Recognizes that no project has zero reversal risk.
- Establishes a protection floor even for low-risk projects.
- Aligned with market practices that adopt minimums between 5% and 10%.

60% maximum:

- Above 60%, the buffer's opportunity cost makes the project economically unviable.
- Aligned with Verra (VCS), which uses 60% as an eligibility limit.
- Projects with risk above 60% do not meet minimum permanence conditions for certification.

Ineligibility above 60%:

- The project is not rejected entirely and may be restructured to reduce risk.
- After restructuring, risk shall be reassessed.
- If, after restructuring, risk remains above 60%, the project is ineligible to issue carbon or environmental assets.

3. Risk Calculation Methodology

The buffer is calculated based on three risk categories, each with its own score; their sum determines the final percentage.

3.1 Risk Categories

Category	Maximum Weight	Description
Internal Risks	35%	Management, financial viability, technical capacity, opportunity cost, project longevity
External Risks	20%	Land tenure, conflicts, governance, political instability, legal framework
Natural Risks	35%	Fires, pests, droughts, extreme weather events, mortality
Maximum Total	90%	—

Note: The theoretical maximum total is 90%, but the eligibility limit is 60%. Projects scoring between 60% and 90% are ineligible.

3.2 General Formula

Buffer (%) = Internal Risks + External Risks + Natural Risks

Subject to: Minimum buffer = 5%; Maximum buffer = 60%; If Buffer > 60% → Project ineligible.

3.3 Calculation Steps

Assessment of Internal Risks (0–35%)

- Management and technical capacity
- Financial viability
- Opportunity cost
- Project longevity
- Community engagement

Assessment of External Risks (0–20%)

- Land tenure and rights
- Land conflicts
- Local governance
- Political instability
- Legal and regulatory framework

Assessment of Natural Risks (0–35%)

- Fires

- Pests and diseases
- Droughts
- Extreme weather events
- Mortality

Sum and Application of Limits

- If the sum is below 5%, apply the 5% minimum buffer.
- If the sum is between 5% and 60%, apply the calculated value.
- If the sum is above 60%, the project is ineligible.

4. Risk Classification Table

Buffer Range	Classification	Eligibility	Action
5%–15%	Low Risk	Eligible	Buffer applied; standard monitoring
16%–30%	Moderate Risk	Eligible	Buffer applied; enhanced monitoring
31%–45%	High Risk	Eligible	Buffer applied; mandatory mitigation measures
46%–60%	Very High Risk	Eligible with restrictions	Buffer applied; mandatory contingency plan; annual review
Above 60%	Critical Risk	Ineligible	Project may not issue assets; it must be restructured

5. Buffer Review and Updating

5.1 Frequency

Event	Action
At each verification	Reassess risk; adjust buffer if necessary
Annually	Minimum mandatory review for high- or very-high-risk projects
Reversal event	Immediate reassessment; replenish the buffer
Material change	Reassessment whenever there is a material change in risk conditions

5.2 Buffer Adjustment

- Buffer reduction: permitted where risk is demonstrably reduced.
- Buffer increase: mandatory where risk increases.

- Replenishment: after use of the buffer to cover a reversal, the proponent shall replenish the balance to the calculated level.

6. Use of the Buffer

6.1 When the Buffer May Be Used

- Confirmed reversal technically validated by CeCicle.
- Total or partial loss of a previously certified benefit.
- Event recognized as a reversal.

6.2 When the Buffer May NOT Be Used

- Calculation errors.
- Lack of additionality.
- Unaccounted leakage.
- Insufficient data.
- Methodological noncompliance.
- Any inconsistency that does not constitute a recognized reversal.

6.3 Use Procedure

1. Identify the event.
2. Document the reversal.
3. Inventory preparer quantifies the loss.
4. CeCicle technically validates the loss.
5. Authorize use of the buffer.
6. Cancel corresponding units.
7. Replenish the buffer.
8. Record the event in the project history.

7. Segregation and Traceability

Requirement	Application
Segregation	Buffer assets remain separate from marketable assets.
Identification	Each buffer asset has a unique, non-reusable identifier.
Registry	Maintained in a digital registry controlled by CeCicle.

Non-marketing	Buffer assets may not be sold, transferred, or retired while held in this status.
Transparency	The buffer percentage and balance shall be public in the certification registry.

8. Responsibilities

Party	Responsibility
Inventory Preparer	Assess risk, calculate the buffer, monitor, identify reversals, and quantify losses.
Proponent	Implement preventive measures, maintain conditions, allow monitoring, and replenish the buffer.
CeCicle	Validate risk assessment, approve the buffer, authorize use, maintain the registry, and ensure traceability.

9. Final Provisions

- This parameter applies to all projects subject to reversal risk under CER V2.
- The values established herein (5% minimum, 60% maximum) are CeCicle-controlled parameters and may be revised in accordance with methodology governance.
- The specific risk-assessment methodology shall be detailed in a supplementary controlled technical document.
- Projects with risk above 60% are ineligible to issue assets but may be restructured and reassessed.
- This annex enters into force on the date of approval by CeCicle governance.

10. Parameters Pending Confirmation (CER 2025)

Item	Status
Exact risk-assessment matrix	Pending
Exact review frequency for each risk band	Pending
Exact buffer-replenishment procedure	Pending
Transition rules for projects already certified	Pending
Interaction with applicable insurance	Pending