

BIOCARBON WASTE AND CIRCULARITY STANDARD (BWCS)

BIOCARBON CERT®

DRAFT FOR PUBLIC CONSULTATION VERSION 1.0 | OCTOBER
9, 2026

Draft for public consultation

© 2026. BIOCARBON CERT®. All rights reserved. No part of this publication may be reproduced without the express authorization of BIOCARBON CERT.

BIOCARBON CERT. 2026. BIOCARBON WASTE AND CIRCULARITY STANDARD (BWCS). Draft for public consultation Version 1.0. October 9, 2026. 68 p. <http://www.biocarbonstandard.com>

Contents

1	Introduction	9
2	Objectives	9
2.1	Environmental and social objectives	9
2.2	Outcome-oriented approach	10
3	Scope and exclusions	10
3.1	Global and multimaterial application	10
3.2	Eligible activities	11
3.3	Excluded activities	13
3.4	Enabling specific pathways	14
4	Normative and documentary framework	15
4.1	Documents and hierarchy	15
4.2	Normative references	15
4.3	External references	16
4.4	Methodology development and approval	16
4.5	Versions and transition	17
5	Principles	17
5.1	Scientific basis and life cycle perspective	17
5.2	Integrity and conservativeness	18
5.3	Traceability and transparency	18
5.4	Inclusion and proportionality	18
6	Governance and responsibilities	19
6.1	BioCarbon Cert	19
6.2	Project participants	19
6.3	Independence and competence of CABs	20
6.4	Registry platform	20

6.5	Conflicts of interest.....	21
7	Outcome categories and nature of VWCCs	21
7.1	Outcome categories.....	21
7.2	Activities and attributes	22
7.3	Verified Waste and Circularity Credits	22
7.4	Single recognition pathway	23
7.5	Outcome Specification	23
8	Project eligibility and configuration.....	24
8.1	Admission requirements	24
8.2	New activities and improvements.....	24
8.3	Individual and grouped projects.....	25
8.4	Continuity.....	25
9	Legal compliance and regulatory interaction.....	25
9.1	Applicable legal requirements.....	25
9.2	EPR and other regulatory instruments.....	26
9.3	Certifications and incentives.....	26
9.4	Updating and reconciliation	27
10	Rights over activities, outcomes, and units.....	27
10.1	Rights to conduct activities	27
10.2	Differentiated rights	27
10.3	Agreements among participants.....	28
10.4	Benefit sharing	28
11	Start date, periods, and renewal	29
11.1	Start date	29
11.2	Time-related admission conditions.....	29
11.3	Recognition period	29

11.4	Renewal	30
12	Project boundaries and traceability	30
12.1	Delineation	30
12.2	Physical evidence and chain of custody	31
12.3	Financial evidence.....	31
12.4	Evidence of rights and outcomes.....	31
12.5	Chain reconciliation	32
13	Baseline and additionality.....	32
13.1	Baseline scenario	32
13.2	Regulatory surplus.....	33
13.3	Causal additionality	34
13.4	Review of changes and renewal.....	34
14	General quantification requirements	35
14.1	Methodological application.....	35
14.2	Requirements by category.....	35
14.3	Quantities, composition, and quality	36
14.4	Uncertainty and displacement	37
15	Attribution and prevention of double counting.....	37
15.1	Exclusivity of the outcome	37
15.2	Stages and successive cycles	38
15.3	Financing and allocation	38
15.4	Coexistence with other instruments.....	38
16	Environmental integrity and sustainable development safeguards	39
16.1	Prevention of adverse impacts.....	39
16.2	Risks and duration	40
16.3	Waste pickers and livelihoods.....	40

16.4	Remuneration, health, and safety	41
16.5	Rights, equity, and consent	41
16.6	Contributions to the Sustainable Development Goals.....	42
17	Participation, transparency, and complaints.....	42
17.1	Identification and consultation	42
17.2	Public information	42
17.3	Confidentiality.....	43
17.4	Complaints and appeals.....	43
18	Monitoring, data, and documentation	44
18.1	Plan and report.....	44
18.2	Quality and retention	45
18.3	Digital systems	46
18.4	Access for assessment.....	46
19	Audit and conformity determination.....	46
19.1	Audit of the project and outcomes	46
19.2	Planning and performance.....	47
19.3	Findings and CAB documents	47
19.4	Conformity determination	48
20	Registry and unit life cycle.....	49
20.1	Project identification and status.....	49
20.2	Issuance and registration.....	49
20.3	Serialization, balances, and movements of VWCCs.....	50
20.4	Transfer, retirement, and cancellation.....	52
21	Claims and conditions of use.....	52
21.1	Supported claims.....	52
21.2	Limits on claims	53

21.3	Names and marks	53
21.4	Public corrections.....	53
22	Changes and noncompliance	54
22.1	Project changes	54
22.2	Errors and improperly recognized outcomes.....	54
22.3	Measures and due process.....	55
22.4	Closure.....	56
23	Entry into force and transitional provisions.....	56
23.1	Adoption and entry into force.....	56
23.2	Operational enablement	56
23.3	Transition between versions	57
24	References.....	57
	Annex A. Terms and definitions.....	60
	Annex B. Requirements for the Development and Approval of Methodologies	65

Acronyms and abbreviations

BRS	Basel, Rotterdam and Stockholm Conventions
BWCS	BioCarbon Waste and Circularity Standard
CAB	Conformity assessment body
EPR	Extended producer responsibility
ERP	Enterprise resource planning
GCT	Global Carbon Trace, Registry Operator
ILO	International Labour Organization
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization / International Electrotechnical Commission
LCA	Life cycle assessment
SDS	Sustainable Development Safeguards
SDGs	Sustainable Development Goals
UNEP	United Nations Environment Programme
VWCC	Verified Waste and Circularity Credit

1 Introduction

The BioCarbon Waste and Circularity Standard (BWCS) establishes an international, multimaterial framework for developing, auditing, recognizing, and registering additional outcomes related to the prevention of waste and material losses, preservation of the function of products and components, material recirculation, recovery of biological resources and nutrients, and recovery of waste from the environment.

BioCarbon administers the Program, approves its methodologies and tools, authorizes and oversees conformity assessment bodies, performs conformity determinations, and decides on project registration and closure and on the issuance, temporary immobilization, correction, and cancellation of VWCCs.

The BWCS operates through a single recognition pathway: demonstration of achieved additional outcomes, independent audit, BioCarbon's conformity determination, and ex post issuance of Verified Waste and Circularity Credits.

The Program distinguishes among the overall performance of an operation, the characteristics of a material or product, the total quantities managed, the additional outcome attributable to an intervention, and its environmental consequences. Quantities managed shall not automatically become VWCCs. Nor shall they, by themselves, constitute evidence of prevention, circularity, material substitution, or net environmental benefit.

VWCCs do not represent greenhouse gas emission reductions or removals, climate offsets, physical recycled content in a product, or universal environmental equivalence. Climate, water, or biodiversity outcomes shall be assessed separately under the applicable programs and methodologies.

This Standard contains the common rules of the Program. Methodologies define the technical application for specific activities and outcomes; tools and modules elaborate cross-cutting requirements; procedures govern assessment, registration, and use of VWCCs; and forms organize information and evidence. No procedure, form, contract, clarification, or guidance may reduce or modify a substantive requirement of this Standard.

2 Objectives

2.1 Environmental and social objectives

The objectives of the BWCS are to:

- (a) promote interventions that prevent waste and material losses, preserve products and components in use, recover materials and nutrients, and remove waste from the environment;

- (b) mobilize financing toward additional, measurable, traceable, and auditable outcomes;
- (c) strengthen the effective participation and working conditions of waste pickers, waste picker organizations, small operators, and other actors in the chain;
- (d) prevent adverse impacts on people, communities, ecosystems, and the quality of recovered materials;
- (e) ensure that recognized outcomes exceed legally enforceable obligations and are not double counted; and
- (f) provide sufficient public information to understand the nature, quantity, period, location, and limitations of each outcome.

Participation in the Program shall not guarantee demand, price, profitability, regulatory acceptance, tax treatment, or recognition by authorities or third parties.

2.2 Outcome-oriented approach

The project shall identify the intervention, the outcome it intends to produce, and the causal relationship between them. At a minimum, this explanation shall identify:

- (a) the situation that would exist without the intervention;
- (b) the activity or decision to be changed;
- (c) the resources, agreements, or incentives that enable the change;
- (d) the outcome to be measured; and
- (e) the evidence by which it will be demonstrated.

The complexity of this demonstration shall be proportionate to the nature and risk of the project. A separate causal model shall not be required when the relationship can be clearly demonstrated through the methodology, operational records, and sufficient contemporaneous evidence.

Complementary environmental and social benefits may be monitored and claimed within their demonstrated scope. They shall not automatically increase the quantity of VWCCs or replace demonstration of the primary outcome.

3 Scope and exclusions

3.1 Global and multimaterial application

The Program may be applied to post-consumer and post-industrial products, components, materials, and biological streams. It may encompass plastics, paper and cardboard, glass, metals, composite materials, textiles, electrical and electronic equipment, construction and demolition materials, food, organic waste, and nutrients.

Inclusion of a stream in the general scope shall not automatically enable recognition of outcomes or issuance of VWCCs. Each project shall apply an approved BWCS methodology that expressly covers the material or product, activity, outcome, recognition point, and applicable conditions.

3.2 Eligible activities

An activity may be conducted under the BWCS when it produces, or demonstrably makes a necessary contribution to, an outcome within one of the categories recognized by the Program. Inclusion of an activity in this subsection shall not automatically enable its registration, audit, conformity determination, or issuance of VWCCs.

Every activity shall:

- (a) fall within the material and geographic scope of the BWCS;
- (b) comply with the laws, permits, and conditions applicable to materials, facilities, products, participants, movements, and end uses;
- (c) be covered by a current methodology and Outcome Specification;
- (d) have clearly defined boundaries, participants, streams, facilities, processes, destinations, and recognition points;
- (e) generate real and achieved outcomes that can be measured, traced, and independently audited;
- (f) demonstrate the quality, fitness, function, destination, or effective use required for the applicable outcome;
- (g) comply with requirements concerning rights, chain of custody, safeguards, monitoring, uncertainty, and prevention of double counting; and
- (h) demonstrate the baseline, regulatory surplus, additionality, and attribution in accordance with this Standard and the applicable methodology.

The following classes of activities may be eligible:

Activity class	Activities covered	Outcome eligible for recognition
Prevention and reduction at source	Demonstrable changes in products, processes, procurement, inventories, distribution, or service delivery that avoid the generation of waste or material losses for an equivalent function. Includes prevention of food and material losses during production, storage, or distribution.	Additional and verifiable reduction in waste or material losses relative to the baseline scenario.
Reuse and redistribution	Return, reuse, refill, redistribution, exchange, rental, sharing, or product recovery	Waste prevention or effective preservation of function, as specified in

Activity class	Activities covered	Outcome eligible for recognition
	systems that preserve product function. Includes redistribution of food fit for consumption.	the applicable methodology.
Repair, refurbishment, and remanufacturing	Diagnosis, repair, restoration, upgrading, refurbishment, remanufacturing, and component recovery intended to restore or extend the useful service of a product.	Additional service actually delivered, with demonstrated fitness, use, and duration.
Material recirculation	Preparation and processing of secondary materials through mechanical, physical, chemical, or other expressly approved recycling processes; purification; recovery of secondary raw materials; industrial symbiosis; and demonstrated incorporation into eligible productive uses.	Additional secondary material that reaches the recognition point and a demonstrated eligible use.
Recovery of biological resources and nutrients	Redistribution of biological resources; composting; anaerobic digestion in relation to its eligible material products; nutrient recovery; and production of soil amendments or other biological products through expressly approved pathways.	Biological resource, usable material, or nutrient recovered and applied in an eligible manner.
Recovery of materials from complex products	Dismantling, separation, preparation, and recovery of materials or components from electrical and electronic equipment, textiles, vehicles, batteries, composite materials, and construction and demolition waste, where an approved pathway exists.	Functional components or secondary materials actually recovered and used, with traceable treatment of hazardous, restricted, or ineligible fractions.
Environmental recovery and leakage prevention	Removal of waste abandoned in the environment; recovery from waterways, riverbanks, coasts, and marine environments; recovery from dumps or landfills enabled by the methodology; and interception in areas or infrastructure with a demonstrated risk of leakage.	Additional quantity recovered or intercepted that reaches the recognition point and an eligible destination, with demonstrated origin, custody, and downstream management.

Collection, receipt, transportation, storage, sorting, consolidation, dismantling, washing, and pretreatment may form part of an eligible activity

when necessary to achieve the outcome defined by the methodology. These operations shall not, by themselves, generate VWCCs, except when an approved methodology expressly defines environmental recovery or leakage prevention as the outcome and establishes its recognition point.

Activities may be implemented through new operations, expansions, improvements in performance or quality, preservation of activities at verifiable risk of interruption, individual projects, or grouped projects. In every case, historical performance shall be distinguished from the change attributable to the intervention.

Redesign, recyclability, compostability, recycled content, biobased status, product certification, equipment acquisition, or increased installed capacity shall not by themselves constitute creditable activities. Recognition shall depend on their producing an achieved, measured, and verifiable outcome in accordance with an approved methodology.

Chemical recycling, pathways involving hazardous or restricted substances, materials intended for food contact or sensitive uses, and other technologies subject to specific risks shall be eligible only when they comply with the enabling conditions established in section 3.4.

Recovery of waste from the environment may be recognized only under a methodology that establishes the baseline scenario, additionality, origin categories, geographic and temporal evidence, management of contaminants and rejects, eligible destinations, and rules to prevent double counting with subsequent material recirculation.

Environmental recovery and recirculation of the same quantity shall not automatically generate two VWCCs. The applicable methodology shall establish a single recognition pathway or demonstrate that the outcomes are distinct, nonoverlapping, and measured separately.

Activities excluded under section 3.3 may not be enabled through a methodology, protocol, contract, external certification, or individual decision.

3.3 Excluded activities

The following shall not be eligible: deliberate generation of waste to produce units; artificial fragmentation or reclassification of materials; illegal trafficking; unauthorized disposal; open burning; or interventions that depend on forced labor, prohibited child labor, or violations of rights.

Energy recovery, fuel production, and final disposal shall not constitute material recirculation. They may appear as destinations for legally managed residual fractions, but their quantities shall be excluded from the recirculation outcome. Mere diversion from a landfill shall not be a standalone creditable outcome.

Extraction of materials from a landfill or dump shall not be eligible based

solely on their removal. Recognition shall require an applicable methodology and demonstration that the intervention does not incentivize new disposal, does not transfer contamination, and directs recovered material and rejects to eligible destinations.

3.4 Enabling specific pathways

Eligibility of an activity shall require an approved methodology for the applicable pathway and outcome. Inclusion of an activity in the general scope of the BWCS shall not authorize its use until a current methodology and a published Outcome Specification are available.

Methodologies for chemical recycling shall distinguish material products, fuels, internal consumption, coproducts, emissions, and losses. Only the fraction with a demonstrated eligible material destination may be recognized.

Methodologies applicable to hazardous waste, equipment containing restricted substances, materials intended for food contact, sensitive uses, batteries, electrical and electronic equipment, or other high-risk streams shall establish specific requirements for safety, quality, treatment, and destination.

Methodologies applicable to electrical and electronic equipment, batteries, and other complex streams shall control the complete item or lot through final treatment; prevent exclusive selection of valuable fractions when hazardous or negative-value fractions would remain unmanaged; limit and reconcile storage; document decontamination, dismantling, recovery, and the destination of each relevant fraction; and comply with applicable rules for transboundary movements.

Methodologies for environmental recovery and leakage prevention shall establish an origin taxonomy capable of distinguishing, as applicable:

- (a) terrestrial environment;
- (b) waterways and river systems;
- (c) riverbanks;
- (d) coastal areas;
- (e) marine environment;
- (f) dumps or landfills;
- (g) areas with a demonstrated risk of leakage; and
- (h) interception infrastructure located before release into the environment.

Classification as ocean, coastal, riverine, environmentally recovered, or leakage-risk material shall require evidence that satisfies the applicable methodology. The BWCS shall not automatically incorporate distances, boundaries, or geographic presumptions used by other programs.

4 Normative and documentary framework

4.1 Documents and hierarchy

Applicable law shall prevail over Program documents. Within the BWCS, this Standard shall establish the general conditions; approved methodologies and tools shall elaborate technical requirements; procedures shall govern assessment and registration; and forms shall capture the applicable evidence. No form, contract, or operating instruction may reduce a substantive requirement.

Document conflicts shall be submitted to BioCarbon and resolved through a reasoned decision before the affected outcomes are recognized. A clarification may not be used to introduce a new unit category or modify substantive conditions without the applicable review procedure.

4.2 Normative references

The following are BWCS normative documents within their applicable scope:

- (a) methodologies, tools, and modules approved by BioCarbon;
- (b) the Sustainable Development Safeguards Tool;
- (c) the Sustainable Development Goals Contribution Tool and its applicable form;
- (d) the Audit and Conformity Determination Procedure;
- (e) criteria for authorization and oversight of CABs;
- (f) procedures for registration, issuance, transfer, retirement, cancellation, and correction of VWCCs;
- (g) the complaints and appeals procedure;
- (h) ethics, anticorruption, conflict-of-interest, data protection, and due diligence policies identified by BioCarbon as applicable; and
- (i) the law applicable to the project.

ISO/IEC 17029:2019, ISO 14065:2020, and ISO 14066:2023 shall apply to CABs within the scope established by the Program and their accreditation.

ISO/IEC 17025:2017 shall apply to testing when required by law, the methodology, or the conditions in section 14.3.

ISO 22095:2020, its current amendment, and ISO 22095-2:2026 shall apply when a methodology authorizes a chain-of-custody or mass-balance model covered by those standards. Book-and-claim models shall not replace the physical evidence required to demonstrate the origin, transformation, or destination of a BWCS outcome.

ISO 14040:2006 and ISO 14044:2006 shall apply when the BWCS or a methodology requires a life cycle assessment.

ISO 14020:2022 and ISO 14021:2026 shall apply to environmental claims within the scope expressly incorporated by the BWCS.

BioCarbon shall maintain a public document catalog identifying each document's version, status, approval date, effective date, scope, and transition. A new version shall not apply retroactively unless necessary to correct a material error, prevent double counting, address a serious risk, or comply with law.

The version of the SDS and SDG tools applicable to each period shall be determined in accordance with the document catalog and their transition provisions. Publication of a new version shall not automatically require completed assessments to be repeated.

4.3 External references

The technical standards, scientific publications, and guidance listed in section 24 provide the basis for the design and interpretation of the BWCS. Only requirements expressly incorporated by this Standard, a methodology, or an approved tool shall be mandatory.

Compliance with the BWCS shall not constitute general certification of conformity with all cited standards. Each reference shall apply only within its subject matter, scope, edition, and conditions of use.

Incorporation of a requirement from another BioCarbon program shall identify the document, version, applicable sections, and approved adaptations. Periods, reserves, permanence criteria, thresholds, claims, or rules designed for climate, water, or biodiversity outcomes shall not transfer automatically.

4.4 Methodology development and approval

Each methodology shall have a technical dossier that satisfies Annex B. The dossier shall link sources and assumptions to applicability conditions, the baseline scenario, the additionality test, equations, parameters, the recognition point, monitoring, and use restrictions.

Assessment shall include an independent technical review performed by persons with relevant competence and no conflicts of interest. New methodologies and substantive amendments shall undergo public consultation for at least 30 calendar days.

Before approval, calculations and decision rules shall be tested through representative cases. Testing shall include, as applicable, mixtures, inventories, missing data, zero or negative outcomes, regulatory changes, and double-counting risks.

BioCarbon shall approve only methodologies whose requirements and calculations can be reproducibly applied and audited. Where evidence is

insufficient, the scope shall be restricted, additional information required, or the pathway's approval deferred.

4.5 Versions and transition

BioCarbon shall maintain a public document catalog stating the version, status, approval date, effective date, and scope of each document. Editorial corrections shall not modify requirements. Clarifications shall explain existing rules without altering eligibility, additionality, quantification, rights, or issuance conditions. Substantive changes shall follow the review procedure and establish the affected subjects and periods, transition, and need for additional audit.

A later edition of a technical reference shall not be incorporated automatically. BioCarbon shall assess its effects and publish the corresponding update. Applicable law shall be assessed according to its own effective date and transition. The identification of a material error, double counting, or noncompliance shall not be protected by a documentary transition; the measures in section 22 shall apply.

When new evidence indicates that a methodology, module, or pathway may produce incorrect outcomes or fail to meet essential requirements, BioCarbon may preventively suspend its application or limit its scope through a reasoned, public decision. The decision shall identify the prohibited operations, affected applications and periods, required evidence, and conditions for lifting the suspension. The validity of previously recognized outcomes shall be assessed separately, and section 22 shall apply where appropriate. Suspension shall not automatically invalidate historical outcomes whose conformity can be demonstrated, nor shall it permit new issuances exposed to the identified risk.

Interpretations and clarifications shall apply prospectively, except when they correct an evident error, duplication, legal noncompliance, or serious risk to Program integrity.

5 Principles

5.1 Scientific basis and life cycle perspective

BWCS outcomes and methods shall be based on relevant, transparent, and reproducible evidence. The Program shall distinguish circular performance indicators, additional outcomes, and environmental impacts.

Every project shall conduct an initial, proportionate assessment of the risks of shifting impacts among processes, locations, materials, or groups of people. The assessment shall consider only matters reasonably relevant to the activity and outcome.

A comparative life cycle assessment shall be required when:

- (a) eligibility depends on demonstrating environmental superiority over an alternative;
- (b) avoided impacts from substitution are to be claimed;
- (c) countervailing effects could affect the admissibility of the pathway; or
- (d) the methodology expressly requires it.

The assessment shall comply with ISO 14040 and ISO 14044 within the applicable scope. A full LCA shall not be required when a proportionate assessment is sufficient to conclude that there is no material risk of shifting impacts.

The waste hierarchy shall guide project design but shall not automatically determine the eligibility or environmental superiority of an intervention.

5.2 Integrity and conservativeness

Outcomes shall be real, measurable, attributable, and verifiable. Where relevant uncertainty exists, assumptions or adjustments shall be used that prevent overestimation. The absence of essential information may not be addressed solely by applying an arbitrary discount.

Waste prevention and resource conservation shall guide design. Selection of a pathway shall consider higher options in the waste-management hierarchy and justify local conditions, without turning that hierarchy into an automatic test of environmental performance.

5.3 Traceability and transparency

The project shall connect physical evidence, financing, rights, and outcome records. Public information shall make it possible to understand what was recognized and within what scope, while the CAB and BioCarbon shall have access to all evidence necessary to assess conformity.

5.4 Inclusion and proportionality

Proportionality shall permit the form and depth of documentation, sampling, site selection, means of evidence, and certain audit activities to be adapted to the project's scale, dispersion, complexity, and risk.

Proportionality shall not reduce requirements concerning legal compliance, regulatory surplus, additionality, quantification integrity, rights to outcomes, absence of double counting, critical safeguards, or audit independence.

The absence of advanced digital systems shall not exclude participants who can provide sufficient, consistent, and auditable records.

6 Governance and responsibilities

6.1 BioCarbon Cert

BioCarbon shall administer the BWCS, approve its documents, methodologies, and tools, authorize and oversee CABs, perform conformity determinations, and decide on registration, issuance, suspension, correction, and closure of projects and VWCCs.

Commercial development, technical review, conformity decision, and appeal resolution functions shall be clearly separated. No decision shall depend on the commercial value of VWCCs or on the commercial relationship with a participant.

BioCarbon shall publish the governance structure applicable to the Program, current documents, fees, enabled methodologies, and decisions that materially affect the scope or integrity of the BWCS.

BioCarbon shall maintain ethics, anticorruption, conflict-of-interest, complaints, and appeals mechanisms. Payment of fees shall not confer a right to a favorable conclusion, registration, or issuance.

6.2 Project participants

The project holder shall retain control of the project file and shall be responsible for the integrity of data from operators, aggregators, suppliers, and recipients. Agreements shall assign responsibility for measurement, retention of evidence, audit access, incident notification, and correction.

Operators shall conduct activities within their permits and competence. Aggregators shall control the inclusion of instances and data reconciliation without concealing differences in eligibility. Producers, municipalities, and funders shall identify their obligations, contributions, and rights and shall not automatically claim outcomes achieved by those operating the chain.

Waste pickers and their organizations shall participate as economic actors with defined rights and responsibilities. Agreements shall recognize their contribution, remuneration conditions, and channels for participation.

The project holder shall verify the identity, representation, and capacity of participants that control essential activities, facilities, data, materials, or rights. Identification of beneficial owners and due diligence shall apply according to BioCarbon policies and participant risk. The same depth of documentation shall not be required from every small supplier, waste picker, or dispersed participant where a responsible aggregator and sufficient controls are in place.

Subcontracting shall not reduce the project holder's responsibility. Agreements shall ensure access to evidence, incident notification, and application of relevant controls.

6.3 Independence and competence of CABs

The CAB shall be a legally identifiable entity authorized by BioCarbon and competent for the outcome categories, materials, processes, and jurisdictions within its scope.

The CAB shall maintain relevant accreditation in accordance with ISO/IEC 17029:2019 and ISO 14065:2020. The competence of teams, technical experts, and independent reviewers shall satisfy ISO 14066:2023 and additional BWCS requirements.

Accreditation limited to greenhouse gas information shall not, by itself, demonstrate competence to audit waste and circularity outcomes. The CAB shall demonstrate experience or knowledge in material balances, chain of custody, sampling, material quality, waste regulation, rights, safeguards, and technologies covered by the project.

BioCarbon authorization shall not replace accreditation. During the transitional period established in section 23.2, BioCarbon may temporarily authorize a CAB that meets the conditions set out there.

The CAB, its personnel, and related entities shall not audit activities or systems they designed or hold an economic interest in VWCCs. Remuneration shall not depend on a favorable conclusion or on the quantity issued.

The CAB's audit, independent review, and decision activities shall be assigned to different persons. The CAB shall be responsible for its Audit Report and Audit Statement.

BioCarbon may review files, observe audits, and require clarification, but shall not replace evidence gathering or draft the CAB's independent conclusion.

6.4 Registry platform

The registry authorized by BioCarbon shall maintain identifiers, statuses, documents, and the history of projects and VWCCs and shall execute authorized instructions for registration, issuance, transfer, retirement, temporary immobilization, and cancellation.

BioCarbon shall retain normative and decision-making authority over admission, conformity, issuance, and integrity measures. The Registry Operator may not independently modify criteria, recognize outcomes, alter attributes, or lift restrictions.

BioCarbon shall identify the current Registry Operator and applicable conditions in the Program catalog. A change of operator shall fully preserve projects, serial numbers, balances, retirements, restrictions, incidents, and history.

6.5 Conflicts of interest

Persons involved in reviews and decisions shall disclose actual, potential, or apparent conflicts. BioCarbon shall document its assessment and any refusal, reassignment, or control measures. Appeals shall be reviewed by persons who did not participate in the challenged decision.

Members of governing bodies, personnel, reviewers, CABs, and those responsible for GCT functions affecting the BWCS shall submit a declaration upon assuming their duties, update it annually, and report changes before participating in an affected matter. A person with a conflict may not decide on their own refusal. The conflict assessment and its treatment shall be documented before action continues.

7 Outcome categories and nature of VWCCs

7.1 Outcome categories

The BWCS may recognize the following outcome categories, provided that an approved methodology exists for the applicable activity:

Category	Outcome to be demonstrated	Main exclusions
Prevention of waste and material losses	Additional reduction in the generation or loss of materials for a comparable function.	Reductions caused solely by lower production, demand, or service.
Preservation of product and component function	Additional use or effective extension of useful function or service.	Repairs, deliveries, or future capacity without demonstrated function or use.
Material recirculation	Additional secondary material that reaches the recognition point and an eligible productive use.	Standalone collection, pending inventories, energy recovery, and disposal.
Recovery of biological resources and nutrients	Additional resource, biological product, or nutrient recovered and used in an eligible manner.	Products without demonstrated quality, stability, availability, dose, or application.
Environmental recovery and leakage prevention	Additional waste removed from the environment or intercepted before release that reaches an eligible destination.	Removal without verified origin, transfer between locations, illegal disposal, or quantities recognized again under another category.

Inclusion of a category in this Standard shall not enable issuance. The methodology and Outcome Specification shall be approved and current.

An improvement in quality, recyclability, recycled content, biobased status, or another attribute shall not by itself generate VWCCs. It may serve as an eligibility condition or reported attribute.

7.2 Activities and attributes

An activity may comprise multiple operations and participants. The outcome shall be determined exclusively according to the category, measure, and recognition point established by the methodology.

Collection, sorting, transportation, processing, and incorporation of the same fraction shall not be added together as equivalent independent outcomes.

Each quantity shall follow a single recognition pathway. Where a quantity may relate to more than one category, the methodology shall determine the applicable category or demonstrate that the outcomes are distinct, independent, and nonoverlapping.

Attributes of origin, quality, content, technology, location, or social benefit shall not increase the issuable quantity unless a methodology establishes a differentiated, nonoverlapping metric.

Special origin attributes may identify material recovered from the terrestrial environment, waterways, riverbanks, coasts, the marine environment, dumps or landfills, leakage-risk areas, or interception infrastructure. The applicable methodology or module shall define the conditions and evidence for each attribute.

7.3 Verified Waste and Circularity Credits

A Verified Waste and Circularity Credit, identified in the registry as a VWCC, is a serialized unit issued ex post by BioCarbon, transferable until retirement, that represents one unit of the additional outcome defined and quantified by an approved BWCS methodology.

Each methodology shall define:

- (a) the recognized magnitude;
- (b) the unit of measure;
- (c) the registry resolution;
- (d) the moisture or composition basis, where applicable;
- (e) the recognition point;
- (f) rounding rules; and
- (g) required attributes.

At a minimum, each VWCC shall identify the outcome category,

methodology and version, project, location, generation period, material or product, measure, quantity, and use restrictions.

The common designation VWCC shall not establish fungibility among categories, materials, measures, or services. Quantities expressed in incompatible measures shall not be added as a single physical quantity or presented as environmentally equivalent.

7.4 Single recognition pathway

The BWCS operates through a single pathway: recognition of achieved additional outcomes and ex post issuance of VWCCs.

Total quantities managed, quantities corresponding to compliance obligations, and quantities that do not demonstrate additionality may be included in reports as contextual information. These quantities:

- (a) shall not generate VWCCs;
- (b) shall not receive parallel documents or certifications;
- (c) shall not have serial numbers or a registry status equivalent to that of a VWCC; and
- (d) shall not be presented as outcomes recognized by the BWCS.

If BioCarbon develops a future scheme to certify facilities, management systems, or circular performance without issuing VWCCs, it shall do so through a separate standard with its own subject matter, criteria, process, and claims.

7.5 Outcome Specification

Each enabled pathway shall have a public Outcome Specification that identifies:

- (a) category and code;
- (b) activity and outcome;
- (c) covered materials, products, or resources;
- (d) measure and resolution;
- (e) recognition point;
- (f) quality, function, destination, or use conditions;
- (g) applicable attributes;
- (h) minimum evidence;
- (i) exclusions;
- (j) methodology and version;
- (k) permitted claims; and
- (l) enablement status.

The Outcome Specification shall summarize approved requirements and may not modify this Standard or the methodology.

8 Project eligibility and configuration

8.1 Admission requirements

A project may be admitted when it:

- (a) identifies an intervention and outcome covered by a current methodology;
- (b) meets the applicability conditions;
- (c) holds sufficient rights to conduct the activities and request recognition of the outcomes;
- (d) identifies its regulatory situation and quantities subject to obligations;
- (e) has a monitoring system capable of producing auditable evidence;
- (f) applies the SDS and SDG tools; and
- (g) presents no evident incompatibility with Program exclusions.

The application shall include a project file composed of:

- (a) a Project Document;
- (b) a map or diagram of facilities, participants, and flows;
- (c) a legal and regulatory register;
- (d) evidence of rights and allocations;
- (e) the baseline and additionality assessment;
- (f) a monitoring plan;
- (g) results of the SDS and SDG tools; and
- (h) a consultation and complaints record.

Information may be incorporated through appendices, controlled references, or access to existing systems. It need not be transcribed into multiple forms where a single, identified, and accessible source exists.

Admission and listing of the project shall be administrative actions. They shall not constitute a conformity determination or guarantee registration or issuance.

8.2 New activities and improvements

New operations, expansions, or improvements to existing activities may be submitted. Existing operations shall distinguish the historical activity from the proposed change; installed capacity, age, or a new trade name shall not demonstrate additionality.

The project shall assess whether it captures materials or customers from existing operations and reduces outcomes elsewhere. Aggregation or relocation of operations may not artificially restart the baseline or eligibility periods.

8.3 Individual and grouped projects

A project may integrate multiple sites or participants under a responsible project holder. The Project Document shall establish complete inclusion criteria by combination of activity, material, geographic area, regulatory regime, and baseline scenario. Applying the same baseline, additionality test, or sampling procedure shall require demonstrated homogeneity; material differences shall be addressed through strata or separate assessments.

Each instance shall have a unique identifier, location, operator, start date, inclusion date, and eligibility file. Its monitoring system shall operate from the first outcome requested. The CAB shall assess inclusion before quantities are included in an issuance; the project holder shall maintain admission controls for all instances even where the audit uses sampling.

Instances shall not be added retroactively to periods whose assessment and issuance have closed. New instances shall fall within the project's approved boundaries and criteria; expansions outside those boundaries shall require a design change assessed under section 22. An ineligible instance may not be offset by the performance of other instances.

8.4 Continuity

During each period, the project holder shall verify that eligibility conditions continue to be met. Loss of a permit, right, eligible destination, or essential control shall exclude the affected quantities until conformity is restored and the corresponding evidence verified.

9 Legal compliance and regulatory interaction

9.1 Applicable legal requirements

The project holder shall maintain a register of legal requirements material to eligibility, implementation, quantification, and use of outcomes.

As applicable, the register shall identify:

- (a) legal classification of waste, materials, and products;
- (b) permits and authorizations for facilities and activities;
- (c) transportation and transboundary movements;
- (d) EPR obligations, targets, and regulatory reporting;
- (e) requirements concerning hazardous substances, products, and end uses;
- (f) labor, health, and safety;
- (g) collective rights, access to materials, and service delivery;
- (h) data protection; and
- (i) environmental and commercial claims.

For each requirement, the official source, obligated party, obligation, evidence of compliance, responsible person, and review date shall be identified.

It shall not be necessary to include all legislation potentially related to a participant. Provisions that could materially affect legality, the outcome, rights, additionality, or claims shall be included.

Draft rules, nonbinding interpretations, and background materials shall be identified separately. They need be monitored only where there is a reasonable possibility that they could affect the project or its recognition period.

Transboundary movements shall comply with the applicable controls in export, transit, and import countries, including relevant requirements of the Basel Convention. Restricted substances and persistent organic pollutants shall be treated in accordance with law and the applicable provisions of the Stockholm Convention.

A formal legal opinion shall be required only where a material interpretive issue cannot be resolved through the rule, the competent authority, or sufficient ordinary evidence.

9.2 EPR and other regulatory instruments

The project holder shall identify EPR obligations, recovery targets, take-back systems, tariff regimes, and other instruments that may overlap with the outcome.

Regulatory, tariff-based, public, or EPR financing shall not automatically exclude a project. The activity, service, obligation, and right being remunerated shall be assessed.

Quantities used to satisfy an enforceable obligation concerning the same outcome shall not be eligible for voluntary issuance. Widespread noncompliance or limited enforcement shall not turn a current obligation into a voluntary activity.

Where there is a collective target, allocation of quantities shall be supported by evidence from the authorized system. Quantities whose regulatory allocation remains pending shall be excluded from the issuance request until resolved.

Exceeding a regulatory target shall produce, at most, a candidate quantity. The surplus shall also satisfy baseline, additionality, rights, attribution, and all other applicable requirements.

9.3 Certifications and incentives

VWCCs shall not replace permits, mandatory certificates, tax returns, or

documents reserved for authorities or authorized bodies. Any regulatory use shall require demonstration of legal recognition of the instrument, competence of the issuing entity, and compliance with the specific requirements.

The project file may provide verifiable data for regulatory applications. It shall identify which evidence can be reused and what additional decision or certification is required. Tax benefits, target compliance, or exemptions shall not be promised solely on the basis of Program participation.

9.4 Updating and reconciliation

The project holder shall review the legal register before the first audit, at every subsequent audit, and upon learning of a material change.

Changes shall apply from their legally effective date. Where they affect only part of a period, quantities shall be segmented.

Quantities that may be allocated to a pending mandatory report shall remain outside the issuance request until their availability is resolved.

The CAB shall assess identification and application of material requirements. BioCarbon and the CAB shall not replace authorities or resolve disputes reserved for courts or administrative bodies.

10 Rights over activities, outcomes, and units

10.1 Rights to conduct activities

The project holder shall demonstrate the rights of access, operation, infrastructure use, and participation necessary for the activities. Where materials originate from public spaces, communities, households, or municipal systems, the project holder shall identify the relevant authorities and authorizations without presuming free appropriation because an item is waste.

Evidence shall identify rights holders, subject matter, scope, duration, conditions, and powers of representation. Rights shall cover the activities conducted and the retention and assessment of their evidence, even if an operating contract ends before issuance is requested. The absence of an identified owner or the apparent abandonment of material shall not constitute evidence of free disposal rights.

10.2 Differentiated rights

Agreements shall distinguish, as applicable:

- (a) ownership or control of the material;
- (b) remuneration for materials or services;
- (c) product attributes;

- (d) rights to the additional outcome;
- (e) authority to request issuance; and
- (f) authority to transfer or retire VWCCs.

Sale of material, payment for collection, provision of a service, or financing of equipment shall not automatically transfer all the rights listed above.

The project holder shall demonstrate a sufficient chain of rights to the requested outcomes. This may be done through contracts, mandates, legal provisions, collective agreements, model clauses, or other valid and auditable instruments.

Individual agreements with every household, supplier, or dispersed participant shall not be required where an aggregator or organization has legitimate representation and the system can demonstrate the allocation of rights.

10.3 Agreements among participants

Agreements shall identify the covered outcome, period, responsibilities, access to evidence, allocations, prior commitments, and obligations to disclose errors or concurrent claims.

Where several parties finance an intervention, the sum of their allocations may not exceed the recognized outcome. The percentage of financing shall not automatically equal the percentage of the outcome.

Participants shall receive understandable information about the rights they transfer or retain, applicable financial conditions, and permitted uses. This obligation shall not require the transfer of rights the participant does not hold or consent from persons without a relevant right to the outcome.

10.4 Benefit sharing

The project holder shall inform participants of the payment and revenue-sharing conditions that apply to them. The project holder shall retain understandable agreements and evidence of payments. Labor compensation or payment for services already due may not be conditioned on the future sale of units, except for lawful forms of expressly agreed additional incentives.

Where participation in outcome revenue is agreed, the beneficiaries, gross or net calculation basis, allowable costs and deductions, formula, frequency, person responsible for payment, and verification mechanism shall be defined. The project holder shall retain reconciled statements and payments and shall report noncompliance and its treatment. The absence of sales shall not suspend wages, payments for materials or services, or previously due remediation obligations.

11 Start date, periods, and renewal

11.1 Start date

The start date shall be the date of first effective implementation of the eligible intervention.

For expansions, improvements, or changes to an existing activity, the start date shall be the date the change from the previous operation is implemented. Historical outcomes before that change shall not be eligible.

Where the intervention is intended to prevent interruption of an existing activity, the start date shall be the implementation date of the measure or agreement that prevents cessation. Contemporaneous evidence of the interruption risk and the decision taken shall exist.

Consideration of BWCS revenue or incentives shall be supported by evidence predating or contemporaneous with the decision to implement, expand, improve, or maintain the intervention. BWCS revenue need not be the only source of financing.

11.2 Time-related admission conditions

The complete application for admission shall be submitted within 24 months after the start date.

The project may include outcomes produced before application where:

- (a) they occurred after the effective date of the BWCS and the applicable methodology;
- (b) continuous and sufficient monitoring exists;
- (c) all Program requirements are met; and
- (d) additionality was not constructed retrospectively.

BioCarbon may establish a general transitional provision for early activities linked to the launch of the Program. Individual exceptions shall not be granted.

11.3 Recognition period

The recognition period shall be seven years from the approved start date. It may be renewed up to twice, for a maximum total duration of 21 years.

Monitoring shall be continuous. Each Monitoring Report and issuance request may cover a continuous period of up to 24 months and shall disaggregate quantities by calendar year.

The project may request audits and issuances for shorter periods. Periods shall not overlap, and the same outcome shall not be recognized twice.

Issuance shall be exclusively ex post. Forward contracts, projections, and financing commitments shall not constitute VWCCs.

11.4 Renewal

Renewal shall be requested before the current period expires and shall require a renewal audit.

At each renewal, the following shall be reassessed:

- (a) the baseline;
- (b) regulatory surplus;
- (c) applicability of the methodology;
- (d) rights to outcomes;
- (e) environmental and social risks; and
- (f) the capacity of the monitoring system.

The full additionality test shall be repeated only where there has been a material change in the intervention, its financing structure, or the baseline scenario.

Outcomes from the new period may not be issued until BioCarbon approves the renewal. The project holder shall continue monitoring if it intends to request their recognition.

12 Project boundaries and traceability

12.1 Delineation

The Project Document shall delineate the system through a flow diagram and a verifiable description of the activities, facilities, participants, streams, products, supply area, destinations, and periods covered. It shall identify measurement, transfer, transformation, and recognition points and operations performed by third parties. Boundaries shall cover the stages necessary to demonstrate the outcome, identify losses, and verify displacement and relevant impacts, even where those stages are outside the project holder's operational control.

Each facility and instance shall have a stable identifier and a documented location and function. The project file shall distinguish facilities included in the project from suppliers, carriers, intermediaries, and users that provide evidence to its chain. Excluding a facility from the project holder's management scope shall not permit omission of information material to the origin, transformation, destination, or use of the outcome. Boundaries and the functional unit used to compare the project and baseline shall be consistent.

12.2 Physical evidence and chain of custody

The chain of custody shall connect origin, receipt, transformation, inventories, transfers, and destination through the recognition point defined by the methodology.

Evidence may include weighbridge records, commercial documents, ERP systems, operational records, transport receipts, georeferenced photographs, third-party confirmations, and other reliable and reconcilable means.

The methodology shall establish eligible chain-of-custody models. Identity preservation, segregation, controlled blending, and mass balance shall be applied within defined boundaries, periods, and conversion rules.

Mass-balance allocation shall not demonstrate that a specific product physically contains the allocated fraction. Claims shall reflect this limitation.

Certificates disconnected from the physical chain and book-and-claim models shall not replace evidence of the BWCS outcome.

Traceability shall extend to the recognition point. Tracking to the final consumer shall not be required where the methodology recognizes the outcome at an earlier stage and sufficient controls over the eligible destination exist.

In dispersed chains, confirmations, sampling, and aggregated evidence may be used where the methodology establishes their representativeness and conservative treatment.

12.3 Financial evidence

The project holder shall retain the financial information necessary to demonstrate additionality, rights, payments, allocation of outcomes, and benefit sharing, where applicable.

Revenue from the sale of materials, service provision, tariffs, EPR, grants, incentives, and results-based financing shall be distinguished.

A comprehensive financial audit of the project shall not be required. Information shall be limited to variables that may affect a Program conclusion.

Payments and deductions involving participants shall be verifiable, without requiring public disclosure of protected personal or commercial information.

12.4 Evidence of rights and outcomes

Each set of quantities proposed for recognition shall be linkable, through reconcilable rules and records, to the applicable rights, contractual allocations, regulatory obligations, and external reports. Transfers and

reservations of rights among participants shall be documented in accordance with sections 10 and 15. Possession or commercial acquisition of material shall not, by itself, demonstrate an exclusive right to the additional outcome.

Quantities with pending rights, quality, destination, or allocation shall remain identified and excluded from the issuance request until the condition is resolved. A correction to origin, quantity, or ownership shall propagate to dependent calculations and records, preserving history and applying section 22 where recognized outcomes are affected.

12.5 Chain reconciliation

The project holder shall reconcile physical, commercial, and outcome-allocation records by facility, stream, and period. Differences between dispatch and receipt, transport losses, returns, reclassifications, and inventory changes shall be documented. Differences shall be investigated against measurement uncertainty and process conditions; a uniform discrepancy percentage shall not be accepted as authorization to recognize unsupported quantities.

An unresolved discrepancy that may affect eligible quantity, identity, or destination shall prevent recognition of the exposed fraction. If it cannot be defensibly delineated, the set of quantities whose integrity depends on the affected record shall be excluded. Offsetting surpluses and shortages among incompatible streams, periods, or facilities shall not remedy a loss of traceability.

13 Baseline and additionality

13.1 Baseline scenario

The baseline shall represent the outcome that would reasonably occur without the intervention within comparable boundaries, periods, and functional conditions. Technically feasible and legally permissible scenarios shall be identified, including continuation of operations, autonomous improvements, and relevant alternative destinations. Selection shall be justified with evidence and reproducible criteria established by the methodology. Final disposal, abandonment, or absence of recovery shall not be presumed because records from a specific facility are unavailable.

The analysis shall distinguish the following situations:

Project situation	Minimum baseline treatment
New facility or activity	Assess the prior and alternative management of materials and service in the supply area. The absence of the project's own operations shall not imply a zero baseline.

Project situation	Minimum baseline treatment
Expansion of capacity or coverage	Separate the performance that would continue without the expansion and verify the origin of incremental quantities, including possible diversion from other operations.
Improvement in performance, quality, or function	Compare equivalent input, production, and service conditions. Recognize quality improvements only where an approved methodological metric exists for that outcome.
Preservation of an activity at risk of interruption	Demonstrate the risk and its cause with contemporaneous evidence and verify that the intervention prevents a credible interruption. A stated intent to close or a deliberate reduction in performance shall not suffice.

The baseline shall represent the outcome that would reasonably occur without the intervention within comparable boundaries, periods, and functional conditions.

The methodology shall define the scenarios to be considered, data hierarchy, reference period, selection rules, and treatment of insufficient data.

A new facility shall not automatically have a zero baseline. Prior or alternative management of materials, existing supply, likely destinations, and the service that would be provided without the project shall be assessed.

Data shall reasonably represent relevant variability, seasonality, composition, capacity, and market conditions. Abnormally low periods or interruptions shall not be selected to artificially increase the outcome.

Where sufficient historical data do not exist, comparators, sector data, or models specified by the methodology may be used. Uncertainty shall be treated conservatively.

13.2 Regulatory surplus

The project holder shall identify enforceable obligations concerning the same outcome, including the obligated parties, metrics, periods, territories, and allocation mechanisms.

Quantities used to satisfy the obligations of the project holder or third parties shall be excluded from issuance. Quantities with pending allocation shall remain withheld.

Widespread noncompliance or limited enforcement shall not eliminate a current obligation.

Exceeding a legal target shall not, by itself, demonstrate additionality. Regulatory surplus shall be only a candidate quantity, subject to the baseline, additionality, rights, uncertainty, and other adjustments.

13.3 Causal additionality

The project holder shall demonstrate that the intervention changes a decision, overcomes a constraint, or enables implementation, expansion, improvement, or preservation of an activity that would not produce the same outcome without the intervention.

The methodology shall establish one or more eligible tests, which may include:

- (a) investment analysis;
- (b) barrier analysis;
- (c) common-practice analysis;
- (d) positive lists;
- (e) demonstrated risk of interruption; or
- (f) another approach approved by BioCarbon.

The project shall apply only the relevant tests established by the methodology. A financial analysis shall not be required where additionality is validly demonstrated through another test.

Where investment analysis is used, material revenue, costs, incentives, and financing sources shall be considered. Where barriers or common practice are used, the population, context, and comparative evidence shall be defined.

Positive lists and simplified tests shall be empirically supported, have a defined validity period, and specify their conditions and exclusions. They shall not waive legal compliance, regulatory surplus, rights, traceability, or safeguards.

Results-based financing may supplement other sources. It need not be shown to be the only source of financing, but its reasonable contribution to the decision or continuity of the intervention shall be demonstrated.

13.4 Review of changes and renewal

During each monitoring period, the project holder shall identify legal, technological, operational, financial, or market changes that may affect the baseline, regulatory surplus, additionality, or methodological applicability.

This review shall not constitute a new, full additionality test.

The baseline and regulatory surplus shall be reassessed at each renewal. The full additionality test shall be repeated only where there is a material change in the intervention, financing, or baseline scenario.

Loss of additionality or applicability shall prevent recognition of affected quantities from the time it occurs.

14 General quantification requirements

14.1 Methodological application

Quantification shall apply the current methodology for the applicable outcome.

The project file shall permit the calculation to be reconstructed from source data through the requested quantity, including conversions, exclusions, adjustments, uncertainty, and rounding.

Each methodology shall define:

- (a) applicability conditions;
- (b) boundaries;
- (c) magnitude and unit of measure;
- (d) recognition point;
- (e) baseline scenario;
- (f) equations and calculation sequence;
- (g) data and parameters;
- (h) quality and composition;
- (i) inventories and losses;
- (j) uncertainty;
- (k) displacement;
- (l) monitoring; and
- (m) rules for missing data.

Unapproved equations, factors, or alternatives shall not be used to increase the outcome. Deviations may concern only equivalent means of obtaining or managing data and may not modify eligibility, additionality, the baseline, equations, the recognition point, or safeguards.

14.2 Requirements by category

Prevention shall demonstrate an attributable reduction in waste or losses for a comparable function. A reduction in activity, production, demand, or service shall not constitute prevention.

Preservation of function shall demonstrate the fitness of the product or component and the additional service actually delivered. An unrealized future useful life shall not be recognized in advance.

Recirculation shall demonstrate the eligible quantity that reaches the recognition point, its quality, and an eligible productive destination. Collection, sorting, processing, and delivery of the same fraction shall not be

added together.

Recovery of biological resources and nutrients shall demonstrate quality, stability or maturity where applicable, availability, dose, and appropriate use.

Environmental recovery and leakage prevention shall demonstrate origin, effective removal or interception, additionality, and an eligible destination. Mere transfer of waste between locations shall not constitute environmental recovery.

Detailed requirements for each category shall be established in the methodology. This Standard shall not impose a universal equation on masses, nutrients, products, or functional services.

14.3 Quantities, composition, and quality

Measurements shall use a consistent basis for mass, moisture, and composition. Water, contaminants, additives, virgin inputs, and ineligible fractions shall be identified where they may affect the outcome.

Wet weights accompanied by representative moisture factors or measurements may be used where the methodology establishes the sampling procedure, frequency, uncertainty, and conversion. Dry weighing of every load shall not be required.

The physical balance shall reconcile, by facility, stream, and period:

- (a) opening inventories;
- (b) inputs;
- (c) production;
- (d) outputs;
- (e) rejects;
- (f) losses; and
- (g) closing inventories.

Pending inventories shall be recognized only when they reach the applicable methodological point. Inventories already recognized may not generate new VWCCs through their transfer or sale.

Quality shall be determined in accordance with law, the methodology, and intended use. Tests material to the determination shall use appropriate methods.

Laboratories accredited in accordance with ISO/IEC 17025 shall be used where:

- (a) required by law;
- (b) required by the methodology;
- (c) the test determines safety or eligibility; and

(d) accredited capacity is reasonably accessible.

Where accredited capacity is unavailable, the methodology may authorize an alternative based on competence, demonstration of method suitability, quality controls, traceability, and uncertainty.

14.4 Uncertainty and displacement

The methodology shall identify sources of material uncertainty and establish conservative treatment commensurate with the risk of overestimation.

Complex statistical propagation shall not be required where quantities can be determined directly through controlled measurements and physical reconciliation.

Where uncertainty is material, the methodology shall establish the confidence level, precision, propagation method, and corresponding adjustment. Arbitrary discounts shall not replace missing essential evidence.

Displacement shall be assessed only where it is reasonably foreseeable and could materially reduce the outcome. The methodology shall define the scope, evidence, and treatment.

Effects expressed in another environmental dimension shall not be converted to the outcome unit through unapproved factors. BWCS outcomes shall not be described as quantified net environmental impacts where such impacts have not been assessed.

15 Attribution and prevention of double counting

15.1 Exclusivity of the outcome

The project shall prevent double accounting of flows, double issuance for an outcome, multiple sale of the same unit, and repeated use of retired units. It shall identify external registries, certifications, and agreements that may create competing rights or claims.

Contractual statements shall be supplemented by document reconciliation, verification of identifiers, and inquiries to registries or participants where relevant. Lack of interoperability shall not relieve the project of controls or permit an assumption that no duplication exists.

Reconciliation shall cover every system in which the project holder or participants have registered, requested, sold, allocated, or claimed potentially overlapping quantities, including mandatory uses. For each outcome and period, it shall identify the registry, identifier, rights holder, quantity, and status. Exclusivity statements shall be supported by records, agreements, and independent checks proportionate to risk. Quantities under dispute or without resolved allocation shall not be issuable.

15.2 Stages and successive cycles

The quantity of the same fraction collected, sorted, recycled, and incorporated shall not be added together to represent the recirculation outcome more than once. Allocation among participants shall preserve the recognized outcome limit for the chain.

Expressing the same physical or functional change through different measures shall not generate independent additional outcomes. The methodology shall identify potential overlaps between prevention and preservation of function, between recovery of biological material and nutrients contained in that material, and among other concurrent outcomes. Where they represent the same outcome, it shall establish a single recognition pathway. Separate recognition shall require demonstration of distinct objects, independent quantification, and no overlap; successive cycles shall meet the conditions of the following paragraph.

A subsequent cycle of use or recycling may be assessed as a new event only if permitted by the methodology, the prior cycle has ended, a separate additional intervention exists, and the sequence is documented. Registration of a new transaction or owner shall not demonstrate a new eligible cycle.

A special origin attribute shall not constitute a second outcome for the same quantity. Where material recovered from the environment is subsequently recycled, the methodology shall define the applicable recognition pathway and permitted claims.

15.3 Financing and allocation

Multiple funders shall be compatible with a single recognized quantity distributed among beneficiaries without overlap. The purchase of units and advance financing shall be identified separately; a later purchase shall not justify a claim that the buyer enabled the original investment.

A funder may communicate its contribution without claiming exclusive quantities. If the funder claims a quantity as its own outcome backed by units, it shall retire the corresponding units and accurately describe its role.

15.4 Coexistence with other instruments

Coexistence with certifications of content or product characteristics, regulatory obligations, or other programs shall be permissible where the objects, rights, and claims are different and can be reconciled.

A physical attribute may remain associated with the product where issuance or transfer of VWCCs neither transfers nor contradicts it.

Coexistence with climate, water, or biodiversity outcomes shall require:

- (a) independent compliance with each program;
- (b) separation of objects and units of measure;
- (c) identification of boundaries and periods;
- (d) reconciliation of rights and financing; and
- (e) claims that do not attribute to each instrument the exclusive outcome of the same intervention.

VWCCs shall not be converted into carbon, water, or biodiversity credits. Compatibility shall be assessed through the applicable procedures without incorporating rules from specific methodologies of other programs into this Standard.

16 Environmental integrity and sustainable development safeguards

Every BWCS project shall apply the versions of the SDS and SDG tools identified as current in the document catalog.

Application of both tools shall be a condition for listing, audit, conformity determination, renewal, and issuance within the applicable scope.

The SDS Tool shall identify adverse risks and impacts and the measures necessary to prevent, mitigate, correct, or remedy them. The SDG Tool shall identify and monitor positive contributions to sustainable development.

Application of one tool shall not replace the other or the requirements concerning legality, additionality, rights, quantification, or traceability.

16.1 Prevention of adverse impacts

The project holder shall complete the SDS assessment and classify project risks before the first audit.

For each material risk, measures, responsible persons, deadlines, indicators, evidence, and response to noncompliance shall be established.

Projects without additional material risks may comply through the SDS assessment, legal controls, and existing operating procedures. They shall not be required to prepare a separate environmental and social plan that duplicates those instruments.

Where material risks exist, the project holder shall prepare and implement a proportionate action plan. The plan shall cover only relevant matters, which may include emissions, effluents, leachate, fires, restricted substances, rejects, product safety, labor, health, communities, or livelihoods.

Each stream shall meet legal and methodological criteria for quality, composition, and destination. Diluting contamination or using recycling to

reintroduce prohibited substances is forbidden.

Serious uncontrolled risks shall preclude a favorable conclusion. Incidents that jeopardize people, the environment, legality, or outcome integrity shall be reported in accordance with the applicable procedure.

The CAB shall assess the identification and treatment of risks through documentary evidence, observation, interviews, and visits proportionate to risk.

16.2 Risks and duration

The project shall identify risks of interruption, fire, loss of traceability, fraud, insolvency, equipment failure, and loss of product fitness. Measures shall correspond to the outcome and to the period for which it must be demonstrated.

An achieved material outcome shall not be considered lost merely because a product later reaches the normal end of its useful life, unless this contradicts a recognized duration condition. Failure of a service not yet delivered shall prevent crediting that service; a previously overestimated outcome shall be corrected under section 22.

The Program shall not establish a general buffer or replacement insurance by analogy with other markets. A methodology may require specific guarantees only where it identifies the risk, covered obligation, responsible party, duration, and method of enforcement. An insurance policy shall not replace evidence of an outcome or remediation obligations.

The plan shall identify responsible persons, resources, and contingency measures to maintain the safe management of inventories and rejects during interruptions or closure. Commitments that survive operations shall have a defined duration and evidence of compliance; they shall not be considered discharged when participation in the Program ends.

16.3 Waste pickers and livelihoods

Before implementing changes, the project holder shall identify waste pickers and organizations operating in the area or chain, their forms of access to materials, income, and rights. The project holder shall assess displacement risks and agree on inclusion, transition, or remediation measures with effective participation by affected persons.

Local rules on recognition, formalization, and service delivery shall be respected. Improvement processes shall not require waivers of rights or appropriation of existing activities in order to present them as new. Social benefits shall be documented through relevant indicators and verifiable evidence.

A detailed assessment of access to materials, income, working conditions,

and economic dependence shall be mandatory where waste pickers or organizations may be materially affected. The depth of the assessment shall be proportionate to the number of persons, their dependence on the activity, and the potential severity of displacement.

16.4 Remuneration, health, and safety

Workers shall receive the remuneration, protection, and conditions required by applicable law.

Before delivering materials or services, independent service providers and waste pickers shall know the prices, quality criteria, deductions, and payment terms. Weighing and settlement records shall be understandable, verifiable, and subject to complaint.

The project holder shall implement safety measures proportionate to risks from substances, sharp objects, loads, machinery, traffic, fires, and other relevant hazards.

Participants shall have access to training, protective equipment, and accident-response mechanisms appropriate to their activities. Independent status may not be used to avoid an employment relationship where one exists under law.

16.5 Rights, equity, and consent

As Program requirements grounded in the ILO fundamental principles and rights at work, the BWCS shall require respect for freedom of association and collective bargaining, prohibition of forced labor, elimination of child labor, nondiscrimination, and safe and healthy working conditions. Harassment, violence, retaliation, coercive retention of documents, and recruitment fees that create debt bondage are prohibited. No person under 18 years of age shall perform hazardous work in project activities. Identification of child labor shall require protection and remediation that do not worsen the child's situation.

The project holder shall assess participation barriers and differentiated risks based on gender, age, disability, migration status, and ethnicity. Measures shall enable safe participation, equitable access to benefits, and confidential interviews during assessment.

Where a project affects the lands, resources, territories, or cultural heritage of Indigenous Peoples, or the collective rights of communities, it shall identify the relevant rights framework and representative institutions. Free, prior, and informed consent shall be a BWCS requirement for interventions affecting those rights and shall be documented before implementation, together with agreements, conditions, and monitoring mechanisms. Public consultation, an individual signature, or an administrative authorization shall not replace it. Changes beyond the consent obtained shall require a new process before implementation.

16.6 Contributions to the Sustainable Development Goals

The project holder shall apply the SDG Contribution Tool and complete the current form.

Contributions shall be specific, material, reasonably attributable to the project, and supported by appropriate indicators and evidence.

The minimum number of SDGs, baseline, monitoring and demonstration requirements, and conditions for claiming contributions shall be those established in the current SDG Tool.

Contributions to the SDGs shall not constitute VWCCs, increase the issuable quantity, or by themselves demonstrate additionality.

The CAB shall assess contributions as part of the project audit.

17 Participation, transparency, and complaints

17.1 Identification and consultation

The project holder shall identify the persons, groups, and organizations that participate in the project or may be materially affected.

Consultation shall be proportionate to the nature and risk of the intervention and shall use understandable information about activities, impacts, rights, financial conditions, and complaint mechanisms.

The public version of the Project Document shall be open for comment for at least 30 calendar days before the first conformity determination.

Where a renewal or material change modifies the scope, activities, technology, supply area, essential participants, or environmental and social risks, the updated public version of the Project Document shall be open for comment for at least 30 calendar days before the applicable decision. The new consultation may be limited to the modified aspects.

Public consultation shall not replace direct participation by materially affected persons. Nor shall signatures or agreements from every stakeholder be required where there is no transfer of rights, impact, or legal requirement.

A prior consultation process may be recognized where it covers BWCS requirements. The project holder shall identify and remedy remaining gaps.

The project file shall document participants, means, languages, information provided, comments, responses, and changes made.

17.2 Public information

At a minimum, BioCarbon shall publish:

- (a) project identification and general location;
- (b) project holder;
- (c) methodology and version;
- (d) outcome category;
- (e) periods;
- (f) public Project Document;
- (g) public Monitoring Reports;
- (h) Audit Report and Audit Statement;
- (i) Conformity Statement;
- (j) Issuance and Registration Statements;
- (k) quantities issued, retired, and cancelled, as well as current registry restrictions; and
- (l) project status.

The information shall make it possible to understand the outcome recognized, its boundaries, and the principal adjustments. Personal data, trade secrets, and information whose publication would create security risks need not be disclosed.

17.3 Confidentiality

Confidentiality claims shall be justified for each item of data or document and accompanied by a sufficient public version. Confidentiality may not conceal the certified subject matter, recognized quantities, methodology applied, relevant noncompliance, or information necessary to understand outcome integrity.

The CAB and BioCarbon shall have access to complete evidence subject to confidentiality obligations. Where a restriction prevents assessment of an essential requirement, issuance may not occur for the affected quantities.

Personal data shall be processed for legitimate purposes and on a legitimate basis, limited to necessary data, and subject to information for data subjects, access controls, and retention periods compatible with evidentiary obligations. Agreements shall identify responsibilities, authorized transfers, incidents, and exercise of rights. Public versions shall anonymize data where appropriate without preventing reproduction of the outcomes through aggregated or de-identified evidence.

Where calculations contain confidential information, a summary shall be published that identifies the equations, sources, assumptions, adjustments, and final quantities sufficient to understand the outcome. The CAB and BioCarbon shall have access to the complete file and shall verify its consistency with the public information.

17.4 Complaints and appeals

The project holder, CABs, and BioCarbon shall maintain accessible mechanisms to receive and resolve complaints within their respective areas

of responsibility.

The mechanisms shall allow:

- (a) submission free of charge;
- (b) protection against retaliation;
- (c) confidential or anonymous communications where sufficient information is provided;
- (d) impartial assessment;
- (e) an opportunity to submit and challenge evidence;
- (f) reasoned decisions; and
- (g) follow-up on agreed measures.

Complaints concerning project activities shall initially be directed to the project's mechanism, without preventing direct access to BioCarbon where there is risk, a conflict of interest, lack of response, or potential Program noncompliance.

Complaints concerning CAB conduct shall be processed through its mechanism and may be reported to BioCarbon where they affect a BWCS decision.

Appeals against BioCarbon decisions shall be resolved by persons who did not participate in the challenged decision.

Deadlines, stages, communications, and admissibility conditions shall be established in the complaints and appeals procedure. These mechanisms shall not limit available administrative, judicial, or contractual remedies.

18 Monitoring, data, and documentation

18.1 Plan and report

For each variable, the monitoring plan shall identify:

- (a) definition;
- (b) unit;
- (c) source;
- (d) measurement or estimation method;
- (e) frequency;
- (f) responsible person;
- (g) quality control;
- (h) supporting record; and
- (i) treatment of missing data.

The methodology shall present these variables in a single monitoring table.

Monitoring shall cover outcomes, the updatable baseline, regulatory

obligations, rights, inventories, payments, and relevant safeguards.

Each Monitoring Report may cover a continuous period of up to 24 months and shall disaggregate quantities by calendar year.

Where a monitoring period exceeds 12 months, the project holder shall submit an annual continuity declaration identifying relevant legal, regulatory, operational, financial, rights-related, safeguard, and incident changes. This declaration shall be included in the project file and shall not constitute an audit or an issuance request.

The report shall present balances, outcomes, exclusions, adjustments, uncertainty, pending inventories, incidents, changes, and corrective actions.

Sampling used to estimate quantities, composition, quality, or use shall be representative of the population to which it applies. The methodology shall define the relevant statistical or technical requirements.

18.2 Quality and retention

Direct measurements appropriate to the recognition point shall be used where available and required. The methodology shall determine when corroborated records, sampling, estimates, or default factors may be used and what controls they require. Reliable data shall not be replaced by a less representative alternative that increases the outcome. Estimated data shall be identified and their uncertainty incorporated into the calculation.

Equipment shall have an identifier, range, resolution, and fitness for use. Maintenance, calibration, or verification records shall be maintained, with metrological traceability where applicable and in accordance with legal and methodological requirements. Sufficient operational checks shall be performed to detect drift and failures. Where equipment is found to be outside specification, the potentially affected interval since the last valid evidence shall be determined, bias shall be investigated, and data shall be corrected or excluded using an approved rule. A satisfactory later calibration shall not automatically validate earlier measurements.

Controls shall detect duplicates, omissions, incompatible dates, atypical yields, and discrepancies among origin, receipt, transformation, and destination records. Outliers shall be investigated; they shall not be removed solely because they differ from the average. Missing data shall be replaced only through approved methodological procedures and with sufficient evidence. Where a conservative outcome cannot be established, the affected quantity shall be excluded and the cause documented.

The project holder shall retain evidence for at least ten years after the latest of the last issuance or project closure, and longer where required by law or a pending investigation. The obligation shall cover original records, calculation versions, contracts, measurements, tests, reconciliations, and decisions. Integrity, backups, recovery, and continuity of custody shall be ensured in

the event of a change of operator or closure, with restricted access to protected data.

18.3 Digital systems

The BWCS shall be technology neutral. Projects may use digital systems, spreadsheets, physical records, or a combination, provided that the information is legible, controlled, and auditable.

Systems shall identify responsible persons, dates, versions, and corrections. Modifications shall preserve the prior data, justification, and date.

Data shall be exportable or made available to the CAB and BioCarbon in a form that permits reconstruction of the outcome.

The absence of an advanced digital platform shall not by itself be grounds for ineligibility.

18.4 Access for assessment

The project holder shall ensure sufficient access for the CAB and BioCarbon to facilities, records, personnel, and third parties whose evidence is necessary, subject to safety and confidentiality conditions. Agreements with participants shall provide for that access and retention of records. It shall be possible to trace a quantity from the outcome to its antecedents and from origin to destination and allocation.

Restrictions shall be assessed according to their effect on the evidence and conclusion. Statements by the project holder shall not replace essential third-party information, measurements, or verification of use. Where a limitation prevents demonstration of a requirement, the affected outcomes shall not be recognized; if its scope cannot be delineated, a favorable conclusion shall not be issued for the set that depends on that evidence.

19 Audit and conformity determination

19.1 Audit of the project and outcomes

Every project shall undergo an audit by a CAB authorized for the applicable scope.

The first audit shall jointly assess:

- (a) project eligibility and configuration;
- (b) the applicable methodology;
- (c) boundaries and participants;
- (d) the baseline;
- (e) regulatory surplus;
- (f) additionality;

- (g) rights;
- (h) chain of custody;
- (i) safeguards;
- (j) consultation;
- (k) the monitoring system; and
- (l) achieved outcomes included in the request.

The first audit shall integrate the assessment of project design and achieved outcomes into a single engagement and shall conclude with one Audit Report.

Subsequent audits shall assess the outcomes for the period, project changes, and continued compliance with applicable requirements.

Renewal shall require a renewal audit. Material changes may require additional activities within the applicable audit.

19.2 Planning and performance

The audit shall provide reasonable assurance regarding the project holder's outcome statement.

The CAB shall establish the scope, criteria, versions, period, and outcome categories covered.

The CAB shall document the risks of misstatement and its evidence plan. Materiality, sampling, visits, and expansion criteria shall be governed by the Audit and Conformity Determination Procedure.

Materiality shall not authorize retention of known overstatements. Matters concerning eligibility, rights, double counting, fraud, legal compliance, and safeguards shall be assessed by their nature, regardless of their quantitative magnitude.

The first audit shall include an on-site visit to the operations material to the outcome. For grouped projects, risk-based site sampling may be applied based on heterogeneity, risk, and the effectiveness of common controls.

Subsequent audits shall include visits where there are material changes, new processes, relevant risks, indications of misrepresentation, or evidence that cannot be obtained equivalently through remote means.

The CAB shall recalculate quantities and verify balances, inventories, conversions, quality, allocations, and traceability through the recognition point.

19.3 Findings and CAB documents

The CAB shall document the findings, applicable requirements, evidence, responses, and resolution.

The CAB shall not issue a favorable conclusion while any finding prevents demonstration of conformity. Exclusion of quantities shall not remedy a systemic failure that affects the remaining set of outcomes.

The CAB shall issue:

- (a) an Audit Report; and
- (b) an Audit Statement.

The Audit Report shall describe the scope, risks, materiality, sampling, visits, tests, recalculations, findings, exclusions, and limitations.

The Audit Statement shall identify the project holder, project, methodology and version, period, category, outcome, measure, quantity, assurance level, conclusion, CAB, date, and authorized signatory.

Before issuing its final documents, the CAB shall conduct an independent review by competent personnel who did not participate in performing the audit.

The Audit Report and Audit Statement shall not constitute a conformity decision or authorize registration or issuance.

19.4 Conformity determination

BioCarbon shall perform the conformity determination based on the project file, the project holder's statement, and the CAB documents.

BioCarbon's review shall verify:

- (a) completeness of the project file;
- (b) application of the correct versions;
- (c) sufficiency and consistency of the audit;
- (d) resolution of findings;
- (e) correspondence among the calculations, conclusion, and requested quantity; and
- (f) absence of applicable registry restrictions.

BioCarbon's review shall not replace the evidence that should have been obtained by the CAB or constitute a second, full audit.

Where the decision is favorable, BioCarbon shall issue a Conformity Statement identifying the project, methodology, period, outcomes, and approved quantities.

Where the acceptable quantity is lower than the quantity requested, the project holder and the CAB shall align the outcome statement, calculations, and audit documents before the final decision.

20 Registry and unit life cycle

20.1 Project identification and status

The registry shall assign a unique identifier to each project and retain its project holder, methodology, instances, periods, documents, decisions, and status.

The minimum project statuses shall be:

- (a) under preparation;
- (b) listed for public consultation;
- (c) under audit;
- (d) conforming;
- (e) suspended;
- (f) closed; and
- (g) terminated.

Listing for public consultation shall not constitute approval, conformity, or a guarantee of issuance.

Conforming status shall be assigned only after a favorable conformity determination.

The status “closed” shall apply to a project that has completed the closure procedure under Section 22.4. The status “terminated” shall apply to a project whose participation has ended through a measure adopted under Section 22.3. Neither status shall permit new issuances. Historical records shall remain available.

20.2 Issuance and registration

Issuance shall be exclusively ex post and shall require:

- (a) achieved outcomes;
- (b) a completed independent audit;
- (c) a favorable Conformity Statement;
- (d) demonstrated rights;
- (e) reconciliation of regulatory and other uses;
- (f) compliance with the conditions of the methodology; and
- (g) absence of applicable registry restrictions.

BioCarbon shall issue an Issuance and Registration Statement identifying the project, methodology, period, category, material or product, measure, quantity, and attributes.

The registry shall issue VWCCs in accordance with BioCarbon’s instruction and shall retain evidence of authorization, execution, and reconciliation.

Provisional VWCCs shall not be issued for future quantities or for quantities whose quality, destination, rights, or allocation remain pending.

20.3 Serialization, balances, and movements of VWCCs

The Registry Operator shall assign each issued quantity a unique, permanent, and non-reusable serial number. The serial number shall identify the origin of the VWCCs and the specific ranges covered by each registry movement.

At a minimum, the serial number structure shall identify:

- (a) the Standard code;
- (b) the country code;
- (c) the project holder code;
- (d) the project code;
- (e) the methodology code;
- (f) the outcome year; and
- (g) the first and last numbers of the serialized range.

The structure may be represented as follows:

BWCS-PE-123-001-BWCS0001-2026-0000001-0012500

BWCS	Standard code
PE	Country code
123	Project Holder code
001	Project code
BWCS0001	Methodology code
2026	Outcome year
0000001	First number
0012500	Last number

The year included in the serial number shall correspond to the calendar year in which the outcome occurred, not the year of issuance.

Where a monitoring period covers more than one calendar year, quantities shall be disaggregated and issued in separate serialized ranges for each year.

Each serialized range shall be homogeneous with respect to the methodology and its version, outcome category, material or product, unit of

measure, and year. Outcomes belonging to different methodologies, versions, categories, or units of measure shall not be combined within the same range.

The registry shall associate the following information with the serial number, although it need not be encoded within the serial number:

- (a) the methodology and its version;
- (b) the category and specific outcome code;
- (c) the material or product;
- (d) the unit of measure;
- (e) the monitoring period;
- (f) the issuance date;
- (g) the current account holder;
- (h) the transfer history;
- (i) special origin attributes, where applicable;
- (j) the Conformity Statement; and
- (k) the applicable Issuance and Registration Statement.

For each issued range, the registry shall maintain and display the total, available, retired, and cancelled quantities, as applicable.

Registry concept	Treatment
Issuance	Creates the VWCCs and the corresponding serialized range
Available	Identifies the balance that may be transferred or retired
Transfer	Moves VWCCs between accounts without changing their origin, attributes, or total quantity issued
Retirement	Permanently removes a quantity from circulation for a registered beneficiary and purpose
Cancellation	Permanently removes a quantity from circulation without supporting a use claim

Balances shall satisfy the following reconciliation:

$$VWCC_{issued} = VWCC_{available} + VWCC_{retired} + VWCC_{cancelled}$$

BioCarbon may order the temporary immobilization of a VWCC range where an incident is pending assessment. The registry shall identify the restriction and prevent transfer or retirement while it remains in force. Temporary immobilization shall not modify the serial number or constitute a separate registry category or balance. Once the incident has been resolved, the restriction shall be lifted or cancellation, rectification, or another applicable measure shall be implemented.

Transfers shall not modify this reconciliation because they only change the

account in which the available VWCCs are held.

Where a transfer, temporary immobilization, retirement, or cancellation covers only part of a range, the registry shall identify the affected first and last numbers and retain their relationship to the original issued range.

At a minimum, retirement shall identify the account holder, beneficiary, purpose, quantity, serialized range, and date. Retired VWCCs shall not be transferred, retired again, or used to support a claim other than the registered claim.

Cancelled VWCCs shall not be transferred, retired, or used to support use claims.

An incident shall not constitute a separate registry category, status, or balance. It shall be recorded separately and may result in the temporary immobilization of the affected VWCCs, their cancellation, rectification of a retirement, or another applicable corrective measure.

20.4 Transfer, retirement, and cancellation

Every transfer shall require an enabled account, authority of the requesting party, acceptance of the conditions of use, and available units. A transfer shall not modify the outcome, period, restrictions, or evidence.

Retirement shall identify the beneficiary, quantity, measure, project, purpose, period of the claim, date, and serial numbers and shall produce publicly verifiable evidence.

Retirement and cancellation shall be final. Errors shall be corrected through linked annotations and transactions that preserve the history, without reactivating retired or cancelled VWCCs.

Preventive technical immobilizations may be applied in accordance with previously authorized controls. BioCarbon shall determine their scope, duration, and release. GCT shall not resolve substantive disputes concerning conformity or rights.

21 Claims and conditions of use

21.1 Supported claims

Every claim supported by VWCCs shall identify:

- (a) the outcome;
- (b) the quantity and measure;
- (c) the material or product;
- (d) the project;
- (e) the period;

- (f) the claimant's role; and
- (g) the retired serial numbers.

A use claim shall require prior retirement of the VWCCs in favor of the beneficiary and shall correspond to their attributes and restrictions.

Financing, purchase, holding, retirement, physical outcome, and product attributes shall be clearly distinguished.

Financing or acquisition shall not, by itself, demonstrate that the buyer originated, implemented, or enabled the intervention.

Quantities from different categories or measures shall be communicated separately.

21.2 Limits on claims

Units shall not authorize claims of neutrality, elimination, or offsetting of waste or plastic footprints. Nor shall they demonstrate total circularity, absence of pollution, universal recyclability, or general environmental superiority. They shall not replace legal compliance or enable regulatory benefits without express legal recognition.

Outcomes external to a supply chain shall not demonstrate physical recycled content in its products. A mass-balance allocation shall be described as such and shall follow the authorized model, without being presented as demonstrated physical presence. Comparative environmental claims shall require a specific basis and assessment under Section 5. Retirement shall not replace such basis or assessment.

Impacts on climate, water, or biodiversity shall require their own evidence and authorizations. Their communication shall not convert a VWCC into a credit under another program or alter the attribution rules in Section 15.

VWCCs shall not be called carbon credits or converted into metric tons of carbon dioxide equivalent. Their use shall not support climate claims unless there is a separate climate outcome recognized under the applicable program.

21.3 Names and marks

The BioCarbon name and marks may be used only with authorization and within the assessed scope. Project conformity shall not be extended to an entire company, facility, catalog, or product not covered by the assessment. Suspension of authorization shall prevent new uses of the marks without removing truthful historical references.

21.4 Public corrections

The project holder and users subject to the BWCS conditions shall correct claims that are inconsistent with the evidence or affected by an incident.

Participation, transfer, and retirement agreements shall establish notification channels and an obligation to communicate corrections to the beneficiary.

BioCarbon shall publish the confirmed scope of the incident and may require rectification or suspend the use of marks, while preserving the due process established in Section 17.

22 Changes and noncompliance

22.1 Project changes

The project holder shall assess changes in ownership, participants, boundaries, technology, materials, destinations, financing, regulation, or the monitoring system.

A change shall be material where it may affect:

- (a) eligibility;
- (b) the baseline or additionality;
- (c) quantity or measure;
- (d) rights;
- (e) safeguards;
- (f) the recognition point;
- (g) the audit; or
- (h) permitted claims.

Nonmaterial changes shall be reported in the next Monitoring Report.

Material changes shall be reported before recognition of the affected outcomes is requested and may require an additional audit.

A project transfer shall ensure continuity of rights, obligations, records, and incidents. It shall not restart the start date, baseline, or recognition period.

22.2 Errors and improperly recognized outcomes

Within the period established in the applicable procedure, the project holder and the CAB shall report to BioCarbon any substantiated indication of overestimation, double counting, misrepresentation, loss of rights, or noncompliance with an essential condition.

Immediate risks to people or the environment shall be reported without delay and addressed in accordance with applicable law.

Upon receiving a substantiated indication, BioCarbon shall provisionally determine the project, monitoring period, outcome, quantity, serial numbers, accounts, and claims that may be affected. While determining the final scope, BioCarbon may order the temporary immobilization of the

identified VWCCs and prevent their transfer or retirement. This measure shall not prejudice the final decision.

Once the incident has been confirmed, BioCarbon shall determine its scope and order the proportionate measures necessary to preserve registry integrity and correct the affected claims. These measures may include rectification of the registry and the claims, cancellation of VWCCs, replacement at the expense of the responsible party, contractual compensation, or other measures defined by BioCarbon. Program administration shall not constitute a general replacement guarantee.

Where BioCarbon orders replacement, the responsible party shall provide valid VWCCs whose equivalence is accepted with respect to the outcome, measure, material or function, relevant period, and restrictions of the original claim. Belonging to the same category shall not be sufficient. Economic equivalence, equivalence across categories, and VWCCs previously retired for another use shall not be accepted.

Where an ordered replacement concerns available VWCCs, the registry shall cancel the affected quantity from the original serial numbers and link the replacement serial numbers to the corresponding accounts. Where it concerns VWCCs already retired, the replacement VWCCs shall be retired in favor of the same beneficiary and solely to correct the identified retirement. They shall not support an additional claim.

BioCarbon shall establish the deadline and conditions for correction in its decision. Where no eligible replacement exists or the responsible party fails to provide it within the established period, the lack of support shall be made public and the applicable contractual, registry, or administrative measures shall be implemented. A refund shall not validate the outcome.

Subsequent cessation of an operation shall not invalidate an achieved historical outcome unless the outcome fails to satisfy a methodology condition concerning time or destination, or the cessation reveals that the outcome did not occur as claimed. Where methodology conditions concerning duration or destination remain applicable after an outcome has occurred, the methodology shall establish the specific monitoring and correction requirements. These conditions shall not permit recognition of future services or replace the evidence of use required under Section 14.2. No carbon reversal or reserve mechanism shall be presumed to apply to the BWCS.

22.3 Measures and due process

Measures may include corrective requirements, exclusion of quantities, temporary immobilization of VWCCs, project suspension, cancellation of VWCCs, or termination of participation.

The decision shall be reasoned, identify the evidence, scope, responsible parties, deadlines, and conditions for lifting the measure, and be notified to

the affected parties. Opportunities to respond and the complaints and appeals mechanisms established in Section 17 shall apply.

Urgent preventive measures may precede a response where necessary to protect people, the environment, or registry integrity. Their necessity and scope shall be reviewed in light of new evidence.

BioCarbon shall distinguish indications from confirmed conclusions in public information. Program administration shall not constitute a general replacement guarantee or exclude the responsibilities applicable to each participant under applicable law and its obligations.

22.4 Closure

Closure shall require reconciliation of outcomes and units, documentation of pending materials and rejects, fulfillment of environmental and social obligations, identification of surviving responsibilities, and assurance of evidence custody and a contact point.

Open incidents shall remain visible and subject to follow-up. Closure shall not extinguish the obligation to correct them.

The project file and registry history shall remain accessible in accordance with the transparency and data-retention rules.

23 Entry into force and transitional provisions

23.1 Adoption and entry into force

This document is the Version 1.0 draft for public consultation.

Version 1.0 shall enter into force on the date specified in the adoption instrument published by BioCarbon.

The Standard shall apply to applications submitted from that date and to outcomes that satisfy the temporal rules established in Section 11.

Entry into force of the Standard shall not automatically enable a category, activity, or outcome. Enablement shall require a current methodology and Outcome Specification.

23.2 Operational enablement

BioCarbon shall publish a catalog of enabled methodologies, modules, tools, and Outcome Specifications.

Before applications are accepted under a pathway, the following shall be available:

- (a) a methodology;

- (b) an Outcome Specification;
- (c) project and monitoring forms;
- (d) an audit procedure;
- (e) CAB authorization criteria;
- (f) a registry and issuance procedure; and
- (g) applicable fees.

During an initial transition period published by BioCarbon, a CAB accredited in accordance with ISO/IEC 17029 and ISO 14065 for environmental information may be temporarily authorized even where its accreditation certificate does not yet expressly identify the BWCS, provided that it:

- (a) demonstrates sectoral competence;
- (b) passes BioCarbon's assessment;
- (c) completes a witnessed audit;
- (d) transparently discloses the scope of its accreditation; and
- (e) submits a plan to extend its scope, where possible.

Transitional authorization shall have a defined duration and conditions and shall not constitute an indefinite exception to the accreditation requirement.

Pilots shall not produce VWCCs until all Program requirements have been met.

23.3 Transition between versions

Each revision shall identify its effective date, the projects and periods affected, transition deadlines, and any need for an additional audit.

Editorial corrections shall not modify requirements. Clarifications shall not alter eligibility, additionality, quantification, rights, or issuance conditions.

Transitions shall not protect material errors, double counting, misrepresentation, or legal noncompliance.

24 References

References are classified as normative, informative technical, scientific, and legal. A reference shall be mandatory only within the scope expressly established in this Standard, a methodology, or an approved tool.

The inclusion of a publication in this section shall not automatically incorporate all its requirements or authorize activities, destinations, chain-of-custody models, or claims excluded by the BWCS.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. Text and annexes, with current status and applicability to be verified for each jurisdiction.

Stockholm Convention on Persistent Organic Pollutants. Text and annexes, with current status and applicability to be verified for each jurisdiction.

Gallego-Schmid, A., Mendoza, J. M. F. and Azapagic, A. (2019). Environmental impacts of takeaway food containers. *Journal of Cleaner Production*, 211, 417–427.

Haupt, M., Vadenbo, C. and Hellweg, S. (2017). Do We Have the Right Performance Indicators for the Circular Economy? Insight into the Swiss Waste Management System. *Journal of Industrial Ecology*, 21(3), 615–627.

ISO 59004:2024. Circular economy — Vocabulary, principles and guidance for implementation.

ISO 59010:2024. Circular economy — Guidance on the transition of business models and value networks.

ISO 59014:2024. Environmental management and circular economy — Sustainability and traceability of the recovery of secondary materials — Principles, requirements and guidance.

ISO 59020:2024. Circular economy — Measuring and assessing circularity performance.

ISO 59040:2025. Circular economy — Product circularity data sheet.

ISO 14040:2006. Environmental management — Life cycle assessment — Principles and framework. Including Amendment 1:2020.

ISO 14044:2006. Environmental management — Life cycle assessment — Requirements and guidelines. Including Amendment 1:2017 and Amendment 2:2020.

ISO 14066:2023. Environmental information. Competence requirements for teams validating and verifying environmental information.

ISO 22095:2020. Chain of custody — General terminology and models.

ISO 22095:2020/Amd 1:2026. Chain of custody — General terminology and models — Amendment 1.

ISO 22095-2:2026. Chain of custody — Part 2: Requirements and guidelines for mass balance.

ISO 22095-3:2026. Chain of custody — Part 3: Requirements and guidelines for book and claim.

ISO 14020:2022. Environmental statements and programmes for products — Principles and general requirements.

ISO 14021:2026. Environmental statements and programmes for products — Self-declared environmental claims.

ISO/IEC 17029:2019. Conformity assessment — General principles and requirements for validation and verification bodies.

ISO 14065:2020. General principles and requirements for bodies validating and verifying environmental information.

ISO/IEC 17025:2017. General requirements for the competence of testing and calibration laboratories.

Marsh, E., Hattam, L. and Allen, S. (2025). Stochastic error propagation with independent probability distributions in LCA does not preserve mass balances and leads to unusable product compositions—a first quantification. *The International Journal of Life Cycle Assessment*, 30, 221–234.

ILO (1998, amended in 2022). ILO Declaration on Fundamental Principles and Rights at Work.

PREVENT Waste Alliance (2024). Guidelines on Minimum Requirements for Plastic Waste Recovery & Crediting Standards.

PREVENT Waste Alliance (2026). Minimum Requirements for Electronic Waste Compensation Services. Final publication, June 2026.

UNEP and the BRS Secretariat (2023). Chemicals in Plastics: A Technical Report.

Zink, T., Geyer, R. and Startz, R. (2016). A Market-Based Framework for Quantifying Displaced Production from Recycling or Reuse. *Journal of Industrial Ecology*, 20(4), 719–729.

Zink, T. and Geyer, R. (2017). Circular Economy Rebound. *Journal of Industrial Ecology*, 21(3), 593–602.

Annex A. Terms and definitions

The following definitions shall apply to the Program without replacing the legal classifications of each jurisdiction.

Activity

An operation or intervention that contributes to producing an outcome, such as repair, sorting, or recycling.

Activity data

A measurement of an operation, such as mass received, equipment serviced, or trips made, that requires additional assessment before it becomes a recognized outcome.

Additional service

A service actually delivered that exceeds the baseline scenario and satisfies the methodological metric and conditions. Future use capacity or a repair performed without demonstrated use shall not, by itself, constitute an additional service.

Audit Statement

A document issued by the CAB that identifies the audit scope, criteria, period, outcome, quantity, assurance level, and conclusion. It shall not constitute a conformity decision or authorize issuance.

Additionality

Demonstration that the recognized outcome exceeds the applicable baseline scenario and depends on a causally supported intervention, in accordance with the methodology and the Program's regulatory rules.

Affected party

A person, group, or organization whose rights, health, safety, access to resources, or livelihoods may be affected by the project.

Attribute

A documented characteristic of a product, component, material, or process, such as composition, origin, or recycled content. It shall not, by itself, constitute an additional outcome.

Audit

A systematic, independent, and documented process through which a CAB obtains and assesses evidence to determine whether the project and the reported outcomes comply with the applicable BWCS criteria.

Baseline

A justified representation of the conditions and outcomes that would occur without the intervention, incorporating enforceable obligations and the relevant methodological adjustments.

Cancellation

Permanent removal of units from circulation for correction, an administrative decision, or another reason other than retirement for a claim.

Chain of custody

A system that connects materials and evidence among participants, including procedures for identification, segregation or authorized blending, and transfer.

Chain-of-custody model

Rules for controlling materials and their characteristics throughout the chain, including identification, segregation, blending, transformation, allocation, and transfer. The model used shall be admissible for the proposed outcome and claim.

Conformity determination

BioCarbon's decision regarding compliance with the BWCS, based on the project file, the project holder's statement, and the CAB documents.

Conformity Statement

A document issued by BioCarbon through which a favorable conformity determination concerning the project and the covered outcomes is communicated.

Effective substitution

Demonstrated displacement of a baseline product, resource, or service by an alternative that performs the relevant function, taking into account differences in quality and conditions of use or market conditions.

Eligible fraction

An identifiable portion of a flow or outcome that satisfies the applicable requirements after the relevant exclusions and adjustments.

Eligible activity

An intervention or delineated set of operations that satisfies the BWCS scope and admission conditions and can be assessed through an approved methodology. Classification as eligible shall not, by itself, demonstrate additionality or confer a right to recognition of outcomes or issuance of units.

Extended producer responsibility or EPR

Responsibilities assigned to producers under the applicable regime in relation to products and their subsequent management.

Functional unit

The quantified performance of a product or service system used as a reference for comparing alternatives, with a defined function, quality level, duration, and conditions of use. It shall not necessarily be equivalent to the registry unit issued by the BWCS.

Instance

An operational unit included in a grouped project that is separately identifiable and assessable.

Issuance and Registration Statement

A document issued by BioCarbon that authorizes the registration and ex post issuance of a specified quantity of VWCCs.

Lot

An identifiable quantity or set of materials, products, or components with documented origin, period, and characteristics. Its divisions and mixtures shall preserve traceability links.

Mass balance as a chain-of-custody model

A system for allocating characteristics to outputs within defined boundaries and periods based on eligible inputs and verified conversions. It is distinct from physical mass reconciliation and shall not, by itself, demonstrate the exact composition of each product.

Material change

A modification that may affect eligibility, the baseline, additionality, quantification, rights, safeguards, the recognition point, the audit, or permitted claims.

Material noncompliance

Noncompliance or a misstatement that may alter eligibility, the recognized quantity, attribution, a conformity decision, or the interpretation of a claim, or materially affect rights, legal compliance, or safeguards. Its material nature shall not depend exclusively on a quantitative threshold.

Material recirculation

The effective return of a secondary material to an eligible productive use, with demonstrated quality and destination.

Monitoring period

A continuous interval covered by a Monitoring Report and a request for recognition of outcomes.

Outcome category

A classification defined by the nature of the recognized outcome. Use of the same unit of measure shall not imply equivalence or fungibility among categories.

Physical mass balance

Reconciliation of inputs, outputs, transformation, losses, and inventory changes within defined boundaries and periods.

Post-consumer material

Material recovered after use by the final user for its intended function.

Post-industrial material

Material generated or separated during manufacturing before the final use of the product. Industrial origin shall not, by itself, determine its classification. Products discarded after performing their function shall be classified according to their use. Rework, scrap, and internal returns that can routinely be reincorporated into the same process shall be identified separately. Their circulation shall not demonstrate an additional outcome.

Preservation of function

Demonstrated extension or repetition of the useful service of a product or component through an eligible intervention.

Project holder

The person or entity responsible to BioCarbon for the project's design, implementation, evidence, rights, and compliance, even where activities are contracted to third parties.

Recognition period

A seven-year period during which a project may generate eligible outcomes, renewable up to twice in accordance with this Standard.

Recognition point

The verifiable stage and condition at which the methodology considers an outcome demonstrated, together with the applicable subsequent adjustments and obligations.

Recognized additional outcome

The quantity of an eligible outcome that exceeds the baseline scenario, has been independently audited, and has received a favorable conformity

determination from BioCarbon.

Retirement

A final registry action that assigns units to a beneficiary and a declared use and excludes them from further transfers or uses.

Secondary material

Material obtained from products or waste and fit for a defined subsequent use. Its technical designation shall not, by itself, determine the end of its legal status as waste.

Special origin attribute

A documented characteristic that identifies the environment or condition from which waste originates, such as the terrestrial environment, a waterway, riverbank, coast, marine environment, dump, landfill, leakage-risk area, or interception infrastructure. It shall not, by itself, constitute an additional outcome or increase the quantity eligible for issuance.

Verified Waste and Circularity Credit

A serialized unit issued ex post by BioCarbon and transferable until retirement that represents one unit of an additional outcome defined and quantified in accordance with an approved BWCS methodology. Its registry code is VWCC.

Annex B. Requirements for the Development and Approval of Methodologies

B.1 Scope

This annex establishes the minimum requirements for developing and approving BWCS methodologies and substantive revisions thereto.

Each methodology shall define a specific outcome that can be measured, audited, and registered without double counting.

Methodologies shall be applicable under real-world project conditions. They shall not require data, technologies, or analyses that would be disproportionately difficult to obtain when equally reliable alternatives are available.

B.2 Minimum content

Each methodology shall include:

- (a) title, code, version, and date;
- (b) objective;
- (c) outcome category;
- (d) covered activities and materials;
- (e) applicability conditions;
- (f) exclusions;
- (g) boundaries;
- (h) start date and temporal conditions;
- (i) baseline scenario;
- (j) regulatory surplus;
- (k) additionality test or tests;
- (l) recognition point;
- (m) equations and calculation sequence;
- (n) variables and parameters;
- (o) quality, composition, and destination;
- (p) inventories, losses, and rejects;
- (q) uncertainty;
- (r) displacement effects;
- (s) monitoring;
- (t) treatment of missing data;
- (u) chain of custody;
- (v) rights and double counting;
- (w) specific safeguards;
- (x) attributes and permitted claims; and
- (y) calculation examples.

For each variable, the methodology shall identify its name, symbol, unit, source, method, frequency, responsible party, quality control, and treatment of missing data.

B.3 Evidence and proportionality

The methodology shall include an evidence matrix that classifies each element as:

- (a) essential evidence;
- (b) conditional evidence; or
- (c) acceptable alternative evidence.

When a specific document is not legally or technically indispensable, the methodology shall allow equivalent evidence that provides the same level of confidence.

Requirements for sampling, testing, traceability, and confirmation of use shall be proportionate to the variability, materiality, and risk of the outcome.

B.4 Category-specific requirements

Prevention methodologies shall control for changes in production, demand, function, and displacement effects.

Preservation-of-function methodologies shall demonstrate condition, fitness for use, actual use, failures, and recognized duration.

Material recirculation methodologies shall control origin, composition, yields, inputs, products, co-products, inventories, losses, quality, and destination.

Biological resource and nutrient recovery methodologies shall control stability, contaminants, availability, dosage, application, and losses.

Environmental recovery and leakage prevention methodologies shall control location, origin category, date, removal or interception, chain of custody, contamination, rejects, destination, and double counting with subsequent recirculation.

B.5 Testing and review

The methodology dossier shall include tests of:

- (a) dimensional consistency;
- (b) physical conservation;
- (c) absence of double counting;
- (d) correct application of adjustments;
- (e) treatment of zero or negative outcomes;

- (f) inventories and periods;
- (g) incomplete data; and
- (h) regulatory or contractual allocations.

Real and simulated cases shall be identified separately.

The independent technical review shall document competence, conflicts of interest, documents examined, tests performed, findings, and their resolution.

B.6 Consultation and approval

Every new methodology and substantive revision shall undergo public consultation for at least thirty calendar days.

BioCarbon shall publish the approved methodology, its effective date, the approval decision, and the disposition of comments.

The approval shall identify monitoring conditions, limitations, and circumstances requiring the methodology to be reviewed.

Document History

Document type. Standard. Regulatory document.

Version	Date	Description
Public Consultation Draft, Version 1.0	October 2026	Public consultation version. Establishes the framework for the ex post recognition of additional outcomes from prevention, preservation of function, material recirculation, biological recovery, and environmental recovery, as well as the rules governing the audit, conformity, issuance, and registration of VWCCs.