

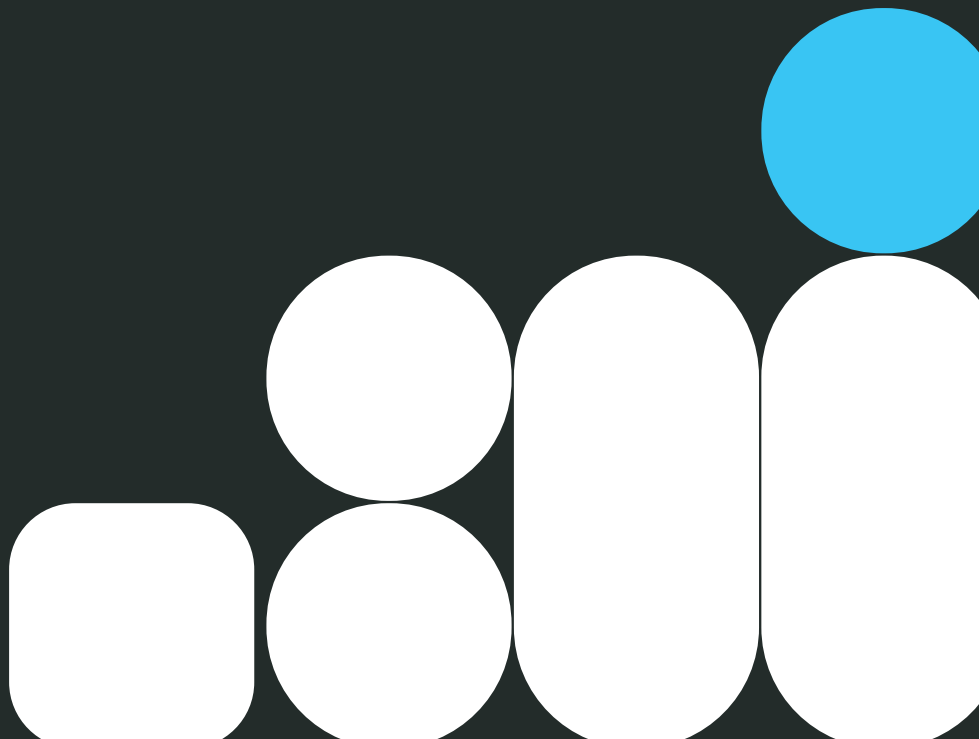


Puro.earth Certification Framework

# Common Criteria

Version 1.0 | APPROVED | 28 May 2028

© Puro.earth Oy 2026. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without full attribution.



# Contents

Introduction .....	3
Objective .....	3
Scope .....	3
Entry into force .....	4
Terms and definitions .....	4
Normative Structure .....	5
Applicability of Common Criteria .....	5
Principles .....	5
Common Criteria .....	5
Sub-criteria.....	6
Methodology-specific Criteria .....	6
Evidence requirements.....	6
Default finding classification.....	7
Conformity Assessment Guidance.....	7
1. Principle: Transparency and Documentation.....	8
1.1. Common Criterion: Project Activity Description.....	8
1.2. Common Criterion: Monitoring Plan.....	13
1.3. Common Criterion: Monitoring Report .....	17
1.4. Common Criterion: Crediting Period Renewal Assessment .....	23
2. Principle: No double counting .....	28
2.1. Common Criterion: No double issuance .....	28
2.2. Common Criterion: No double claiming with mandatory domestic mitigation schemes.....	30
2.3. Common Criterion: No double claiming from other environmental credits .....	31
2.4. Common Criterion: Article 6 Authorization .....	32
3. Principle: Additionality .....	35
3.1. Common Criterion: Additionality Demonstration Approach.....	35
3.2. Common Criterion: Regulatory analysis.....	39
3.3. Common Criterion: Investment analysis.....	41
3.4. Common Criterion: Barrier analysis.....	44
3.5. Common Criterion: Common practice and Technology Lock-in.....	48
4. Principle: Net GHG Quantification.....	52
4.1. Common Criterion: Net CDR Accounting Scope .....	52
4.2. Common Criterion: Uncertainty of measurement .....	56
4.3. Common Criterion: Data collection.....	58

- 4.4. Common Criterion: Quality Control System ..... 61
- 5. Principle: Permanence and Reversal Risk ..... 63
  - 5.1. Common Criterion: Reversal Risk Assessment ..... 66
  - 5.2. Common Criterion: Reversal Risk Monitoring ..... 69
  - 5.3. Common Criterion: Reversal Event Reporting and Compensation..... 72
- 6. Principle: Environmental and Social Safeguards ..... 76
  - 6.1. Common Criterion: Environmental and Social Impact Assessment..... 76
  - 6.2. Common Criterion: Stakeholder Engagement.....78
  - 6.3. Common Criterion: Environmental and Social Management Plan ..... 81
- 7. Principle: SDGs and Co-Benefits..... 84
  - 7.1. Common Criterion: SDG 13 Climate Action..... 84
  - 7.2. Common Criterion: Voluntary SDG Contributions and Co-Benefits..... 84
  - 7.3. Common Criterion: SDG Indicator Register ..... 90
- 8. Principle: Contribution to Net-Zero Transition ..... 93
  - 8.1. Common Criterion: Net-Zero Alignment..... 93
  - 8.2. Common Criterion: Sustainable Biomass Sourcing..... 95
  - 8.3. Common Criterion: Sustainable Energy Sourcing ..... 99
- References .....103
- Document History .....105

## No table of figures entries found.

- Table 1. Summary of methodology specific standardized approaches ..... 37
- Table 2. Technology readiness levels of Puro methodologies. .... 48
- Table 3. Causes of uncertainty and mitigation actions..... 56
- Table 4. Required parameter attributes. .... 58
- Table 5. Permanence Tier Classification ..... 63
- Table 6. Criteria for categorization of activity environmental and social risk.....77
- Table 7. SDG Indicator Register ..... 88

## Introduction

The Puro.earth Common Criteria are a shared normative resource for the development of carbon removal methodologies under the Puro.earth Certification Framework, its Certification Procedures and relevant Program Annexes.

They provide a common set of principles, criteria, and sub-criteria that methodology documents may incorporate when establishing requirements for specific carbon removal pathways and programs.

The Common Criteria do not govern carbon removal activities directly. Methodology documents are the primary normative authority for each certified activity. Requirements in this document become binding on Operators only where they are expressly referenced in the applicable methodology document or in the relevant Program Annex, and only to the extent and in the manner specified by that reference. Once applicable, the relevant Common Criteria and sub-criteria are subject to conformity assessment by Validation and Verification Bodies (VVBs) under that methodology.

For the purposes of this document, applicable Common Criteria means the Common Criteria and related sub-criteria that are expressly referenced in a methodology document or Program Annex.

## Objective

The objective of this document is to provide a common normative basis for methodology development under the Puro.earth Certification Framework and the programs operated by Puro.earth.

The document supports consistency across methodologies by defining shared principles, criteria, sub-criteria, evidence requirements, and default finding classifications that may be referenced by methodology documents or Program Annexes.

## Scope

This document is addressed primarily to:

- Operators, who use the applicable Common Criteria when designing and implementing their carbon removal activity;
- VVBs, who assess conformity with the applicable Common Criteria during validation and verification engagements;
- Methodology developers, who use the Common Criteria when developing requirements for specific carbon removal methodologies and programs.

The Common Criteria may apply at different stages of the certification lifecycle. The relevant certification stage, validation, verification, or both, is specified at sub-criterion level.

Where the relevant Common Criteria apply, this document specifies what Operators must demonstrate and what documentation they must prepare, maintain, and make available to VVBs.

This document does not prescribe how VVBs evaluate evidence. Audit procedures and evidence evaluation guidance are provided in the Puro.earth Audit Guidance.

## Entry into force

1<sup>st</sup> of June 2026. For more information refer to the Puro.earth Certification Framework v.1 updates and effective dates.

## Terms and definitions

For terms and definitions, see *Puro List of Definitions and Abbreviations*.

## Normative Structure

This document is organized around eight principles of carbon removal integrity. Each principle is supported by one or more Common Criteria. Each Common Criterion is further specified through one or more sub-criteria.

Principles describe the intended integrity outcome. Common Criteria define the normative conditions that must be met to satisfy the relevant principle. Sub-criteria define the auditable obligations against which the VVB makes conformity findings.

### Applicability of Common Criteria

Common Criteria apply only where they are expressly referenced in the applicable methodology document or in the relevant Program Annex, and only to the extent and in the manner specified by that reference.

Applicability may depend on:

- program-level requirements set out in the Puro.earth Certification Procedures and its Program Annexes, e.g., including requirements related to Article 6 authorization, SDG reporting, or contribution to net-zero transition, where relevant;
- the carbon removal pathway covered by the methodology and the certification scope of the activity;
- activity-specific characteristics, including technologies, inputs, processes, storage types, or monitoring arrangements used by the activity.

### Principles

Principles are high-level statements of the intended integrity outcomes for carbon removal activities. They provide the organizing framework for the Common Criteria and are aligned with the Integrity Council for the Voluntary Carbon Market Core Carbon Principles. A principle is satisfied through conformity with the applicable Common Criteria and sub-criteria associated with that principle.

### Common Criteria

Common Criteria are the normative requirements that a carbon removal pathway must satisfy where, and only to the extent that, they are expressly referenced in the applicable methodology document or relevant Program Annex.

Each Common Criterion is linked to a principle and supported by one or more sub-criteria. A Common Criterion is considered satisfied only when its applicable sub-criteria have been resolved.

Where referenced, the Common Criteria provide supporting documentation, evidence, monitoring, reporting, and conformity-assessment requirements. They do not modify the eligibility, quantification, permanence, monitoring-period, sustainability, or other methodology-specific requirements set out in the applicable methodology, unless the methodology document or relevant Program Annex expressly states otherwise.

In the event of inconsistency between the applicable methodology document and the Common Criteria, the methodology document prevails within its scope, subject to the Puro.earth Certification Procedures and relevant Program Annex.

## Sub-criteria

Sub-criteria translate a Common Criterion into discrete auditable obligations. Sub-criteria are scoped so that a single auditor finding can be mapped unambiguously to one sub-criterion.

The structure of each sub-criterion contains four elements:

- a specific “shall” requirement;
- the applicable certification stage, validation, verification, or both;
- a default finding classification;
- evidence requirements.

**Example.** The following outline exemplifies the structural distinction between a principle, a Common Criterion and sub-criteria.

6. Principle: Environmental and Social Safeguard System (*first-level principle: topic and purpose*).

6.2. Stakeholder engagement (*second-level, common criterion*).

6.2.1 Public consultation (*third-level, sub-criterion*).

**Applies to:** Validation

**Default finding if not met:**

- Major nonconformity
- Minor nonconformity

6.2.2 Ongoing feedback and grievance mechanism (*third-level, sub-criterion*).

6.2.3 Free, Prior and Informed Consent (*third-level sub-criterion*).

## Methodology-specific Criteria

Methodology-specific criteria are requirements defined in a methodology document for a specific carbon removal pathway. They establish pathway-specific requirements supplementary to the applicable Common Criteria.

## Evidence requirements

Evidence requirements specify the information needed to determine whether an applicable sub-criterion has been met. They are classified as follows:

- **Demonstration requirements:** the elements that the Operator must demonstrate.
- **Documentation requirements:** the records the Operator must prepare, maintain, and make available to the VVB.

## Default finding classification

Each sub-criterion includes a default finding classification. This classification provides the VVB's baseline level of non-conformity (NC) before applying professional judgment. The available finding classifications are contained in Table A.

**TABLE A. DEFAULT FINDING CLASSIFICATION**

Finding classification	Description	Assurance outcome
<b>Critical non-conformity</b>	Evidence of deliberate misrepresentation, falsification of records, or fraudulent classification.	The VVB shall communicate findings to Puro.earth immediately. Puro.earth determines the program response in accordance with the Certification Procedures (Section 6).
<b>Major non-conformity</b>	Prevents an unmodified opinion and must be resolved before issuance.	Modified or adverse opinion.
<b>Minor non-conformity</b>	Corrective Action Plan accepted; may escalate if unresolved or material in aggregate.	Unmodified opinion.
<b>Clarification request or observation</b>	Does not require a mandatory Corrective Action Plan.	No effect on opinion unless escalated.

Non-conformity management is governed by the Puro.earth Certification Procedures.

## Conformity Assessment Guidance

Conformity Assessment Guidance is provided to VVBs as non-normative guidance on how to assess conformity with applicable sub-criteria. It may include examples of findings at different levels of non-conformity, including missing evidence, incomplete evidence, errors, omissions, or misleading information.

The four possible conformity assessment outcomes are:

- In conformity
- Minor non-conformity
- Major non-conformity
- Critical non-conformity

For further information, VVBs should refer to the Puro.earth Audit Guidance.

# 1. Principle: Transparency and Documentation

The Operator shall provide comprehensive and transparent information on the design, implementation, and performance of the carbon removal activity to enable independent third parties to assess assumptions, replicate calculations, and scrutinise mitigation claims. Following successful audit, this information shall be made publicly available in the Puro Registry in electronic format and accessible to non-specialised audiences, subject to the confidentiality and data protection provisions of the Certification Procedures.

## 1.1. Common Criterion: Project Activity Description

The Operator shall demonstrate that the carbon removal activity is designed in a manner that is transparent, complete, and sufficient to allow independent validation of its carbon removal claims. The Project Activity Description (PAD), which sets out how this demonstration is made, shall be submitted in accordance with the Certification Procedures, Common Criteria and applicable Methodology Specific Criteria prior to requesting Validation.

**PAD content requirements:** the PAD shall contain the following sections and information:

The PAD items below are of two types, which are distinguished throughout this list:

- PAD content items, which are sections or statements authored within the PAD document and whose completeness is assessed under sub-criteria 1.1.1 and 1.1.2; and
- PAD-supporting verification evidence items, which are documents made available to the VVB at validation but not authored as sections of the PAD, assessed under the applicable criterion indicated and not under sub-criterion 1.1.1. Items falling into the second category are identified as such.

1. General information
  - a. Legal ownership and contact information of the Operator, including evidence of Project Ownership (see CP 4.1).
  - b. Operational partners with contact information, if applicable.
  - c. Georeferenced boundaries of the Project Activity and contributing supply chain elements
  - d. Project start date (see CP 3.2).
  - e. Prior scheme participation disclosure, including failed audits and pre-re-certification withdrawals, for the activity and the Operator's legal predecessors (see CP 9.8.20).
2. Eligibility for certification
  - a. Certification Program and applicable methodology, with reference to CP 3.1.1 (Table 2).
  - b. Geographic scope (see CP 3.3).
  - c. Approved deviation, if applicable.
3. Activity description
  - a. Non-technical summary of the activity.
  - b. Technologies, practices, and processes applied; planned production capacity based on equipment specifications and throughput.
  - c. Legal and regulatory compliance: identification of all permits, licences, consents and authorisations required to operate the activity under

applicable local, regional and national law; confirmation that these have been obtained and are valid; and identification of any other applicable laws, statutes or regulatory frameworks with a compliance statement for each (e.g. see [Commission Delegated Regulation \(EU\) 2026/285 §1.3.1\(c\)](#)).

4. Additionality
  - a. Identification of the applicable standardized stepwise approach, with reference to the relevant methodology-specific criteria or the applicable Common Criteria (see CC 3.1).
  - b. Evidence of prior consideration of carbon finance (see CC 3.1.1).
  - c. Regulatory analysis covering the applicable jurisdiction, direct mandate assessment, binding support scheme assessment, assessment of announced regulations, and regulatory surplus conclusion (see CC 3.2), where applicable.
  - d. Investment comparison analysis, including all cost and revenue inputs, the carbon revenue line, sensitivity analysis, and the underlying financial model made available to the VVB – where required by Table 1, Option A (see CC 3.3), where applicable.
  - e. Barrier analysis, including barrier type selection and justification, project-specific barrier description, substantiating evidence, alternative scenario assessment, and demonstration that carbon finance is the decisive enabling factor – where permitted by Table 1, Option B and selected in lieu of Option A (see CC 3.4), where applicable.
  - f. Common practice and technology lock-in section: TRL confirmation with reference to Table 2, and either a waiver statement where TRL is below 8, or the required analysis or analyses where TRL is 8 or above (see CC 3.5), where applicable.
5. No double counting
  - a. Double issuance declaration: confirmation of current and prior registration status under other carbon crediting programs in the last five years; where applicable, program details, status, withdrawal statement, and the auditing reports of the last two verification audits under those programs (see CC 2.1).
  - b. Mandatory domestic mitigation scheme assessment: identification of applicable schemes in the host jurisdiction; assessment of whether the activity's GHG outcomes fall within their scope; and, where overlap exists, description of the exclusion or cancellation mechanism in place (see CC 2.2).
  - c. Environmental co-instrument overlap assessment: identification of applicable environmental credit instruments, certification schemes, or sustainability frameworks covering the activity or its outputs; assessment of potential GHG outcome overlap with carbon credits; and, where overlap is identified, description of the measures ensuring exclusive attribution to the credit (see CC 2.3).
  - d. Article 6 authorization section (where Article 6 use is sought): declaration of intent to use carbon credits under Article 6 and identification of the applicable host country National Designated Authority (NDA); evidence of Letter of Authorization (LoA) application or stage documentation; copy of LoA where already issued at time of validation. Where carbon credits are intended exclusively for voluntary retirement, a confirmation to that effect (see CC 2.4).
6. GHG quantification

- a. Expected total carbon removals and total GHG emissions associated with the activity based on planned production capacity. In the case of a mixed engagement where validation takes place in tandem with verification, the Operator may provide the activity calculation model with fixed inputs and monitoring-period data clearly differentiated in lieu of projected figures (see CC 4.1 where applicable).
  - b. Expected net carbon removals and/or expected emission reductions generated by the activity, expressed in tCO<sub>2</sub>e and reconcilable with item 6a above.
  - c. Net CDR quantification section presenting the calculation with all components required by the methodology or applicable Common Criteria; activity boundary definition consistent with the quantification; GHG results expressed in tCO<sub>2</sub>e using GWP100 values applicable under CC 4.1 and, where the applicable methodology specifies a program-specific GWP source, under that specification (see CC 4.1).
  - d. Uncertainty assessment covering all material sources of uncertainty for each component of the net CDR quantification, including type classification for each source; combined uncertainty at the confidence level required by the methodology and at 95%, and in accordance with the methodology-specific criteria or applicable Common Criteria (see CC 4.2).
  - e. Parameter register (Table 4) covering all fixed and monitored parameters contributing to the net CDR quantification, with the attributes specified in CC 4.3 (see CC 4.3).
  - f. Materiality assessment: for any emission source associated with the activity but not explicitly identified in the applicable methodology, and for any source where the materiality pathway for capital emissions or input emissions has been applied, a description of the materiality assessment conducted including the estimated emission range, application of the 2 % threshold test, and the basis for any immateriality conclusion (see [Commission Delegated Regulation \(EU\) 2026/285](#) §1.3.1(f) and 2.3.1).
7. Permanence
- a. Reversal risk assessment: identification of all potential causes of reversal covering natural, human-induced, and geopolitical risk categories and any additional categories specified in the applicable methodology-specific criteria; rating of likelihood and magnitude and classification as avoidable or unavoidable for each identified risk; description of prevention measures and contingency responses for each risk; cross-reference to the applicable methodology-specific criteria governing risk categories, rating methods, and compensation mechanism requirements, if relevant for the specific program/methodology (see CC 5.1).
8. Environmental and social safeguards
- a. Safeguard Screening Report (all activities), covering stakeholder identification, applicable national regulations and methodology-specific criteria, competent authority engagement, and risk category determination under Table 6 (see CC 6.1).
  - b. Full Environmental and Social Impact Assessment report – Category A and B1 activities (see CC 6.1).
  - c. Simplified scoping-based Environmental and Social Impact Assessment – Category B2 activities (see CC 6.1).

- d. Risk category confirmation with reference to the specific Table 6 criteria supporting the low-risk classification – Category C activities (see CC 6.1).
  - e. Environmental and Social Management Plan (ESMA), integrating the findings of the full or scoping-based ESIA, the public consultation feedback, and, where applicable, Free, Prior, and Informed Consent (FPIC) documentation; incorporating the Environmental and Social Monitoring Plan, roles and responsibilities, FPIC monitoring procedures where applicable, the ongoing feedback and grievance mechanism, and the Corrective Action and Preventive Action (CAPA) plan (all activities; see CC 6.3).
  - f. Public Consultation Plan, prepared before the consultation is conducted (see CC 6.2).
  - g. Public Consultation Report, prepared after the consultation is complete and submitted using the Puro Stakeholder Engagement Report template (see CC 6.2).
  - h. Ongoing Feedback and Grievance Mechanism description (see CC 6.2).
  - i. Free, Prior and Informed Consent documentation – where the activity directly or indirectly affects indigenous peoples or local communities (see CC 6.2.3).
9. Sustainable Development Goals (SDGs) and co-benefits
- a. Section describing voluntary SDG contributions: declaration of selected SDG target(s) and approved indicator(s) from the SDG Indicator Register specifying whether each is a Descriptor or Attribute; qualitative description of the expected positive impact and causal link to the claimed SDG target; identification of monitoring indicators and evidence to be collected in support of verification; and commitment that the claimed SDG impact is not simultaneously claimed under another certification standard or environmental credit instrument. This section shall be omitted where no claim is made (see CC 7.2).
10. Contribution to net-zero transition and sustainable sourcing
- a. Net-zero alignment section: declaration confirming no coal use, no direct fossil fuel extraction increase, and no reliance on unabated fossil fuel electricity as the primary energy source, with reference to the energy and fuel inputs of the activity; assessment of consistency with the host country's NDC and, where available, its Long-Term Low Emission Development Strategy (LT-LEDS); assessment of long-term infrastructure or contractual commitments extending beyond the crediting period, where applicable (see CC 8.1, where applicable).
  - b. Biomass sourcing declaration identifying each feedstock type and its BSC category with justification, country and region of origin, and estimated volumes; per-feedstock traceability information and sustainability evidence as required by the applicable BSC category; chain of custody model declaration (segregation or mass balance) and basis for selection; Category P volume declaration and confirmation of exclusion from the carbon credit calculation, where Category P feedstock is processed – where biomass is used as feedstock; this section shall be omitted where no biomass is used (see CC 8.2, where applicable).
  - c. Operational and supply chain energy sourcing plan: all energy inputs used in the carbon removal process and upstream supply chain; renewable energy sources applied or planned; Renewable Energy Certificate (REC)

or equivalent instruments; and timeline for achieving full renewable energy sourcing where transitional fossil fuel use is declared under CC 8.1.1 (see CC 8.3, where applicable).

### **Template delegation**

The PAD content requirements listed above shall be prepared and presented using the latest version of the Puro PAD Template, as identified in the Compatibility Matrix maintained under the Certification Procedures. The PAD Template constitutes the authorized disaggregation of each content specification into the fields and sections required for a complete submission. Where the PAD Template specifies fields within a content requirement, those fields define the minimum level of information the Operator shall provide to satisfy that requirement.

Note: "Authorized" in this context means approved by Puro.earth as the operational form of the content specifications above. It does not confer legal authorisation in a regulatory or statutory sense.

The PAD Template does not create obligations additional to or independent of the content specifications above or the sub-criteria below. Where a discrepancy arises between the PAD Template and this criterion, this criterion governs. The Operator shall use the version of the PAD Template identified in the Compatibility Matrix as applicable to the declared methodology version and submission type. Use of a depreciated template version without prior written approval from Puro constitutes a document content non-conformity assessable under sub-criterion 1.1.1.

### **Sub-criteria**

#### **1.1.1. Internal consistency of the project design.**

The PAD shall be internally consistent: the project boundary, baseline scenario, additionality demonstration, GHG quantification approach, and environmental and social safeguards shall be mutually reinforcing and free from contradiction. Where the PAD references methodology-specific criteria, the application of those criteria shall be consistent with the project design as described.

NOTE: Where commercially sensitive information underlies the PAD, the Operator shall provide the VVB with direct access to that information under a confidentiality agreement. Confidentiality obligations do not exempt the Operator from the internal consistency and transparency requirements of this sub-criterion.

**Applies to:** Validation.

#### **Default finding if not met:**

- Major NC if internal contradictions between the project boundary, baseline, additionality, or quantification approach are material and constitute a fundamental deficiency such that a coherent validation conclusion cannot be drawn.
- Minor NC if inconsistencies are present but do not impair the overall coherence of the PAD or prevent a validation conclusion.

#### **1.1.2. Transparency and sufficiency of disclosure.**

The PAD shall be sufficiently transparent so that an independent party can understand all assumptions, reproduce all presented calculations, and reach a validation conclusion without recourse to information not disclosed in the PAD or its referenced

annexes. Assumptions shall be explicitly stated and justified; data sources shall be identified; and limitations shall be acknowledged and managed.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if key assumptions are undisclosed or calculations cannot be reproduced.
- Minor NC if the PAD contains omissions or ambiguities that do not prevent a validation conclusion but require clarification.

## 1.2. Common Criterion: Monitoring Plan

The Operator shall demonstrate that the monitoring system is designed to generate data that is sufficiently complete, accurate, and traceable to support independent verification of the carbon removal activity's GHG performance across all monitoring periods. The Monitoring Plan is the primary means by which this demonstration is made and shall be submitted with the PAD for Validation. It shall be developed in conjunction with the Quality Control procedures (see CC 4.4) and shall describe the process to collect data and evidence in accordance with ISO 14064-2:2019 and the relevant program and methodology specific criteria.

**Monitoring Plan content requirements:** the Monitoring Plan shall include the following components. Note that these are document content specifications, and substantive conformity is assessed under sub-criteria 1.2.1 and 1.2.2 below.

1. General
  - a. Project boundaries and monitoring system diagram, consistent with the activity boundary defined in the PAD (see CC 4.1).
  - b. Version history and amendment log, identifying the monitoring period(s) to which each version applies and summarising the nature of any amendments.
  - c. Monitoring Plan evaluation and update procedures: the triggers that will prompt a review of the Monitoring Plan (changes to the activity; changes to the normative framework; corrective actions requested by the auditor), the process for conducting and documenting that review, and the obligation to report updates in the Monitoring Report (see CC 1.2.3).
2. GHG Emissions and Carbon Removals Monitoring Plan (GHGMP)
  - a. Parameter register covering all monitored and fixed parameters contributing to the Equation 1 calculation (see CC 4.1), structured in accordance with Table 4 in CC 4.3, including monitoring frequencies, QC procedures, measurement uncertainty, and data archive information for each parameter (see CC 4.3).
  - b. Sampling plan: sampling design, sample sizes, and statistical methods applicable to measured parameters, with documentation of instrument selection, installation, and qualification (see CC 4.3.1 and CC 4.3.2).
  - c. Laboratory information: names and addresses of any internal or external laboratories used and evidence of their conformity with ISO/IEC 17025 or equivalent, where laboratory analyses are required by the applicable methodology-specific criteria (see CC 4.3.2).
  - d. CO<sub>2</sub> transfer monitoring design: where the activity involves transfer of CO<sub>2</sub> via transport infrastructure, a detailed description of the monitoring

methodology for that transfer, including the continuous measurement systems used and the procedures for preventing, detecting and quantifying leakage events (applicable to DACCS and BioCCS activities only)

### 3. Quality Control System

The QC system section shall document all eleven components specified in CC 4.4, including:

- a. roles and responsibilities with responsibility matrix and segregation of duties;
- b. documentation and data traceability (data sources, emission factors, version control, audit trail);
- c. activity data verification;
- d. emission factor validation; data entry and transcription checks;
- e. uncertainty analysis;
- f. internal audit and peer review schedule;
- g. data management and storage;
- h. calibration and maintenance plan;
- i. training and competency assurance;
- j. the reporting and corrective actions mechanism (see CC 4.4).

Note: For activities certified under the CRCF program, the QC system shall conform to the quality assurance standard in Article 60 of Implementing Regulation (EU) 2018/2066; calibration shall follow Article 42; and data aggregation shall follow Article 44 (see [Commission Delegated Regulation \(EU\) 2026/285 §1.3.2\(g\)–\(h\)](#)).

### 4. Environmental and Social Monitoring Plan (ESMP) and ESMA

The ESMP and associated ESMA components shall form a dedicated section of the Monitoring Plan, developed in accordance with CC 4.3 and CC 4.4, and shall contain:

- a. Environmental and Social Monitoring Plan (ESMP): indicators covering each material risk identified in the ESIA; threshold or trigger values for each indicator; monitoring methods, frequencies, and responsible personnel for each parameter; and procedures for responding to threshold exceedances (see CC 6.3).
- b. Roles and responsibilities for ESMA implementation, with clear accountability and segregation of duties (see CC 6.3).
- c. FPIC monitoring procedures, including the use of a recognized FPIC monitoring tool where available – where FPIC applies (see CC 6.3).
- d. Reference to and integration of the ongoing feedback and grievance mechanism required under CC 6.2.2 (see CC 6.3).
- e. Corrective Action and Preventive Action (CAPA) plan: procedures for emergency preparation and response triggered by ESMP threshold exceedances; procedures for identifying the root cause of negative environmental or social incidents; corrective actions to avoid, minimise, restore, or compensate for negative impacts; and procedures for verifying the effectiveness of corrective actions and updating the ESMP where required (see CC 6.3).

NOTE: The ESMP and RRMP are structured components of the Monitoring Plan, not standalone documents. The use of "Plan" in these names reflects internationally recognized terminology (e.g., IFC Performance Standards) and does not imply that separate documents must be produced.

### 5. Reversal Risk Monitoring Plan (RRMP)

The RRMP shall form a dedicated section of the Monitoring Plan and shall contain:

- a. Monitoring parameters, methods, measurement frequencies, threshold values or trigger conditions, and QC procedures for each reversal risk identified in the reversal risk assessment (see CC 5.2).
  - b. Roles and responsibilities for monitoring, reporting, and responding to reversal risks and events, with clear accountability lines and contact information (see CC 5.2).
  - c. Reversal event contingency plan: immediate containment actions to be taken upon trigger exceedance; the process for quantifying the extent of the reversal; the process for notifying Puro within five days of detection in accordance with CC 5.3; and the steps for implementing compensation (see CC 5.2 and CC 5.3).
  - d. Post-closure monitoring provisions specifying duration, parameters, and responsible parties – where required by the applicable methodology-specific criteria (see CC 5.2).
6. Sustainable sourcing tracking procedures  
A description of the record-keeping and tracking procedures through which the Operator will maintain ongoing compliance with the sustainable sourcing obligations during the crediting period, covering:
- a. Per-delivery biomass documentation tracking: the system for collecting and retaining, for each delivery, the identification attributes required by the applicable BSC category (batch identification, delivery dates, volumes, species or material types, supply chain entities), and the mass balance or segregation reconciliation approach where a mass balance CoC model is applied – where biomass is used as feedstock (see CC 8.2.4).
  - b. Energy sourcing records: the system for tracking and retaining Renewable Energy Certificate or equivalent certificates, temporal and spatial correlation evidence, and lifecycle GHG saving calculations for each monitoring period, in accordance with the applicable sub-criteria (see CC 8.3.1–8.3.5).
7. Data management and record-keeping policy  
The data management and storage policy shall cover: types of records kept; personnel responsible with clear segregation of duties and contact information; storage format (digital and/or hard copy); backup and security procedures; procedures for authorising, approving, and documenting changes to recorded data; time-stamping and quantification requirements; auditor access provisions; and the two-year post-crediting-period retention requirement (see CC 1.2.4).  
For activities certified under the CRCF program, records shall be retained for a minimum of ten years in accordance with Article 67(1) of Implementing Regulation (EU) 2018/2066, which supersedes the two-year minimum where the longer period applies (see DA (EU) 2026/285 §1.3.2(i))

## Sub-criteria

### 1.2.1. Completeness and coverage of the monitoring system

The Monitoring Plan shall cover all GHG emission sources and carbon removal pathways within the project boundary defined in the PAD in line with Principle 4, all environmental and social indicators required by Principle 6, reversal risk monitoring as required by Criterion 5, and sustainable sourcing as required by Principle 8, and any

other monitoring required by the applicable methodology. Monitoring parameters, methods, frequencies, quality control procedures, and responsibilities shall be clearly defined and aligned with the project design.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC, in the VVB's assessment, the Monitoring Plan omits parameters or responsibilities that would materially prevent or significantly impede independent verification of the GHG accounting.
- Minor NC if monitoring procedures are generally sound but lack detail or clarity that can be resolved prior to the monitoring period.

### 1.2.2. Traceability and verifiability of monitoring data

The data management and record-keeping system described in the Monitoring Plan shall be sufficient to ensure that reported GHG results can be traced from the reported figures back to raw monitoring data, and that a VVB can independently reproduce the calculations for each monitoring period.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the traceability architecture described in the Monitoring Plan is insufficient to allow a verifier to trace reported results to raw data.
- Minor NC if the system design is sound but lacks detail, provided the gap is correctable before the first monitoring period begins. Implementation of the data management system is assessed at Verification under CC 1.2.4.

### 1.2.3. Ongoing evaluation and updating of monitoring practices

The Operator shall evaluate the appropriateness and effectiveness of the monitoring practices as part of its Quality Control procedures as required in CC 4.4, and update the Monitoring Plan, accordingly, reporting those changes in the corresponding Monitoring Report. The evaluation shall include a reassessment of the site-specific monitoring requirements and risks. Updates to the Monitoring Plan shall be required at least where: changes to the Activity affect the activities being monitored; or changes to the normative framework require an update to the monitoring activities or corrective actions requested by the auditor.

**Applies to:** Verification (primary); Validation where the Monitoring Plan does not describe an adequate evaluation process.

**Default finding if not met:**

- Major NC if the Operator cannot demonstrate that any required updates to the Monitoring Plan were identified and actioned.
- Minor NC if the evaluation was conducted but not sufficiently documented, or if minor updates were not formally incorporated into the plan.

### 1.2.4. Data management and record-keeping implementation

The Operator shall have in place a data management and storage policy and an information management system to keep records of all monitoring activities associated with the activity, to be made available to the public and auditors following

the data quality control criteria in CC 4.4. The record-keeping or data management and storage policy shall include: types of records kept; personnel responsible for record-keeping with clear segregation of duties and available contact information; storage format (digital and/or hard copy); backup and security procedures; procedures for authorizing, approving, and documenting changes to recorded data; information on the parameter or process monitored, as well as results of any measurements performed. The information shall be time-stamped, and quantitative where applicable. These records shall be available to the Auditor for the Validation and Verification audits, allowing traceability from reported numbers to raw data. These records shall be kept for at least two years after the end of the crediting period or the last issuance of certificates for this project activity, whichever occurs later.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if the data management and storage policy is absent or if records are not being maintained in a manner that allows traceability from reported numbers to raw data.
- Minor NC if the policy is present but incomplete in its coverage of the required elements, provided the gap is correctable before the first monitoring period begins.

### 1.3. Common Criterion: Monitoring Report

The Operator shall demonstrate that the carbon removal activity's performance during the monitoring period is reported accurately and completely across all aspects covered by the approved Monitoring Plan. This includes GHG performance as the primary subject of the report, as well as environmental and social impacts, reversal risk, and sustainable sourcing as defined in the Monitoring Plan. The Monitoring Report is the primary means by which this demonstration is made and shall be submitted for each monitoring period in accordance with the Certification Procedures 5.4.

**Monitoring Report content requirements:** the Monitoring Report shall include the following minimum content for each monitoring period. For GHG-related components, the report shall be prepared in accordance with ISO 14064-2:2019, clause 6.13. For all other components, it shall follow the scope and requirements of the approved Monitoring Plan and the applicable methodology-specific criteria.

The items below are of two types, which are distinguished throughout this list. Monitoring Report content items are sections or statements that form part of the document itself; their completeness is assessed as a document content specification under sub-criteria 1.3.1 and 1.3.2.

Supporting verification evidence items are operational records that the Operator shall maintain and make available to the VVB for inspection alongside the MR; they are not sections of the MR document, and their substantive adequacy is assessed under the applicable criterion indicated. Both types of items are subject to the completeness review conducted by Puro under the Certification Procedures.

1. Identification and context
  - a. Name of the Operator and operational partners.
  - b. Brief description of the activity: size, location, crediting period, type of carbon removal activity, and methodology version being followed.

- c. Monitoring period: start and end dates covered by the report and date of submission.
- 2. GHG quantification
  - a. Net CDR calculation presenting Equation 1 with all components (carbon stored, baseline, carbon losses, project emissions, leakage, and conservativeness factor) populated with the actual values monitored during the period. Including, the following:
    - i. GHG results expressed in tCO<sub>2</sub>e using GWP100 values applicable under CC 4.1 and, where the applicable methodology specifies a program-specific GWP source, under that specification, with the GWP source identified (see CC 4.1);
    - ii. supporting calculations and evidence sufficient for independent replication by the VVB (see CC 4.1).
    - iii. Where a reversal event occurred during the monitoring period, the net CDR calculation shall present the estimated reversal quantity as a separately identified provisional deduction, clearly labelled as a provisional estimate pending standalone reversal audit confirmation under CC 5.3. Moreover,
      - 1. The net CDR figure stated in the MR represents monitored performance net of that provisional deduction.
      - 2. The confirmed net CDR for the period – the figure on which final credit issuance for the affected portion of the monitoring period is based – is established by the outcome of the standalone reversal audit.
  - b. Updated parameter register (Table 4) reflecting the monitored parameter values for the period, with updated source, QC, uncertainty, and archive information for each parameter (see CC 4.3).
  - c. Uncertainty assessment updated for the monitoring period: actual uncertainty values for all Equation 1 parameters classified by type per Table 3; combined uncertainty at the confidence level required by the methodology and at 95%; and the resulting F(c) determination (see CC 4.2).
  - d. Statement of deviations from the approved Monitoring Plan: each deviation explicitly identified, the reason explained, and the impact on the reported GHG results assessed. Where no deviations occurred, an explicit confirmation to that effect (see CC 1.3.2).
- 3. Quality control
  - a. Description of any updates made to the QC system during the monitoring period, the reasons for those updates, and their effect on data quality. Where a VVB finding from a previous verification identified a QC deficiency, demonstration that the corrective action has been implemented and is effective (see CC 4.4.3).
- 4. Permanence and reversal risk
  - a. Records of meeting the minimum permanence conditions required by the applicable methodology-specific criteria for the monitoring period (e.g., evidence of biochar end-use).
  - b. RRMP implementation statement: a statement confirming that monitoring under the RRMP was conducted as designed during the period, identifying any periods where monitoring did not occur at the specified frequency and the reason. RRMP updates made during the monitoring period and their rationale. Where no updates occurred, an explicit confirmation to that effect (see CC 5.2.2). *Supporting operational evidence (monitoring*

*records, trigger condition records, contingency action records) is made available to the VVB in accordance with CC 1.3.3(c).*

- c. Reversal event report – where a reversal event occurred during the monitoring period:
  - i. Reversal event report containing: the date of detection; a description of the cause or causes of the reversal event, assessed against the risk categories in the CC 5.1 risk assessment, together with a preliminary classification as avoidable or unavoidable – which is the Operator's preliminary determination and is provisional pending confirmation by the standalone reversal audit under CC 5.3; the estimated quantity of carbon re-released to the atmosphere in tCO<sub>2</sub>e, constituting the provisional deduction referred to in the net CDR calculation above, together with the methodology-specific calculation method applied to derive the estimate; and a description of the immediate containment actions taken following detection (see CC 5.3).
  - ii. Compensation plan describing: the steps to be taken to compensate for the reversal and the timeline for those steps; the Operator's preliminary determination of the applicable compensation mechanism under the Permanence Tier assigned to the activity in Table 5, on the basis of the preliminary avoidable or unavoidable classification stated in the reversal event report; the volume of CORCs corresponding to the provisional reversal deduction that are to be held in the Registry pending standalone reversal audit confirmation, in accordance with CC 1.3 sub-criterion 1.3.4; and the Registry mechanism through which compensation will be applied upon standalone audit confirmation, in accordance with the Certification Procedures (see CC 5.3).
  - iii. A reference to the standalone reversal audit record published in the Registry, confirming the verified reversal quantity, the confirmed avoidable or unavoidable classification, and – where the reversal is classified as avoidable – the completion of compensation, as determined by the standalone reversal audit conducted under CC 5.3 and the Certification Procedures. Where the standalone reversal audit is not complete at the time the Monitoring Report is submitted, the Monitoring Report shall include: a status update on the audit process, specifying the stage reached and the expected completion timeline; the current Registry hold status of the provisional deduction volume; and a reference to the Registry record that will be published upon completion (see CC 5.3).

5. Environmental and social performance

- a. ESMA implementation report: environmental and social performance of the activity during the monitoring period including any incidents, corrective actions taken, and changes to the ESMA; sufficient to allow the VVB to confirm the activity operated within ESMA parameters and that no material incidents have been omitted (see CC 6.3.3).
- b. Stakeholder feedback and grievance log: records of all feedback and grievances received during the monitoring period, the Operator's responses, and the resolution status of any outstanding issues (see CC 6.2.2).

- c. CAPA plan updates made during the monitoring period and their rationale. Where no updates occurred, an explicit confirmation to that effect (see CC 6.3.2).
  - d. *Supporting verification evidence*: CAPA operational records for the monitoring period, made available to the VVB in accordance with CC 1.3.3(d), *where threshold exceedances or incidents occurred during the monitoring period* (see CC 6.3.2).
- 6. Monitoring Plan updates
  - a. Reference to any updates made to the Monitoring Plan during the monitoring period, with an explanation of the change, the reason for it, and its effect on the monitoring approach for the period. Where no updates occurred, an explicit confirmation to that effect (see CC 1.2.3).
- 7. No double counting – ongoing confirmations
  - a. Confirmation that no new environmental credit instrument applicable to the activity or its outputs was established during the monitoring period that would create an overlap with carbon credits issued for the period; third-party supplier confirmations that input materials have not been submitted under any such instrument – where the activity involves third-party material suppliers (see CC 2.3.2). Third-party supplier confirmations in this item are supporting verification evidence items: they are operational records made available to the VVB for inspection but not authored as sections of the Monitoring Report, assessed under CC 2.3.2 and not under CC 1.3.1 or CC 1.3.2.
  - b. Where Article 6 Authorized Use is sought for carbon credits issued in this period (see CC 2.4.2), .Confirmation that a valid LoA is on file with Puro covering the vintage years and monitoring period of the carbon credits subject to Article 6 Authorized Use assignment.
- 8. SDGs and co-benefits
  - a. Qualitative and quantitative evidence of the SDG impact claimed at validation, in accordance with the evidence requirements for the applicable approved indicator in the SDG Indicator Register – where a voluntary SDG claim was declared in the PAD (see CC 7.2.2).
- 9. Sustainable sourcing compliance
  - a. Biomass sustainability and traceability evidence for the monitoring period – where biomass is used as feedstock:
    - i. Confirmation whether a revised BSC version has been published since the previous audit and whether it applies to the current monitoring period (see CC 8.2).
    - ii. Per-feedstock sustainability evidence per the applicable BSC category for the period, including third-party ISAE 3000<sup>1</sup> limited assurance verifications where required by the BSC (see CC 8.2.3).
    - iii. Per-delivery traceability records and mass balance reconciliation for the monitoring period made available to the VVB (see CC 8.2.4 and CC 1.3.3.(e)).
  - b. Energy sourcing documentation for the monitoring period – for all activities: REC cancellation records; temporal and spatial correlation evidence; incrementality documentation; and lifecycle GHG saving calculations, in accordance with the applicable sub-criteria (see CC 8.3.1–8.3.5).

<sup>1</sup> International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information.

NOTE: In addition to the content sections above, the Operator shall make available to the VVB the operational records specified in CC 1.3.3. Those records are not sections of this document but are a mandatory component of the verification evidence package for each monitoring period.

## Sub-criteria

### 1.3.1. Accuracy and traceability of reported GHG results

The Monitoring Report shall provide sufficient evidence that reported GHG emission reductions and removals can be traced from reported figures back to raw monitoring data, and that the calculations supporting the GHG statement can be independently reproduced by a verifier. Data gaps, deviations from expected values, and any corrections applied shall be transparently documented and justified.

- A. Where a reversal event occurred during the monitoring period, the verifier's scope under this sub-criterion is limited to: (a) the accuracy and traceability of the GHG performance of non-affected tonnes – that is, the net CDR calculation as reported in the MR excluding the provisional reversal deduction; and (b) the completeness and internal consistency of the reversal event report as a document, assessed against the content requirements in CC 1.3 above. The substantive accuracy of the reversal quantification, the confirmed avoidable or unavoidable classification, and the completion of compensation are assessed under CC 5.3.2 and CC 5.3.3 as part of the standalone reversal audit and are outside the scope of this sub-criterion. The verifier shall state in the verification opinion that a reversal event is in progress, that a provisional deduction of [volume] tCO<sub>2e</sub> has been identified in the net CDR calculation, and that the reversal claim is subject to a standalone reversal audit under CC 5.3.

**Applies to:** Verification.

#### Default finding if not met:

- Major NC if reported results for non-affected tonnes cannot be traced to source data or calculations cannot be reproduced, or if the provisional reversal deduction is not clearly identified in the net CDR calculation;
- Minor NC if minor data gaps, transcription errors, or documentation weaknesses do not materially affect the reported GHG results and are correctable through clarification or additional evidence submission.

### 1.3.2. Consistency with the approved Monitoring Plan

The Monitoring Report shall demonstrate that monitoring during the period was conducted in accordance with the approved Monitoring Plan. Where deviations from the Monitoring Plan occurred, they shall be explicitly identified, the reason for each deviation explained, and the impact on the reported GHG results assessed. Any updates to the Monitoring Plan arising during the period shall be referenced and their effect on the monitoring approach described.

**Applies to:** Verification.

#### Default finding if not met:

- Major NC if significant data gaps, unreported deviations, or inconsistent application of the Monitoring Plan mean the verifier cannot confirm the GHG statement.

- Minor NC if deviations are present but disclosed, the underlying data remains valid, and the impact on reported results is not material.

### 1.3.3. Availability of supporting verification evidence

The Operator shall make available to the VVB, for each monitoring period, all operational records identified as supporting verification evidence items in the Monitoring Report content requirements above. These records shall be maintained in accordance with the data management and record-keeping policy required under CC 1.2.4 and shall be accessible to the VVB at the time of the verification audit.

**Applies to:** Verification.

**Default finding if not met:**

Each supporting verification evidence item identified in the Monitoring Report content requirements above is assessed under the criterion governing that record type, as indicated. A systematic failure to maintain records across multiple categories may additionally give rise to a finding under CC 4.4.1 where it evidences a breakdown in the QC system.

### 1.3.4. Credit issuance pending standalone reversal audit confirmation

This sub-criterion applies to Tier II and Tier III activities. For Tier I activities, reversal events occur post-injection at which point credits for the affected activity have already been issued; the response is governed by the statutory liability of the storage site operator under the applicable recognized regulatory regime and the notification and documentation obligations in CC 5.3.1 and CC 5.3.3. The issuance hold mechanism in this sub-criterion does not apply to Tier I.

Where a reversal event occurred during the monitoring period of a Tier II or Tier III activity, credit issuance for the affected period is governed as follows, in accordance with the Certification Procedures:

- A. Credits corresponding to non-affected tonnes – defined as the net CDR for the period as reported in the MR minus the provisional reversal deduction – may be issued following the MR verification conclusion.
- B. Credits corresponding to the provisional reversal deduction are held in the Registry pending standalone reversal audit conclusion under CC 5.3. The volume held is the provisional reversal quantity as stated in the reversal event report. Where the standalone audit confirms a quantity that differs from the provisional estimate, the held volume is adjusted accordingly.

NOTE: The provisional deduction does not limit the Operator's compensation liability. The compensation obligation under CC 5.3.3 extends to the full volume of the reversal as determined by the standalone reversal audit, regardless of the volume held provisionally. Where the standalone audit identifies a reversal materially larger than the provisional estimate, the additional volume is subject to the same compensation and cancellation obligations.

- C. Upon standalone reversal audit conclusion, the held credits are treated as follows:
  - i. Tier II activities: where the standalone audit confirms that a permanence condition failure has occurred, the credits held are cancelled and the compensation obligations in CC 5.3.3 apply.

- ii. Tier III activities: where the reversal is confirmed as avoidable, the held credits remain suspended until compensation is completed in accordance with CC 5.3.3 and the Certification Procedures, at which point they are cancelled. The definition of a reversal event, the trigger conditions, and the methodology for estimating the magnitude of a reversal applicable to Tier III activities are as specified in the applicable methodology-specific criteria.

The Certification Procedures specify the Registry mechanism through which the issuance hold, adjustment, and cancellation actions are executed.

**Applies to:** Verification (triggered by reversal event in Tier II and Tier III activities).

**Default finding if not met:**

- Major NC if credits corresponding to the provisional reversal deduction are issued before standalone reversal audit confirmation.
- Major NC if the held volume stated in the Registry does not correspond to the provisional deduction identified in the reversal event report.

## 1.4. Common Criterion: Crediting Period Renewal Assessment

The Operator shall demonstrate, at the time of crediting period renewal, that the carbon removal activity remains eligible for continued certification and that the assessments underpinning the original Project Activity Description remain valid, have been updated to reflect changed conditions, or have been superseded by revised analyses prepared in accordance with the applicable Common Criteria. The Renewal Assessment (RA) is the primary means by which this demonstration is made and shall be submitted to Puro in accordance with the Certification Procedures prior to the commencement of the new crediting period.

The RA shall be a standalone document that is self-contained for the purposes of independent review. It shall provide sufficient activity context and summary of prior-period performance to allow an external stakeholder to evaluate the renewal analyses without reference to the original PAD. Where the RA updates or supersedes a section of the approved PAD, the updated content in the RA shall govern for all purposes from the effective date of the new crediting period. The original PAD is not revised; the RA operates as an addendum that takes precedence over the sections it identifies as superseded.

NOTE: Within these criteria, "**Applies to:** Validation (renewal engagement)" designates sub-criteria that must be re-demonstrated with full rigor for the new crediting period, as if assessed for the first time. "**Applies to:** Verification (at crediting period renewal)" designates sub-criteria assessed within the scope of the ongoing verification engagement, where re-assessment is limited to confirming the absence of material change or is triggered only by a defined condition (e.g., a regulatory change, a TRL revision). Both engagement types are conducted as part of the same crediting period renewal process.

**Renewal Assessment content requirements:** the RA shall contain the following sections. These are document content specifications; substantive conformity is assessed under sub-criteria 1.4.1 and 1.4.2 below.

1. Activity context

- a. Name of the Operator, operational partners, and the certification program and methodology under which the activity is registered.
  - b. Brief description of the activity: type, location, technology, and planned production capacity, consistent with the approved PAD and reflecting any post-certification changes approved during the expiring crediting period.
  - c. Reference to the expiring crediting period: start and end dates, the version of the PAD and any approved amendments that governed the expiring period, and a statement of the crediting period number (e.g., first renewal, second renewal).
  - d. Reference to the Monitoring Reports submitted during the expiring crediting period, with summary of total net CDR quantified and verified across all monitoring periods.
2. Performance summary
    - a. Summary of the activity's actual operational performance during the expiring crediting period against the assumptions made in the approved PAD, covering: actual production capacity and throughput relative to planned; actual net CDR per monitoring period relative to the projected figures; and any material operational changes or post-certification amendments made during the period and their effect on the activity as designed.
    - b. Summary of any findings raised by the VVB during the expiring crediting period that remain open or that have implications for the renewal assessment, with the Operator's account of the actions taken in response.
3. Additionality reconfirmation
    - a. Regulatory reassessment: identification of any change in applicable law, regulation, or binding policy since the previous crediting period; assessment of whether any such change renders the activity non-additional or requires modification of the additionality demonstration; confirmation of the implementation status of any officially announced regulation previously identified; and a concluded statement on whether regulatory surplus is maintained. Where regulatory conditions have materially changed, an updated regulatory analysis and, where required, an updated baseline scenario shall be included (see CC 3.2.2 and CC 3.1.3).
    - b. Financial performance reassessment, where investment comparison analysis was the applicable additionality pathway in the expiring crediting period: comparison of actual financial performance against the assumptions used in the previous analysis, identifying and explaining material deviations in costs, revenues, co-product values, subsidies, or carbon credit price; assessment of whether any such deviation affects the additionality conclusion; and confirmation that carbon finance remains necessary for financial viability under the updated assumptions. Where the updated analysis indicates the activity would be financially viable without carbon finance, this shall be disclosed and the additionality conclusion shall be reassessed with reference to CC 3.3 (see CC 3.3.2 and CC 3.1.3).
    - c. Barrier reassessment, where barrier analysis was the applicable additionality pathway in the expiring crediting period: confirmation that the identified barriers remain in place and retain their prohibitive character; assessment of whether any change in the regulatory

environment, market conditions, financial landscape, or TRL has reduced or eliminated any identified barrier; confirmation that no new programs, subsidies, or incentives have arisen that would independently enable the activity without carbon finance; and a concluded statement on whether the barrier justification remains valid. Where FOAK was relied upon and the applicable methodology TRL has been revised to 8 or above, the transition to an investment comparison analysis required under CC 3.4 shall be addressed (see CC 3.4.3 and CC 3.1.3).

- d. Common practice and technology lock-in reassessment, where a TRL update has occurred since the last validation or where material changes to the host country's transition policy have occurred: the applicable analysis in full, in accordance with CC 3.5.1 (common practice analysis) and CC 3.5.2 (technology lock-in risk analysis), as triggered. Where neither analysis is triggered, a statement confirming the current TRL with reference to Table 2 and confirming that the waiver conditions remain fulfilled (see CC 3.5).
4. No double counting
    - a. Mandatory domestic scheme reassessment, where a change in the applicable regulatory framework has occurred since the previous crediting period: an updated assessment of whether the activity's GHG outcomes fall within the scope of any mandatory domestic mitigation scheme; and, where they do, confirmation that the exclusion or cancellation mechanism identified in the PAD remains operative or an updated description of the mechanism now in place. Where no regulatory change has occurred, a statement to that effect with reference to the regulatory reassessment in section 3a above (see CC 2.2.1).
  5. Permanence
    - a. Reversal risk assessment review, required at each crediting period renewal, or at each five-year interval if renewal occurs more frequently: review of the reversal risk assessment approved at the previous validation or renewal, assessing whether changes to the activity, the operating environment, or the applicable methodology-specific criteria indicate that the risk profile has materially changed; an updated reversal risk assessment where such changes are identified; and confirmation of the compensation mechanism (if any) applicable to the new crediting period. Where the risk profile is unchanged, a documented review confirming that the original assessment remains valid shall be included (see CC 5.1.3).
  6. Net-zero alignment
    - a. Net-zero alignment reassessment, where material changes to the energy or feedstock profile of the activity, or to the host country's NDC, LT-LEDS, or relevant policy framework, have occurred since the previous crediting period: an updated net-zero alignment section addressing the changed conditions, in accordance with CC 8.1.1 and CC 8.1.2. Where no material changes have occurred, a statement to that effect with reference to the net-zero alignment section of the approved PAD (see CC 8.1).
  7. PAD sections superseded by this Renewal Assessment
    - a. A supersession table explicitly identifying each section of the approved PAD (and any approved amendments thereto) that is updated or replaced by this RA, specifying: the PAD section reference; the RA section reference that replaces it; and the effective date of supersession, which

shall be the first day of the new crediting period. PAD sections not listed in the supersession table remain in force as approved.

## Sub-criteria

### 1.4.1. Completeness and internal consistency of the Renewal Assessment

The RA shall address all elements required under this criterion and shall be internally consistent: the performance summary, regulatory reassessment, financial or barrier reassessment, and reversal risk assessment review shall be free from contradiction. Where the RA concludes that conditions have not materially changed in a given area, that conclusion shall be supported by explicit reference to the evidence or analysis on which it is based. A bare assertion of unchanged conditions, without reference to evidence, is insufficient. Where analyses in the RA depend on data or conclusions from the expiring period's Monitoring Reports, those references shall be specific and traceable.

#### Applies to:

- Validation (renewal engagement).
- Verification (at crediting period renewal, only where a change in the applicable regulatory framework has occurred).

#### Default finding if not met:

- Major NC if any mandatory section of the RA is absent, or if the RA reaches conclusions on additionality, reversal risk, or net-zero alignment that are materially inconsistent with each other or with the evidence presented, or if the RA fails to identify and address material changes in the activity's conditions relative to the conclusions of the original PAD or most recent approved RA.
- Minor NC if the RA is substantively complete but individual sections contain gaps in documentation or cross-referencing that do not affect the renewal conclusions.

### 1.4.2. Supersession of PAD sections

The RA shall identify each PAD section it updates or replaces in the supersession table required under item 7.a of the RA content requirements above. The supersession table shall be complete: no PAD section shall be implicitly superseded by content in the RA without being explicitly listed. Where a renewed analysis produces the same conclusion as the original PAD section it updates (e.g., a regulatory reassessment confirming no change), the RA section nonetheless takes precedence over the original PAD section from the effective date of the new crediting period, and this shall be reflected in the supersession table.

#### Applies to:

- Validation (renewal engagement).
- Verification (at crediting period renewal, only where a change in the applicable regulatory framework has occurred).

#### Default finding if not met:

- Major NC if the RA contains updated analyses for which no corresponding PAD section is listed in the supersession table, creating ambiguity as to which version governs for the new crediting period.
- Minor NC if the supersession table is present but incompletely cross-referenced in a manner correctable without changing any substantive conclusion.



## 2. Principle: No double counting

Carbon dioxide removals certified under the Puro Certification Framework shall be counted only once towards climate mitigation targets or goals. This Principle addresses three forms of duplicative claim – double issuance, double claiming, and double use – each prevented through distinct Operator-level obligations and program-level controls established in Common Criteria 2.1 to 2.4.

Double issuance arises where the same removal outcome is registered or credited by more than one program, or more than once within the same program. NOTE: Intra-program double issuance (e.g. due to registry error or duplicate submission) is prevented through registry-level system controls maintained by Puro and does not generate an Operator disclosure obligation under this criterion. The sub-criteria below address cross-program double issuance only.

Double claiming arises where the same outcome is counted towards both a voluntary carbon credit and a mandatory domestic mitigation obligation or another environmental credit instrument.

Double use arises where a credit is retired more than once; this is addressed through the Puro Registry's program-level controls and does not generate a separate Operator-level demonstration obligation.

The Operator-level obligations in respect of double issuance, double claiming, and Article 6 authorization are addressed in Common Criteria 2.1, 2.2, 2.3, and 2.4 respectively.

### 2.1. Common Criterion: No double issuance

The Operator shall demonstrate that the carbon removal activity is not simultaneously registered or credited under another carbon crediting program for the same activity and monitoring period, and that no other program has issued or is issuing credits for the same GHG emission reductions or removals.

**PAD content requirements:** the no double issuance section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 2.1.1 and 2.1.2 below:

1. A declaration confirming whether the Operator or their legal predecessor is currently participating in, or has participated in, another carbon crediting program in the last five years in respect of the same activity or a predecessor activity at the same location or facility.
2. Where participation in another program exists or has existed: the name of the program, the registration or project identification number, the crediting period, and the status of that registration (active, expired, withdrawn, or suspended).
3. Where the Operator has withdrawn from another program before completing the first verification audit under that program: a statement of the circumstances of the withdrawal, and confirmation that no credits were issued under that program for the relevant activity.
4. The auditing reports of the last two verification audits conducted under any other program, including the detailed list of findings raised by the VVB and any program decision to suspend or withdraw certification in the last five years.

Note: The content requirements above reflect and consolidate the disclosure obligations already required under PAD section CC 1.1. Operators shall cross-reference rather than duplicate this information where it has already been provided in the general information section of the PAD.

## Sub-criteria

### 2.1.1. Absence of simultaneous registration

The Operator shall confirm that the carbon removal activity is not currently registered as active under another carbon crediting program for the same activity, location, and monitoring period. Registration under a previous program that has since expired or been formally terminated – with no credits outstanding for the relevant monitoring period – does not constitute double issuance, provided this is documented and disclosed. The Operator shall notify Puro in writing without undue delay if a simultaneous registration or crediting arises after the validation date.

The Operator shall confirm that the activity's GHG accounting boundaries do not overlap with those of another mitigation activity that is currently registered and active under the same or another program, and for which credits have been or are being issued for the same emission reductions or removals.

#### Applies to:

- Validation (full declaration) and
- Verification (confirmation that no notification of new simultaneous registration has been received and independent registry check by the VVB).

#### Default finding if not met:

- Major NC if the activity is currently active under another program for the same monitoring period.
- Major NC if the GHG accounting boundaries overlap with those of an active registered activity under another program and credits have been or are being issued for the same outcomes.
- Minor NC if a prior registration is present and disclosed but the documentation of its termination or expiry is incomplete.

### 2.1.2. Disclosure of prior or subsequent program participation

The Operator shall fully disclose any prior participation in another carbon crediting program in respect of the same activity, including the outcome of any prior audits, findings, and any program-level sanction. Disclosure shall be sufficient to allow the VVB to assess whether the prior program participation creates any residual risk of double issuance or indicates a pattern of non-conformity relevant to the integrity of the current registration. Subsequent participation in another program after the validation date is subject to the notification and simultaneity obligations under CC 2.1.1.

#### Applies to: Validation.

#### Default finding if not met:

- Major NC if prior program participation is not disclosed or is materially misrepresented.
- Minor NC if the disclosure is present but incomplete, for example, missing audit reports or an insufficiently explained withdrawal, in a manner that is correctable without changing the double issuance conclusion.

NOTE: Where evidence of deliberate misrepresentation of the activity's registration status under another carbon crediting program, or of the existence or outcome of prior program participation, is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

## 2.2. Common Criterion: No double claiming with mandatory domestic mitigation schemes

The Operator shall demonstrate that the carbon removal outcomes credited as carbon credits are not simultaneously counted towards the achievement of targets or obligations under any mandatory domestic mitigation scheme applicable to the activity, including emissions trading systems, renewable energy quota obligations, or equivalent regulatory instruments.

**PAD content requirements:** the no double claiming section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under CC 2.2.1 below:

1. Identification of any mandatory domestic mitigation scheme applicable in the jurisdiction where the activity is implemented that could cover the GHG emission reductions or removals generated by the activity, including emissions trading systems, sectoral carbon taxes, renewable energy obligations, and equivalent instruments.
2. An assessment of whether the activity's GHG outcomes fall within the scope of any such scheme, and whether those outcomes would – absent specific measures – be counted towards the scheme's targets or obligations in addition to being credited as carbon credits.
3. Where the activity falls within the scope of a mandatory domestic scheme: a description of the mechanism in place to ensure that the relevant GHG outcomes are not double counted – either by confirming that the activity is excluded from the scheme's scope, or by demonstrating that the scheme has measures in place to cancel or adjust the relevant allowances, entitlements, or compliance instruments before carbon credits are issued.

### Sub-criteria

#### 2.2.1. Absence of overlap with mandatory domestic schemes

The Operator shall demonstrate that the carbon removal outcomes credited as carbon credits are not also counted towards the achievement of obligations under any mandatory domestic mitigation scheme in the host country. Where the activity generates GHG outcomes that fall within the scope of such a scheme, the Operator shall demonstrate that one of the following conditions is met:

- a. The applicable mandatory scheme explicitly excludes the activity type or the carbon removal pathway from its scope of compliance, and this exclusion is documented by reference to the relevant legislative or regulatory instrument.
- b. The applicable mandatory scheme has procedures in place to cancel, surrender, or adjust the relevant compliance instruments – for example, by cancelling emissions allowances or renewable energy certificates – in respect of the same GHG outcomes before carbon credits are issued, and evidence of this cancellation or adjustment is provided.

Where the assessment concludes that no mandatory domestic scheme applies to the activity, the Operator shall document this conclusion with specific reference to the

applicable regulatory framework and shall not rely on a generic assertion that no such scheme exists.

**Applies to:**

- Validation.
- Verification (at crediting period renewal, only where a change in the applicable regulatory framework has occurred).

**Default finding if not met:**

- Major NC if the activity's GHG outcomes fall within the scope of a mandatory domestic scheme and no exclusion or cancellation mechanism has been demonstrated.
- Minor NC if the regulatory assessment is substantively correct but lacks specificity, for example, relying on a general statement rather than a reference to the applicable instrument, in a manner correctable without changing the conclusion.

## 2.3. Common Criterion: No double claiming from other environmental credits

The Operator shall demonstrate that the carbon removal outcomes credited as carbon credits are not simultaneously represented in another environmental credit instrument – including Renewable Energy Certificates, waste management credits, or sustainability certifications – in a manner that results in the same GHG outcome being claimed more than once.

**PAD content requirements:** the no double claiming from other environmental credits section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 2.3.1 and 2.3.2 below:

1. Identification of any environmental credit instruments, certification schemes, or sustainability frameworks other than the Puro Certification Framework that are applicable to the activity or its outputs, including instruments relating to energy, biomass, waste materials, or co-products.
2. An assessment of whether any such instrument represents, includes, or implicitly claims the same GHG outcome as the carbon credits to be issued, either directly or through an accounting relationship.
3. Where a potential overlap is identified: a description of the measures in place to ensure that the overlapping GHG outcome is attributed exclusively to the carbon credit and is not simultaneously represented in the other instrument, including any contractual, operational, or registry-level controls.

### Sub-criteria

#### 2.3.1. Assessment of co-instrument overlap

The Operator shall identify and assess all environmental credit instruments applicable to the activity or its outputs that could represent the same GHG outcome as the carbon credits. The assessment shall be specific to the activity type and shall address the following:

- a. For bioenergy or biogenic carbon activities: whether any Guarantee of Origin, renewable energy certificate, or equivalent instrument has been or

could be issued in respect of the energy or biogenic carbon content of the same material or output that forms the basis of the carbon credit calculation.

- b. For waste or residue-based activities: whether any waste management certification, sustainability certification, or traceability instrument applicable to the input material represents a GHG claim that overlaps with the carbon credit.
- c. For activities generating co-products with recognized environmental value: whether any sustainability or environmental certification applicable to the co-product embeds a GHG claim that is also reflected in the carbon credit calculation.
- d. Where an overlapping is identified or cannot be excluded, the Operator shall demonstrate that the overlapping instrument has been, or will be, withheld, cancelled, or structurally excluded from the transaction chain for the relevant monitoring period, such that the GHG outcome is attributed exclusively to the carbon credit.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if an overlapping environmental credit instrument has been issued or is in circulation for the same GHG outcome as the carbon credit.
- Minor NC if the assessment identifies a potential overlap that has been adequately addressed but the documentation of the exclusion or cancellation mechanism is incomplete.

### 2.3.2. Ongoing monitoring of co-instrument status

The Operator shall confirm at each verification that no new environmental credit instrument applicable to the activity or its outputs has been established during the monitoring period that would create an overlap with carbon credits issued for that period. Where the Operator's supply chain involves third-party material suppliers, for example, biomass or waste material providers, the Operator shall obtain and document confirmation from those suppliers that the relevant material has not been submitted for certification under any environmental credit instrument that would represent the same GHG outcome.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if a new overlapping instrument has been established during the monitoring period and has not been addressed.
- Minor NC if third-party supplier confirmations are present but incomplete for a subset of the supply chain in a manner that is correctable.

## 2.4. Common Criterion: Article 6 Authorization

This criterion applies only where the Operator seeks to use carbon credits under Article 6 of the Paris Agreement, including for NDC achievement or for use in international compliance mechanisms such as CORSIA. Where carbon credits are intended exclusively for voluntary retirement without international compliance use, this criterion does not apply, and the Operator shall confirm this in the PAD.

Where Article 6 use is sought, the Operator shall obtain a Letter of Authorization (LoA) from the National Designated Authority (NDA) of the host country, confirming that the host country authorizes the international transfer of the corresponding mitigation outcome and will apply the required corresponding adjustment to its national accounts. The LoA is the instrument by which the host country prevents double claiming between the carbon credit and the host country's NDC – it is therefore the project-level counterpart to CC 2.2, which addresses double claiming with mandatory domestic schemes.

The detailed requirements governing the content, timing, maintenance, and audit of the LoA are set out in the Puro Article 6 Procedures. This criterion establishes the certification-level obligation; the Article 6 Procedures govern the registry-level implementation.

**PAD content requirements:** the Article 6 authorization section of the PAD shall contain the following where Article 6 use is sought. Note that these are document content specifications; substantive conformity is assessed under sub-criteria 3.4.1 and 3.4.2 below:

1. A declaration of intent to use carbon credits under Article 6, specifying the intended use – NDC achievement, OIMP including CORSIA, or both – and the applicable host country.
2. Identification of the host country's national designated authority for Article 6 authorizations, with reference to the host country's designated focal point as reported to the UNFCCC where available.
3. Where Article 6 use is sought but no LoA application has yet been submitted to the NDA: a declaration of intent confirming that the Operator will apply to the applicable NDA prior to requesting issuance of Authorized-Use credits, with an explanation of the anticipated application timeline.
4. Where an LoA application has been submitted to the NDA but the LoA has not yet been issued: evidence of submission (for example, a copy of the application, correspondence with the NDA, or an acknowledgement of receipt) and a statement of the stage reached in the authorization process at the time of validation.
5. Where the LoA has already been issued at the time of validation: a copy of the LoA confirming the authorized mitigation outcome vintages, the applicable compliance period, the first transfer definition, and the timing and process for applying corresponding adjustments.

## Sub-criteria

### 2.4.1. Article 6 authorization intent and process at validation

Where the Operator seeks Article 6 use, the Operator shall demonstrate at validation that the authorization process with the host country NDA is underway, or – where the host country has not yet established a formal Article 6 authorization process – that active engagement with the NDA is in progress in accordance with the provisions below and that no known regulatory, policy, or diplomatic obstacle exists that would prevent the LoA from being granted for the intended use and volume.

The Operator shall confirm the host country's participation in Article 6 cooperative approaches or the Article 6.4 mechanism, as applicable, and shall confirm that the intended use of carbon credits is consistent with the host country's NDC and Article 6 authorization framework.

Where the host country has not yet established an Article 6 authorization process, the Operator shall document this and provide evidence of engagement with the host country NDA, including any relevant government communications or formal expressions of intent.

Where an Operator who has declared voluntary-only intent subsequently seeks to use any issued credits under Article 6, the Operator shall notify Puro immediately and prior to any corresponding adjustment being sought. Those credits shall be subject to reassessment under this sub-criterion before Article 6 Authorized Use status may be assigned.

**Applies to:** Validation.

**Default finding if not met:**

- Critical NC if credits originally registered as voluntary-only are subsequently claimed or used under Article 6 without prior notification to Puro and reassessment under this sub-criterion, or if evidence emerges that Article 6 intent existed at the time of validation but was deliberately not declared.
- Major NC if the Operator has declared intent to use carbon credits under Article 6 but has not demonstrated that an authorization process is underway or has provided no evidence of engagement with the host country NDA.
- Minor NC if the authorization process is underway but the documentation of the stage reached is incomplete.

#### 2.4.2. Letter of Authorization at verification

Prior to the assignment of Article 6 Authorized Use status to carbon credits in the Puro Registry, the Operator shall confirm that a valid LoA has been obtained from the host country NDA and provided to Puro in accordance with clause 2.9.2 of the Article 6 Procedures. The LoA shall cover the vintage years and monitoring period of the carbon credits subject to Authorized Use assignment and shall have been issued by an authority designated by the host country for Article 6 authorizations.

The Operator shall notify Puro immediately of any withdrawal, suspension, or material modification of the LoA, in accordance with clause 2.9.5 of the Article 6 Procedures. Where the LoA is withdrawn or suspended, the Article 6 Authorized Use label shall be suspended from the affected carbon credits pending resolution.

**Applies to:** Verification (prior to Authorized Use assignment).

**Default finding if not met:**

- Major NC if no LoA is on file.
- Major NC if the LoA was issued by a non-designated authority.
- Major NC if the LoA does not cover the relevant vintages or compliance period.
- Major NC if the Operator has failed to notify Puro of a withdrawal or suspension of the LoA. The nonconformity classification criteria and audit procedures in Annex A of the Article 6 Procedures shall apply to findings under this CC.

NOTE: Where evidence of deliberate falsification or misrepresentation of a Letter of Authorization is identified during audit, Puro shall be notified immediately in accordance with Annex A of the Article 6 Procedures. See the Audit Guidance for the applicable escalation procedure.

## 3. Principle: Additionality

The carbon removal activity shall be additional and demonstrate that it would not have occurred in the absence of the financial incentives provided by the carbon market, considering all relevant national policies, including legislation. The additionality demonstration shall be defined against a baseline scenario as per CC 3.1 and follow the analytical approaches described in sub-criteria 3.2 through 3.5.

The criteria in this section establish the universal minimum requirements for additionality applicable across all programs and methodologies under the Puro Certification Framework. Program-level rules may specify additional components, methods, or thresholds. Methodology-level rules may specify approved baseline scenarios and approved demonstration methods within program-level rules. No program or methodology rule may waive the requirement to demonstrate additionality; however, the specific approaches, pathways, and thresholds applicable to a given program are defined in the Program Annex in accordance with the applicable sub-criteria of this Principle.

NOTE: This Principle and associated Common Criteria replace the Puro Additionality Assessment Requirements.

### 3.1. Common Criterion: Additionality Demonstration Approach

The Operator shall demonstrate the additionality of the carbon removal activity by following the relevant standardized stepwise approach applicable to the activity type, as defined in this criterion and the relevant methodology-specific criteria. The demonstration shall be made against a conservative counterfactual baseline scenario representing the conditions most likely to prevail without the activity, in accordance with the sub-criteria contained herein. Figure 1 provides a decision diagram illustrating this approach.

NOTE: For programs that operate a standardized additionality framework under which activities are deemed additional upon meeting defined eligibility criteria (e.g., CRCF standardized baselines), the Program Annex shall specify how the requirements of this criterion are satisfied or modified, and Table 1 shall be supplemented by program-specific pathway definitions where applicable.

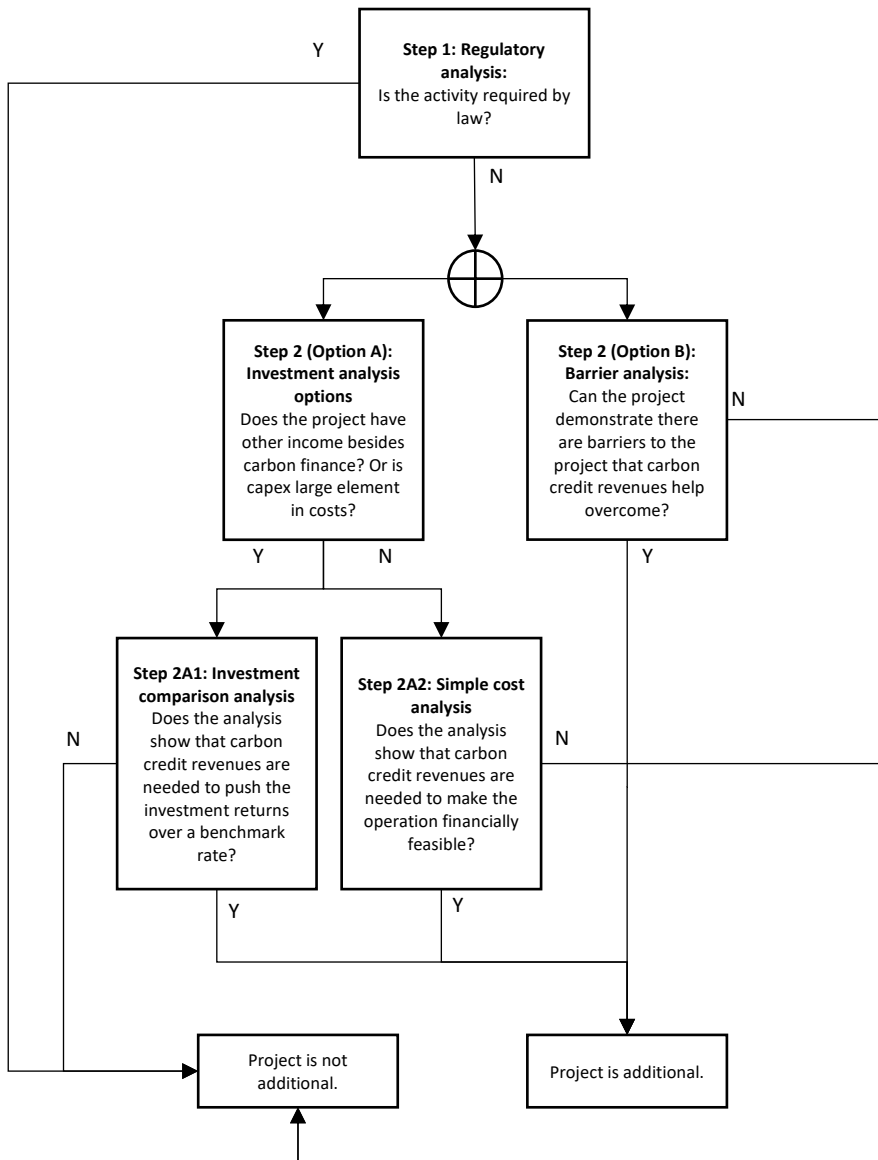


FIGURE 1. DEMONSTRATION OF ADDITIONALITY APPROACH DIAGRAM.

**PAD content requirements:** the additionality section of the PAD shall contain the following. Note that these are document content specifications, and substantive conformity is assessed under sub-criteria 3.1.1, 3.1.2, and 3.1.3 below.

1. Identification of the standardized stepwise approach applicable to the activity type, with reference to Table 1 and the relevant methodology-specific criteria.
2. Evidence of prior consideration of carbon finance in the development of the activity, demonstrating that the decision to develop the activity was made with the expectation of carbon credit revenue contributing to its financial viability (see CC 3.1.1).
3. Regulatory analysis in accordance with CC 3.2 (mandatory for all activity types).
4. Investment analysis in accordance with CC 3.3 (where required by Table 1), or barrier analysis in accordance with CC 3.4 (where permitted by Table 1 as an alternative to investment analysis).

5. Confirmation that common practice and technology lock-in analyses are not required, with reference to the applicable TRL as defined in Table 2, or, where required, the relevant analyses (see CC 3.5).

**TABLE 1. SUMMARY OF METHODOLOGY SPECIFIC STANDARDIZED APPROACHES**

Methodology	Regulatory Step 1 (Mandatory)	Investment Step 2 (Option A)	Barrier Step 2 (Option B)
GSC DAC	Required	N/A – see positive list	N/A
GSC BioCCS GSC waste to energy GSC point source	Required	Required	N/A
Biochar	Required	Required	Permitted
Terrestrial storage of biomass	Required	Required	Permitted
ERW	Required	Required	Permitted
Carbonated Materials	Required	Required	N/A
Marine CDR	Required	Required	Permitted
DACOS	Required	Required	Permitted

Positive List: the following activity types are subject to a modified analytical requirement.

- Direct Air Capture activities that store the captured carbon stream without generating additional revenues from carbon capture and use (CCU) are required to demonstrate regulatory additionality only. Where CCU revenues exist, an investment comparison analysis shall be performed to reflect their impact on financial feasibility.

## Sub-criteria

### 3.1.1. Prior consideration of carbon finance

The Operator shall demonstrate that carbon credit finance was considered prior to the commencement of the activity, that is, that the decision to develop and implement the activity was made with the expectation of carbon credit revenue contributing to its financial viability. The Operator shall submit the project for validation no later than two years after the activity start date, or with the application to transfer from another scheme. Methodology-specific criteria may establish a stricter maximum period; where they do, that stricter limit applies. Where the project is submitted after the two-year window, the Operator shall provide a documented justification for the delay, which shall be subject to validation by the VVB.

Where the activity was previously registered and active under another recognized carbon credit program, the prior consideration of carbon finance requirement is deemed satisfied by that registration. The 24-month window condition shall not apply to such transfers; instead, the Operator shall document the prior program registration and confirm that no crediting period overlaps exists in accordance with CC 2.2.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the project cannot demonstrate that carbon finance was a factor in the investment or implementation decision prior to the activity start date, or if

the submission for validation materially exceeds the applicable maximum period without documented justification.

- Minor NC if the validation timeline falls within the applicable window but the prior consideration evidence is incomplete, provided the underlying decision-making context can be substantiated.

### 3.1.2. Analytical pathway selection

The Operator shall identify and apply the standardized stepwise approach applicable to the activity type as defined in Table 1 and the relevant methodology-specific criteria. The selected pathway shall be explicitly stated in the PAD with a cross-reference to the applicable analytical method. Where Table 1 permits a choice between Option A (investment analysis) and Option B (barrier analysis), the Operator shall justify the selected option in the PAD. Where the activity type is not listed in Table 1, the Operator shall request clarification from Puro or propose an approach for approval prior to submission.

Where Table 1 designates both Option A and Option B as available, the Operator shall select the pathway most appropriate to the activity's financial structure. Where the activity involves a private investment decision with identifiable financial benchmarks, Option A (investment analysis) shall be applied. Where the activity is funded through grants, public procurement, or does not involve a conventional investment decision, Option B (barrier analysis) may be applied with documented justification.

**Applies to:** Validation.

#### Default finding if not met:

- Major NC if the analytical pathway applied does not correspond to the applicable methodology-specific requirement, or if the Operator applies Option B (barrier analysis) without adequate justification where Option A (investment analysis) is available.
- Minor NC if the pathway is correctly identified but the cross-referencing or justification in the PAD is incomplete.

### 3.1.3. Crediting period renewal

At the time of crediting period renewal, the Operator shall reassess and reconfirm the additionality of the activity. The renewal assessment shall follow the sequence below and address all of the following elements:

**Regulatory reassessment and baseline review.** The Operator shall reassess the regulatory environment applicable to the activity in accordance with CC 3.2, confirming that no change in law, regulation, or binding policy has occurred that would render the activity non-additional or require incorporation into the additionality assessment. In conjunction with the regulatory reassessment, the validity of the baseline scenario established in the previous crediting period shall be reviewed, and any required updates to the baseline arising from regulatory changes or changed conditions shall be identified and addressed in accordance with CC 3.2.

**Financial performance reassessment.** The activity's financial performance shall be reassessed against the assumptions used during the previous crediting period. Updated financial data shall be incorporated into the additionality demonstration where material deviations from prior assumptions have occurred, including any changes in the activity's ability to generate revenue from co-products or cost savings that could affect the additionality conclusion.

**Justification validity.** Continued additionality under the financial or barrier justification applied during the previous crediting period shall be confirmed, demonstrating that the

conditions supporting the original justification remain substantially unchanged or, where changed, that additionality is still demonstrated under the revised conditions.

**Common practice and technology lock-in.** Any applicable common practice or technology lock-in obligations arising from an updated TRL assessment shall be identified and addressed in accordance with CC 3.5.

**Applies to:** Verification (at crediting period renewal).

**Default finding if not met:**

- Major NC if any element of the renewal assessment is absent, if the regulatory reassessment reveals that the activity is no longer additional, if the baseline is materially out of date and has not been updated, or if a material change in financial conditions has not been disclosed and assessed.
- Minor NC if the reassessment is substantively complete but contains gaps in documentation or minor inconsistencies that do not affect the additionality conclusion.

### 3.2. Common Criterion: Regulatory analysis

The Operator shall demonstrate that the carbon removal activity generates emission reductions or removals beyond what is required by applicable law, regulation, or binding policy in the jurisdiction where the activity is implemented. The regulatory analysis shall confirm that the activity is not directly or indirectly mandated by any legal or regulatory instrument in force, and that no binding support scheme would deliver equivalent outcomes in the absence of carbon finance.

Note: Where the applicable program operates a standardized additionality framework that deems activities additional upon meeting defined criteria (e.g., CRCF standardized baselines), the Program Annex shall specify which elements of this criterion are satisfied by that framework and which require separate demonstration.

**PAD content requirements:** the regulatory analysis section of the PAD shall contain the following. Note that these are document content specifications, and substantive conformity is assessed under sub-criteria 3.2.1 and 3.2.2 below.

1. Identification of the applicable jurisdiction(s) and the relevant regulatory framework governing the activity type, including national and sub-national legislation, regulations, and binding policies in force at the project start date.
2. Assessment of whether the activity is directly required by any applicable legal or regulatory instrument, including technology or performance mandates and prohibitions on alternative scenarios.
3. Assessment of whether any binding support scheme exists that is designed to achieve a quantitative target for the relevant technology or practice, is applicable to the activity, and would likely deliver equivalent emission reductions or removals if the activity were not implemented.
4. Assessment of any officially announced regulation or policy expected to mandate or require the activity within the crediting period, including the timing, geographic scope, and probability of enforcement.
5. A conclusion on regulatory surplus – a reasoned statement confirming that none of the instruments assessed directly or indirectly requires the implementation of the activity, or, where an instrument formally integrates carbon finance as an instrument of implementation, explaining why the activity nonetheless qualifies as additional.

## Sub-criteria

### 3.2.1. Regulatory surplus at validation

The Operator shall demonstrate at the time of validation that the activity exceeds the minimum legal or regulatory requirements applicable to it in the relevant jurisdiction.

The analysis shall confirm that:

- A. No applicable law, regulation, or binding instrument directly requires the implementation of the activity, or directly requires a technological, performance, or management action that would result in the same emission reductions or removals.
- B. No applicable law, regulation, or binding instrument indirectly requires the activity by preventing all plausible alternative scenarios.
- C. No binding support scheme applicable to the activity is designed to achieve a quantitative target for the relevant technology or practice in a manner that would deliver equivalent outcomes absent carbon finance.
- D. Any officially announced regulation expected to mandate the activity within the crediting period is identified and assessed in terms of timing and expected enforcement date; where an officially announced regulation exists, implementation shall be presumed unless the Operator provides documented evidence of a formal withdrawal or substantive change in policy direction, and likely impact on the additionality conclusion.
- E. Where an applicable instrument formally integrates the carbon removal mechanism as a tool of implementation – such that the activity can be both legally supported and carbon-financed – the Operator shall document this and confirm that regulatory surplus is maintained.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the activity is directly or indirectly mandated by law, regulation, or binding support scheme, or if a credible announced regulation mandating the activity within the crediting period has not been addressed.
- Minor NC if the regulatory screening is substantively correct but contains minor gaps, such as a missing citation, incomplete discussion of indirect effects, or an insufficiently documented scan of announced regulations, that can be resolved without changing the regulatory surplus conclusion.

### 3.2.2. Regulatory reassessment at renewal

This CC operationalizes the regulatory element of the crediting period renewal assessment required under CC 3.1.3. At the time of crediting period renewal, the Operator shall confirm that the regulatory surplus demonstrated at validation remains valid. The reassessment shall:

- A. Identify any change in applicable law, regulation, or binding policy that has occurred since the previous crediting period, including the introduction of new instruments, the tightening of existing requirements, or the introduction of new support schemes applicable to the activity.
- B. Assess whether any such change renders the activity non-additional or requires modification of the additionality demonstration.

- C. Confirm that any credibly announced regulation identified at validation or arising during the monitoring period has been reviewed against its actual implementation status.
- D. Where regulatory conditions have materially changed, the Operator shall update the baseline scenario in accordance with CC 2.2 and resubmit the regulatory analysis for validation prior to the commencement of the new crediting period.

**Applies to:** Verification (at crediting period renewal).

**Default finding if not met:**

- Major NC if a regulatory change that renders the activity non-additional has occurred and has not been disclosed or addressed.
- Major NC if the updated baseline required by a regulatory change has not been prepared.
- Minor NC if the reassessment is present but incompletely documented without affecting the conclusion.

### 3.3. Common Criterion: Investment analysis

The Operator shall demonstrate that carbon credit finance was necessary to secure the investment in the carbon removal activity, showing that the activity would not be financially viable without the revenue generated by carbon credits. The investment comparison analysis is the required method for all activity types listed in Table 1 as requiring Step 2 Option A.

**PAD content requirements:** the investment analysis section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 3.3.1, 3.3.2, 3.3.3, and 3.3.4 below:

1. Identification of the investment comparison analysis as the applicable analytical method, with reference to Table 1 and the relevant methodology-specific criteria.
2. All cost and revenue inputs used in the analysis, including initial and replacement capital expenditure (CAPEX), operational expenditure (OPEX), revenues from co-products and subsidies, cost savings, public funding, avoided carbon taxes, and emissions trading system impacts, presented transparently with sources and assumptions documented.
3. The expected carbon removal performance and resulting credit revenue included as a revenue line, calculated on the basis of the planned production capacity and the applicable carbon credit price assumption.
4. A sensitivity analysis demonstrating that the conclusion on financial additionality is robust to reasonable variations in the critical assumptions, including maximum, stable, and low potential output scenarios.
5. A summary of the investment analysis shall be published in the Puro Registry in accordance with the Certification Procedures. The summary shall include at minimum: all cost categories, revenue sources (including carbon credit revenue), the financial conclusion, and any sensitivity analysis. Commercially sensitive information – such as specific contract prices with named counterparties, proprietary benchmark rates, or confidential supplier agreements – may be excluded; any parameter that materially affects the additionality conclusion shall not be excluded.

6. The underlying financial model or spreadsheet shall be made available to the VVB as a PAD-supporting evidence item for verification purposes. This material is treated as confidential and is not published in the Puro Registry.

Note: Transaction costs associated with generating carbon removal certificates or credits – including costs for preparing the PAD and applicable program fees – shall be excluded from all investment analyses.

The content requirements in this criterion shall be prepared and presented in accordance with the applicable Puro submission template as published by Puro and identified in the Compatibility Matrix maintained under the Certification Procedures. The applicable template does not create obligations additional to or independent of the requirements above; where a discrepancy arises, this criterion takes precedence.

## Sub-criteria

### 3.3.1. Common requirements applicable to all investment analyses

Regardless of the analytical method applied, all investment analyses shall meet the following requirements:

- A. The analysis shall cover the period of expected operation of the underlying activity, equal to the crediting period as defined in the applicable methodology. The residual value of fixed assets at the end of the assessment period shall be included where material.
- B. All parameters and assumptions shall be internally consistent. Cash flows shall be expressed in either real or nominal terms consistently throughout the analysis. Where carbon credit revenue is included, the price assumption shall be documented and justified.
- C. The analysis shall be prepared based on information available at the time of the investment or implementation decision – it shall reflect the financial context of the project start, not a retrospective reconstruction. Where the analysis was prepared prior to validation, the Operator shall confirm that no material assumptions have changed between preparation and submission.
- D. Public funding, subsidies, and other non-carbon revenue sources shall be included in the analysis. Where public funding alone would be sufficient to close the funding gap, the Operator shall demonstrate that carbon finance provides an additional and decisive contribution to financial viability.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the analysis is internally inconsistent, if carbon revenue is excluded or misstated, if public funding dominance is not assessed where applicable, or if the analysis cannot be demonstrated to reflect the financial context at the time of the investment decision.
- Minor NC if the analysis is conceptually correct but contains minor presentation gaps or limited documentation of assumptions that do not affect the conclusion.

### 3.3.2. Investment comparison analysis

The Operator shall demonstrate financial additionality through an investment comparison analysis. This applies to all activity types listed in Table 1 as requiring Step 2 Option A, regardless of whether the activity generates revenues from co-products, cost savings, or subsidies. The analysis shall demonstrate that the activity would not be the financially preferred scenario in the absence of carbon credit revenue, assessed against a conservative financial benchmark appropriate to the country, sector, and technology type of the activity.

The analysis shall meet the following requirements:

- A. The Operator shall select an appropriate financial metric – net present value (NPV), internal rate of return (IRR), return on investment (ROI), or payback period – and apply it consistently. Where the investment decision was made using a specific metric, that metric shall be used. The financial benchmark used shall be documented and justified as appropriate to the country, sector, and technology readiness level of the activity, reflecting the weighted average cost of capital or cost of equity as applicable.
- B. The analysis shall demonstrate that without carbon credit revenue, the activity either does not meet the financial benchmark or is not the economically preferred alternative among plausible scenarios. With carbon credit revenue included, the activity shall meet or exceed the benchmark.
- C. Alternative scenarios considered in the analysis shall be mutually exclusive and shall provide the same type of product or service as the carbon removal activity, where applicable. The Operator shall document why the carbon removal activity would not be selected without carbon finance.
- D. The sensitivity analysis required under CC 3.3.1 shall vary the critical parameters – including the carbon credit price, key cost items, and key revenue items – and demonstrate that the conclusion on financial additionality is robust across the range of scenarios tested.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the financial benchmark is inappropriate, unjustified, or non-conservative; if material revenues, subsidies, co-product values, or residual asset value are omitted; if the sensitivity analysis demonstrates that carbon revenue is not decisive; or if evidence is insufficient to support financial additionality.
- Minor NC if the benchmark justification is partially documented but plausible, the sensitivity analysis is present but not fully comprehensive, or minor data gaps do not affect the pass or fail conclusion against the benchmark.

### 3.3.3. Investment analysis reassessment at renewal

This sub-criterion operationalizes the financial performance reassessment element of the crediting period renewal assessment required under CC 3.1.3. At the time of crediting period renewal, the Operator shall update the investment analysis to reflect the actual financial performance of the activity during the previous crediting period and the expected financial conditions of the upcoming period.

The purpose of this comparison is not to retrospectively validate or invalidate the original additionality determination, but to establish whether financial conditions have materially changed in a way that affects the activity's continued additionality for the new crediting period.

The reassessment shall:

- A. Compare actual financial performance against the assumptions used in the previous crediting period analysis, identifying and explaining any material deviations in costs, revenues, co-product values, subsidies, or carbon credit price. Where deviations are material, their impact on the additionality conclusion shall be assessed in accordance with items B and C below.
- B. Assess whether any change in the activity's ability to generate revenue from co-products, cost savings, or access to public funding materially affects the additionality conclusion.
- C. Confirm that carbon finance remains necessary for the financial viability of the activity under the updated assumptions. Where the updated analysis indicates the activity would be financially viable without carbon finance, this shall be disclosed and the additionality conclusion shall be reassessed.

**Applies to:** Verification (at crediting period renewal).

**Default finding if not met:**

- Major NC if the financial reassessment is absent; if a material change in financial conditions has not been disclosed; if the updated analysis demonstrates the activity is financially viable without carbon finance and this has not been addressed.
- Minor NC if the reassessment is substantively complete but incompletely documented without affecting the additionality conclusion.

### 3.4. Common Criterion: Barrier analysis

The Operator shall demonstrate financial additionality through a barrier analysis where the activity type permits this as Step 2 Option B under Table 1, and where the Operator can show that the activity faces real and prohibitive non-monetary barriers that prevent its implementation without carbon finance, and that those barriers cannot be captured in an investment comparison analysis. The barrier analysis is not a substitute for the investment comparison analysis where Option A is required.

**PAD content requirements:** the barrier analysis section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 3.4.1, 3.4.2, and 3.4.3 below:

1. Identification of the barrier or barriers selected from the list in CC 3.4.1, with written justification for why the investment comparison analysis is not the applicable pathway – either because Option A is not available under Table 1 for the methodology, or because the specific circumstances of the activity justify the barrier analysis pathway where both options are permitted.
2. A description of each identified barrier, explaining its nature, origin, and how it specifically applies to this activity in this jurisdiction and sector.
3. The description shall be specific to the project – generic sectoral assertions are insufficient.
4. Evidence substantiating each identified barrier, drawn from sources that are independent of the Operator and contemporaneous with the investment decision or operating conditions being assessed. Acceptable sources include independently produced studies or reports, published market analyses, verifiable data from national or international statistics, or written statements from

financial institutions or relevant market actors. Anecdotal or Operator-prepared assertions without independent corroboration shall not be used.

5. Demonstration that no other programs, subsidies, or incentives exist that would enable the implementation of the activity independently of carbon finance.
6. An assessment of at least one plausible alternative scenario, demonstrating that those alternative faces similar barriers or that the carbon removal activity is the only feasible pathway under the prevailing conditions.
7. An explanation of how carbon credit revenue will overcome the identified barrier and a demonstration that the expected revenue is sufficient to do so.

The content requirements in this criterion shall be prepared and presented in accordance with the applicable Puro submission template published by Puro and identified in the Compatibility Matrix maintained under the Certification Procedures. The applicable template does not create obligations additional to or independent of the requirements above; where a discrepancy arises, this criterion takes precedence.

## Sub-criteria

### 3.4.1. Eligibility and barrier type

The Operator shall select the barrier or barriers forming the basis of the analysis from the following defined types:

- A. **Financial barriers:** Financing for the type of activity is not accessible in the country due to the risks associated with the activity. This may be evidenced with bank refusal letters or statements from financiers demonstrating that carbon finance was necessary for approval. The Operator shall provide documentation from the relevant financial institutions. Where the Operator asserts that carbon finance attracts financiers that would otherwise decline the project, this assertion shall be substantiated with written evidence from the financiers in question.
- B. **Institutional barriers:** A structural impediment exists that prevents the investment decision, arising from misalignment between the entity responsible for financing or implementing the activity and the entity that bears or receives its financial consequences. Common forms include split-incentive arrangements (where the investor and the beneficiary of cost savings or revenues are different entities), principal-agent constraints (where decision-making authority is separated from financial exposure), and governance or mandate limitations that restrict long-horizon capital commitments in the relevant institutional context. The Operator shall identify the specific structural impediment, explain how it prevents implementation without carbon finance in the relevant market and governance context, and provide evidence that the impediment is genuine and not readily resolved through measures that would be commercially standard for the activity type in the applicable jurisdiction.
- C. **Information barriers:** There is a demonstrable lack of awareness among relevant market participants of the financial benefits of co-products associated with the activity, such that the market does not price those benefits and the activity cannot access finance based on them. The Operator shall provide evidence of this information failure from independent sources.
- D. **First-of-a-kind (FOAK) barriers:** The activity is the first of its kind in the applicable jurisdiction or region, and the absence of demonstrated operational precedent creates investment barriers that prevent access to

finance without carbon support. FOAK status is only permissible as a barrier type where the applicable methodology TRL is below 8 as defined in Table 2. Where the methodology TRL is 8 or above, the absence of operational precedent cannot be claimed as a barrier, and the Operator shall instead apply the investment comparison analysis under CC 3.3. Where the TRL is below 8, FOAK status shall be demonstrated with reference to verifiable data on existing deployments in the applicable geographic area. The mere novelty of the technology at a global level is not sufficient – where operational precedents exist in comparable jurisdictions at a similar or higher stage of development, the Operator shall explain why those precedents do not eliminate the FOAK barrier in the applicable jurisdiction. The Operator shall cross-reference the current TRL of the applicable methodology as listed in Table 2 and confirm it meets the TRL condition.

- E. **Other barriers:** Barriers specific to the carbon removal methodology and/or the region where the activity is implemented that are not captured by the categories above. The Operator shall describe the barrier in full, explain why it is not addressed by the categories above, and provide independent evidence of its existence and prohibitive character.

The Operator shall identify and justify the primary barrier type relied upon. Where multiple barrier types are claimed, each shall be substantiated independently.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the barrier type selected is not drawn from the defined list without adequate justification.
- Major NC if a FOAK barrier is claimed where the applicable methodology TRL is 8 or above, or where comparable operational precedents exist in comparable jurisdictions without adequate explanation.
- Minor NC if the barrier type is correctly identified but the justification for selecting the barrier pathway over the investment comparison pathway is incomplete.

### 3.4.2.Evidence and substantiation

The barrier analysis shall be supported by credible, independent, and non-anecdotal evidence. The following standards apply:

- A. Evidence shall be drawn from at least one of the following source types: independent studies or academic publications; publicly available surveys or market analyses; verifiable market data from national or international statistics; financial models rejected by investors, made available to the auditor; written statements from financial institutions or relevant market actors; or official national or sub-national data on the applicable sector or technology.
- B. The evidence shall be specific to the applicable jurisdiction, sector, and activity type. Evidence drawn from other jurisdictions or sectors may be used to supplement but not substitute for jurisdiction-specific evidence, and its relevance shall be explicitly justified.
- C. The evidence shall be current – that is, it shall reflect conditions at the time of the investment decision, not conditions that have since changed.

Where conditions have evolved since the evidence was gathered, the Operator shall address the impact of that evolution on the barrier analysis.

- D. The barrier shall be demonstrated to be prohibitive – that is, it would prevent the implementation of the activity even where the Operator has made reasonable efforts to overcome it through means other than carbon finance. The Operator shall document those efforts.
- E. Carbon credit revenue shall be shown to be the decisive element in overcoming the identified barrier, and the expected revenue shall be demonstrated to be sufficient to do so.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the barrier is asserted without credible independent evidence, or if the evidence is anecdotal, non-specific, or derived entirely from jurisdictions or sectors not comparable to the activity.
- Major NC if the barrier is not demonstrated to be prohibitive or if carbon finance is not shown to be the decisive element overcoming it.
- Minor NC if the evidence base is plausible but thin, for example, limited independent sources or an alternative assessment that is incomplete but correctable.

### 3.4.3. Barrier reassessment at renewal

This CC operationalizes the barrier justification validity element of the crediting period renewal assessment required under CC 3.1.3. At the time of crediting period renewal, the Operator shall re-demonstrate, with evidence current as of the renewal date, that the barriers identified at the previous validation persist and continue to prevent implementation without carbon finance. The re-demonstration shall address all the following:

- A. Re-demonstrate that each identified barrier persists in the applicable jurisdiction, sector, and activity type, providing updated independent evidence meeting the standards set out in CC 3.4.2.
- B. Demonstrate that changes in the regulatory environment, market conditions, or financial landscape – including new financing instruments, changes in public funding availability, or growth in comparable deployments – have not reduced or eliminated the identified barrier.
- C. Demonstrate that no programs, subsidies, or incentives arising since the previous validation would independently enable implementation without carbon finance.
- D. Confirm that the applicable methodology TRL has not been revised to 8 or above since the previous crediting period. Where a TRL revision to 8 or above has occurred, FOAK ceases to be a permissible barrier type under CC 3.4.1. Where FOAK was the primary or sole basis for the additionality demonstration, the Operator shall transition to an investment comparison analysis under CC 3.3 for the upcoming crediting period. Where FOAK was a secondary barrier type, the Operator shall confirm the continued validity of remaining barriers independently of the FOAK claim.
- E. Where any identified barrier cannot be re-demonstrated to persist with the required standard of evidence, the Operator shall assess whether the activity remains additional. If it does, the Operator shall transition to an

investment comparison analysis under CC 3.3 for the upcoming crediting period. If it does not, the Operator shall disclose this, and the activity shall not be renewed.

**Applies to:** Validation (renewal engagement).

**Default finding if not met:**

- Major NC if the barrier reassessment is absent; if an identified barrier no longer exists and this has not been disclosed; if a TRL revision to 8 or above has eliminated FOAK as a permissible barrier type and the required transition to an investment comparison analysis has not been performed; or if the activity is no longer additional and this has not been addressed.
- Minor NC if the reassessment is present but incompletely documented without affecting the additionality conclusion.

### 3.5. Common Criterion: Common practice and Technology Lock-in

The Operator shall assess whether a common practice analysis and a technology lock-in risk analysis are required for the carbon removal activity. For the activity types currently (May 2026) certified under the Puro Certification Framework, both analyses are conditionally waived based on the Technology Readiness Level (TRL) of the applicable methodology, as defined in Table 2. The waiver is not automatic – the Operator shall confirm at validation that the applicable methodology meets the TRL condition for each waiver, and Puro shall review the TRL status of each methodology every two years. Where a methodology's TRL has been updated to a level that triggers the requirement, the Operator shall conduct the applicable analysis at the next validation or crediting period renewal.

**PAD content requirements:** the CC 3.5 section of the PAD shall contain the following. Note that these are document content specifications, and substantive conformity is assessed under sub-criteria 3.5.1 and 3.5.2 below:

1. Identification of the applicable methodology and its current TRL as defined in Table 2, with a statement confirming whether the common practice waiver applies, whether the technology lock-in waiver applies, or whether either analysis is required.
2. Where either waiver applies: a brief statement confirming that the applicable TRL condition is met, with a cross-reference to Table 2.
3. Where the common practice waiver does not apply: a common practice analysis demonstrates that the activity is not standard practice in the applicable jurisdiction and sector, identifying the geographic boundary applied and the market penetration data used, in accordance with sub-criterion 2.5.1.
4. Where the technology lock-in waiver does not apply: a technology lock-in risk analysis assessing whether the activity creates infrastructure, contractual commitments, or resource dependencies inconsistent with the host country's long-term decarbonization trajectory, covering the elements specified in sub-criterion 2.5.2.

**TABLE 2. TECHNOLOGY READINESS LEVELS OF PURO METHODOLOGIES.**

Methodology	Technology readiness level (TRL)	Source
DACCS	6	IPCC

Methodology	Technology readiness level (TRL)	Source
Enhanced weathering	3-4	IPCC
BECCS	5-6	IPCC
Biochar	6-7	IPCC
Carbonated materials*	5-6	Puro estimate
Terrestrial storage of biomass, DACOS*	4-5	Puro estimate
MCFS, MACS*	3-4	Puro estimate

NOTE: Puro shall review the TRL status of each methodology listed in Table 2 at intervals not exceeding two years. Each review shall consider the latest evidence from IPCC assessment reports, peer-reviewed literature, and verified operational data from activities certified under the Puro Certification Framework. TRL estimates marked with \* are Puro estimates subject to revision at each review; IPCC-sourced values shall be updated following each relevant IPCC assessment cycle. The outcome of each review shall be published by Puro alongside the effective date from which any revised TRL applies for the purposes of CC 3.5.1 and CC 3.5.2. Where a revision triggers the end of a waiver, Puro shall provide at least six months' notice before the effective date to allow Operators to prepare the required analysis. This program commitment is not an Operator obligation and does not generate a finding under this criterion; it is recorded here to enable VVBs to confirm that the TRL values applied at the time of audit are current.

**Waiver conditions:**

- The common practice waiver applies where the methodology TRL is below 8, on the basis that common practice analysis requires statistics on existing installations and market share that are not yet available at this TRL.
- The technology lock-in waiver applies where the methodology TRL is below 8, on the basis that these novel activities are in developing phases with significant uncertainty in efficient resource use and operational lifetime.
- Both waivers apply to all methodologies currently listed in Table 2. When a methodology's TRL is revised to 8 or above, the corresponding waivers cease to apply from the effective date of that revision.

**Sub-criteria**

**3.5.1. Common practice analysis**

Where the TRL of the applicable methodology has been revised to 8 or above at the time of validation, the Operator shall conduct a common practice analysis demonstrating that the activity is not standard practice in the applicable jurisdiction and sector. The analysis shall:

- Identify the applicable geographic boundary for the common practice assessment, which shall be the national level as a default. A sub-national boundary may be applied where there is significant subnational variation in the deployment of the relevant technology or practice, provided the boundary is justified.
- Quantify the existing deployment of the relevant technology or practice within the applicable geographic boundary, expressed as a share of the realistic maximum market size or potential, considering any constraints on uptake. The data sources used shall be independent, publicly available, and current.

- C. Define and apply an appropriate market penetration threshold below which the technology or practice is not considered common. The threshold shall be defined and justified in the PAD with reference to the applicable methodology-specific criteria. The activity shall pass the common practice test only if the market penetration of the technology or practice does not exceed this threshold.
- D. Confirm that the common practice assessment does not exclude the activity itself from the market penetration calculation where this would inflate the apparent novelty of the technology. The methodology-specific criteria may specify whether the activity is excluded or included in the calculation.

**Applies to:**

- Validation.
- Verification (at crediting period renewal, only where a TRL update has occurred).

**Default finding if not met:**

- Major NC if a common practice analysis is required but not performed, or if the analysis demonstrates that the technology or practice has exceeded the market penetration threshold.
- Minor NC if the analysis is present but uses data sources of limited independence or currency, or if the market boundary or threshold is incompletely justified, provided the underlying conclusion is not affected.

### 3.5.2. Technology lock-in risk analysis

Where the TRL of the applicable methodology has been revised to 8 or above at the time of validation, the Operator shall conduct a technology lock-in risk analysis assessing the risk that the carbon removal activity commits resources to a pathway that is inconsistent with the host country's long-term net-zero transition trajectory or that forecloses lower-emission alternatives. The analysis shall:

- A. Assess whether the activity type is aligned with the host country's current and projected energy and industrial transition policies, including the NDC and any relevant long-term low-emission development strategy (LT-LEDS).
- B. Identify whether the activity involves infrastructure, contractual commitments, or resource dependencies with an operational lifetime that extends beyond the crediting period and that could create pathway dependencies inconsistent with decarbonization.
- C. Assess whether lower-emission alternatives to the carbon removal pathway exist that would be foreclosed or made less attractive by the investment in the activity.
- D. Demonstrate that the activity does not directly lead to an increase in the extraction or use of fossil fuels, or to outcomes that would undermine national or sectoral decarbonization trajectories, consistent with the net-zero alignment conditions set out in Principle 8.
- E. Where a lock-in risk is identified, the Operator shall describe the measures in place to manage or mitigate it.

NOTE: The technology lock-in risk analysis required under this CC is conducted against the baseline net-zero alignment obligations established in CC 8.1. Common Criterion 8.1 sets universal minimum obligations, including the prohibition on coal use, the prohibition on directly enabling fossil fuel extraction, and the prohibition on unabated fossil fuel electricity as a primary energy source, that apply to all activities regardless of TRL and cannot be waived by the TRL-based exemption in CC 3.5. The lock-in analysis under this CC therefore addresses risks that arise above and beyond those baseline obligations: it assesses whether the activity creates pathway dependencies or forecloses lower-emission alternatives in a manner that is not already captured by the CC 8.1 prohibitions. Where the lock-in analysis identifies a risk that would constitute a breach of CC 8.1, the finding shall be raised under CC 8.1; where it identifies a risk that goes beyond the CC 8.1 baseline, for example, a long-term infrastructure commitment that is not prohibited by CC 8.1 but is nonetheless inconsistent with the host country's decarbonization trajectory, the finding shall be raised under this CC.

**Applies to:**

- Validation.
- Verification (at crediting period renewal, only where a TRL update has occurred, or where material changes to the host country's transition policy have occurred).

**Default finding if not met:**

- Major NC if a lock-in risk analysis is required but not performed, or if the analysis identifies a material lock-in risk that has not been addressed.
- Minor NC if the analysis is present but incompletely addresses one or more elements, provided no material lock-in risk is apparent from the available evidence.

## 4. Principle: Net GHG Quantification

The carbon removal or reduction activity shall be quantified on a net basis, accounting for all material sources of GHG emissions and carbon removals-within the activity boundary. Quantification shall be based on the robust application of the applicable common and methodology-specific criteria, accurate measurements conducted at specified intervals throughout the crediting period, and conservative assumptions, values, and procedures to ensure that the net carbon dioxide removal is not overstated. The Common Criteria in this Principle establish the quantification framework, the principles of conservativeness, completeness, and data quality that all methodology-specific calculations must conform to, and the quality control obligations applicable to all activity types.

### 4.1. Common Criterion: Net CDR Accounting Scope

The Operator shall quantify the net carbon dioxide removal of the activity by applying the general accounting equation established in this criterion in accordance with the applicable methodology-specific criteria. The net CDR shall be calculated by deducting from the gross carbon stored (carbon sink) all material losses (emission sources), project emissions, and leakage emissions, and applying a conservativeness factor reflecting the combined uncertainty of the quantification. The Operator shall demonstrate that the calculation is complete, conservative, internally consistent, and fully traceable to the methodology-specific criteria and the data collected under the approved Monitoring Plan.

**PAD, Monitoring Plan, and Monitoring Report content requirements:** the quantification section shall contain the following. Note that these are document content specifications, and substantive conformity with the calculation methods and values for each component is assessed under the applicable methodology-specific criteria. General conformity with the principles governing the quantification is assessed under sub-criteria 4.1.1, 4.1.2, and 4.1.3 below.

NOTE: The content requirements below apply across the PAD, Monitoring Plan (MP), and Monitoring Report (MR) as a consolidated set. As a rule: the PAD shall describe the quantification approach, methodology selection, baseline scenario, and key parameters at design level; the MP shall specify all monitoring methods, measurement procedures, equipment, and data processing protocols; and the MR shall report the quantitative and qualitative outcomes of monitoring. Where a specific item is relevant to only one or two of these documents, this is indicated in the item text. A systematic per-document content specification will be introduced in the next version of this document.

The net CDR shall be calculated in accordance with the following general equation:

$$Net\ CDR = F_c * (C_{sto} - C_{base} - C_{loss} - E_{proj} - E_{leak}) \quad (1)$$

Where the variables are defined as follows:

Variable	Description	Unit
Net CDR	Net metric tons of CO <sub>2</sub> equivalent removed by the carbon removal activity.	tCO <sub>2</sub> e

<b>F<sub>c</sub></b>	Factor of conservativeness calculated based on the total estimated uncertainty in the net CO <sub>2</sub> removal activity in accordance methodology specific criteria.	Unitless or %
<b>C<sub>sto</sub></b>	Gross number of metric tons of CO <sub>2</sub> equivalent stored by the carbon removal activity in accordance methodology specific criteria.	tCO <sub>2</sub> e
<b>C<sub>base</sub></b>	Baseline CO <sub>2</sub> storage based on the carbon removal activity in accordance with methodology specific criteria.	tCO <sub>2</sub> e
<b>C<sub>loss</sub></b>	Total re-emissions, losses, of the sequestered CO <sub>2</sub> based on the carbon removal activity in accordance methodology specific criteria.	tCO <sub>2</sub> e
<b>E<sub>proj</sub></b>	Total amount of CO <sub>2</sub> e that is emitted along the supply chain of the carbon removal activity in accordance methodology specific criteria.	tCO <sub>2</sub> e
<b>E<sub>leak</sub></b>	The amount of CO <sub>2</sub> e emitted indirectly due to unmitigated negative ecological, market, and activity-shifting leakage resulting from the carbon removal activity in accordance methodology specific criteria.	tCO <sub>2</sub> e

NOTE: The applicability of F<sub>c</sub> and the components to which it is applied are defined in the methodology-specific criteria. Not all methodologies apply F<sub>c</sub>, and where applied, it may be scoped to specific components of the equation rather than the full net CDR. The general equation above represents the maximum variable set; methodology-specific criteria govern which variables are used and how.

The quantification section of the **PAD, Monitoring Plan, and Monitoring Report** shall present, for each component of Equation 1: the methodology-specific calculation method applied, the data sources and parameter values used, the uncertainty estimated for that component, and the cross-reference to the applicable methodology-specific criterion or CC. The component descriptions above define the scope of each variable; the calculation method for each is governed exclusively by the applicable methodology-specific criteria.

GHG results shall be expressed in metric tons of CO<sub>2</sub> equivalent using GWP100 values from the IPCC Fifth Assessment Report (AR5)<sup>2</sup> as the program default. Where the applicable program or methodology explicitly requires GWP100 values from the IPCC Sixth Assessment Report (AR6)<sup>3</sup>, AR6 values shall be used. For activities subject to CRCF certification or Article 6 cooperative approaches, AR5 GWP100 values apply in accordance with the applicable regulatory requirements. Where AR5 and AR6 values differ for a given GHG, the Operator shall disclose both in the Monitoring Report for reference.

At Validation, the values presented for each Equation 1 component are projected values based on planned production capacity. At Verification, the values are the monitored

<sup>2</sup> GWP100 values from the AR5 can be found in the Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Chapter 8, Appendix 8.A, Table 8.A.1, accessible at: [https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5\\_Chapter08\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf)

<sup>3</sup> GWP100 values from the AR6 can be found in the report of Working Group 1, Chapter 7, Section 7.6, Table 7.15, accessible at: <https://www.ipcc.ch/report/ar6/wg1/chapter/chapter-7/#7.6#7.6.1.1>

actuals for the monitoring period as recorded under the approved Monitoring Plan and generated through the quality control procedures required under CC 4.4.

## Sub-criteria

### 4.1.1. Completeness of the accounting boundary

The Operator shall demonstrate that all material GHG sources, sinks, and reservoirs within the activity boundary have been identified and included in the Equation 1 calculation, or that their exclusion is justified on the basis that their contribution is immaterial or their exclusion results in a more conservative (lower) net CDR estimate, because the excluded item, if included, would have inflated the calculated net CDR. No component of the calculation, baseline, carbon stored, carbon loss, project emissions, or leakage, shall omit a material GHG source or pathway without documented justification. The activity boundary defined in the PAD shall be consistent with the boundary applied in the quantification calculation throughout the crediting period.

#### Applies to:

- Validation (accounting boundary definition and completeness).
- Verification (conformance with the boundary as approved in the Monitoring Plan; identification of any changes to activity scope that may require boundary revision).

#### Default finding if not met:

- Major NC if a material GHG source, sink, or reservoir within the activity boundary has been excluded from the calculation without documented justification.
- Minor NC if an exclusion is documented and justified but the justification is incompletely supported, for example, relying on a general assertion of immateriality rather than a quantitative or qualitative assessment, in a manner correctable without changing the accounting boundary conclusion.

### 4.1.2. Conservativeness of the quantification approach

The Operator shall demonstrate that the approach for the determination of uncertainty adopted for any component of Equation 1 is conservative, that is, it does not lead to an overstatement of the net CDR. The conservativeness factor  $F(c)$  shall be calculated in accordance with the applicable methodology-specific criteria and shall reflect the combined uncertainty of all components of Equation 1. The application of  $F(c)$  shall not be used as a substitute for conservative assumptions elsewhere in the calculation.

#### Applies to:

- Validation (conservativeness approach definition).
- Verification (conformance with the conservativeness approach as specified in the approved Monitoring Plan).

#### Default finding if not met:

- Major NC if the quantification approach utilizes non-conservative assumptions, values, or methods that are not required by the applicable methodology-specific criteria.
- Major NC if  $F(c)$  is not calculated or applied in accordance with the applicable methodology-specific criteria.

- Minor NC if the conservativeness of a specific assumption or value is insufficiently documented but the overall quantification approach remains conservative.

#### 4.1.3. Internal consistency and GWP accuracy

The Operator shall demonstrate *that* the quantification is internally consistent across all components of Equation 1, *that* the same activity boundary, and accounting conventions are applied to each component, and *that* the resulting net CDR is the product of a unified calculation of all component figures. GHG results shall be expressed using GWP100 values from the IPCC Sixth Assessment Report (AR6) unless the applicable methodology specifies otherwise. Where the methodology specifies a different GWP source, the Operator shall document the basis for that specification and confirm that the values used are current at the time of the calculation.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if different activity boundaries or monitoring periods are applied to different components of Equation 1 in a manner that materially affects the net CDR result.
- Minor NC if GWP values are drawn from an earlier IPCC assessment without documented justification in the methodology-specific criteria, or if the internal consistency of the calculation is demonstrable but insufficiently documented.

#### 4.1.4. Net-positivity of the credited outcome

The result of Equation 1 for a monitoring period shall be positive – that is, gross carbon stored, after deduction of the baseline, all carbon losses, project emissions, leakage, and the conservativeness factor  $F(c)$ , shall yield a number greater than zero – before carbon credits may be issued for that period. Where the Equation 1 result is zero or negative, no carbon credit shall be issued for the period concerned. The Operator shall state the Equation 1 result explicitly in the Monitoring Report, and the VVB shall confirm its net-positivity as part of the verification opinion.

A zero or negative result for a single monitoring period is an accounting outcome that prevents credit issuance; it is not in itself a non-conformity under this criterion. A persistent pattern of zero or negative results across consecutive monitoring periods shall be assessed by the VVB as evidence that the activity may no longer meet the eligibility conditions for certification and shall be reported to Puro for review under the Certification Procedures.

**Applies to:**

- At Validation, the adequacy of the projected net CDR is assessed under sub-criteria CC4.1.1 completeness and CC4.1.2 conservativeness sub-criteria above; the net-positivity of projected figures is a precondition for a positive validation opinion.
- At Verification, confirmation that the Equation 1 result for the monitoring period is positive before credit issuance.

**Default finding if not met:**

- No finding: a zero or negative Equation 1 result prevents credit issuance for the period but does not constitute a non-conformity. The VVB shall document the result and communicate it to Puro in the verification opinion.

- Major NC if the VVB concludes that a zero or negative result arises from a material omission, methodological error, or non-conservative assumption in the Equation 1 calculation rather than from the genuine performance of the activity.

## 4.2. Common Criterion: Uncertainty of measurement

The Operator shall estimate the uncertainty of measurement of all components contributing to the net CDR calculation and shall apply this estimate in the determination of the conservativeness factor  $F(c)$  in accordance with the applicable methodology-specific criteria. The uncertainty estimation shall be systematic, documented, and sufficiently detailed to allow the VVB to assess whether the conservativeness factor adequately reflects the combined uncertainty of the calculation.

**PAD and Monitoring Report content requirements:** the uncertainty section shall contain the following. Note that these are document content specifications, and substantive conformity is assessed under sub-criteria CC4.2.1 and CC4.2.2 below.

1. An assessment of the uncertainty of all parameters contributing to each component of Equation 1, covering the following sources of uncertainty: assumptions including baseline scenario; estimation equations or models; parameters including representativeness of default values; measurement methods including instrument accuracy and calibration; and any other factors with a material effect on the net CDR quantification.
2. For each source of uncertainty, the type of uncertainty – bias or random error – shall be identified in accordance with Table 3 below, and the potential mitigation action applied shall be described.
3. A single parameter may exhibit both a bias and a random error component; where both apply, each shall be assessed and listed as a separate entry in Table 3.
4. The combined uncertainty (i.e. the combined relative uncertainty, expanded to cover the specified confidence interval) of the net CDR calculation shall be expressed as a percentage, using the confidence level required by the applicable methodology. If the methodology does not specify a confidence level, then a 95% confidence level shall be used.
5. The cross-reference to the methodology-specific criteria governing the uncertainty assessment and the determination of  $F(c)$ .

**TABLE 3. CAUSES OF UNCERTAINTY AND MITIGATION ACTIONS**

<b>Cause of uncertainty</b>	<b>Type</b>	<b>Potential mitigation action</b>
<b>Lack of data</b>	Bias	Quality control: expert judgement
<b>Lack of representativeness of data</b>	Bias	Quality control: pedigree matrix approach
<b>Statistical random sampling errors</b>	Random errors	Quality control: sampling
<b>Measurement error (systematic)</b>	Bias	Quality control: calibration
<b>Measurement error (random)</b>	Random errors	Quality control: sampling
<b>Misreporting</b>	Bias	Quality control
<b>Data gaps</b>	Bias and random errors	Quality control: statistics, expert judgement

Note 1: Knowledge of measurement uncertainty implies increased confidence in a result's validity. The Operator should refer to the [ISO/IEC Guide 98 series](#) or the EURACHEM-CITAC Guide CG<sup>4</sup> for further guidance on the estimation of measurement uncertainty.

Note 2: The distinction between bias and random errors is relevant to the choice of mitigation action. Bias represents a systematic deviation from the true value in a consistent direction; random errors represent unpredictable deviations that can be reduced through increased sampling. The applicable methodology-specific criteria shall specify whether direct quantification of uncertainties via statistical methods or calibration records is required.

## Sub-criteria

### 4.2.1. Systematic identification and quantification of uncertainty

The Operator shall identify all material sources of uncertainty in the net CDR calculation and shall quantify each, either through direct statistical methods, calibration records, or documented expert judgement supported by peer-reviewed literature or applicable standards. Uncertainty estimates from external sources – including peer-reviewed scientific literature, national inventories, or local regulations – may be used where direct quantification is not practicable, provided the relevance and applicability of those sources to the specific activity and context are documented.

The uncertainty assessment shall be specific to the activity – generic or default uncertainty values shall not be used where activity-specific measurements or calibration data are available and practicable to obtain.

**Applies to:** Validation and Verification.

#### Default finding if not met:

- Major NC if the uncertainty assessment does not cover all material sources of uncertainty or if F(c) cannot be traced to a documented uncertainty estimate for each contributing component.
- Minor NC if the uncertainty assessment is present and methodologically sound but relies on generic values where activity-specific data was practicable to obtain, or if the documentation of external sources lacks specificity.

<sup>4</sup> Ellison, S L R, & Williams, A. (Eds.). (2012). Quantifying Uncertainty in Analytical Measurement (3rd ed.) [141pp.]. Eurachem/CITAC. <https://repository.oceanbestpractices.org/handle/11329/1449>

#### 4.2.2. Adequacy of the conservativeness factor

The Operator shall demonstrate that the conservativeness factor  $F(c)$  applied to Equation 1 adequately reflects the combined uncertainty of the net CDR calculation in accordance with the applicable methodology-specific criteria.  $F(c)$  shall be applied as a single integrated discount to the net CDR and shall not be disaggregated or applied selectively to individual components unless the methodology-specific criteria explicitly provide for this.

Where the applicable methodology specifies a default  $F(c)$  value rather than a project-specific calculation, the Operator shall confirm that the activity meets the conditions under which the default applies and shall document any activity-specific characteristics that could affect the appropriateness of the default.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if  $F(c)$  does not reflect the combined uncertainty of the calculation, if it is applied selectively in a manner not authorized by the methodology, or if the conditions for applying a default  $F(c)$  have not been confirmed.
- Minor NC if  $F(c)$  is correctly determined but the documentation of the calculation or the applicability of a default value is incomplete.

### 4.3. Common Criterion: Data collection

The Operator shall collect all data required to quantify the net CDR and support the quality control procedures in accordance with the approved Monitoring Plan and the applicable methodology-specific criteria. Data collection shall be systematic, documented, and sufficient to support independent verification of the net CDR calculation.

**PAD, Monitoring Plan, and Monitoring Report content requirements:** the data collection section shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 4.3.1 and 4.3.2 below.

A parameter register defining all fixed and monitored parameters used in the Equation 1 calculation, structured in accordance with Table 4.

TABLE 4. REQUIRED PARAMETER ATTRIBUTES.

Variable	Description
ID	A unique identifier of the parameter
Parameter	The name of the parameter
Unit	The measurement unit of the parameter.
Value	The value of the parameter.
Equation	Reference to the equation where this parameter contributes to.
Description	A brief text describing what the parameter is about, and how it is used in calculations.
Source of data	Classify the data sourced as measured (m), estimated (e), or calculated (c) based on the definitions described in CC 4.3.1, including bibliographical references and/or databases.
Monitoring	The frequency of monitoring of the parameter.

<b>frequency</b>	
<b>QC procedures</b>	A brief text describing how the data is obtained, via what measurements, and why the value selected is conservative considering possible error or uncertainty.
<b>Measurement uncertainty</b>	An estimation of the random error component associated with the measurement is estimated as percentage uncertainty in the parameter.
<b>Data archive process</b>	How is the data archived?
<b>Time of data archive</b>	For how long the data will be archived?
<b>Comments</b>	Free text comments

All parameters in the parameter register shall use SI units as the primary unit of measurement. Where non-SI units are used, the conversion to SI equivalents shall be documented.

### Template delegation

The parameter register required by this criterion shall be prepared using the current version of the applicable Puro submission template – PAD Template, Monitoring Plan Template, or Monitoring Report Template, as applicable to the submission type – as published by Puro and identified in the Compatibility Matrix maintained under the Certification Procedures. The applicable template constitutes the authorized disaggregation of the parameter attributes specified in Table 4 into the fields required for a complete submission. The template does not create obligations additional to or independent of those specifications; where a discrepancy arises between a template and this criterion, this criterion takes precedence.

Once the PAD is approved at Validation, the Monitoring Plan version of the parameter register governs for all periods of the crediting period. The PAD version represents the projected parameter values submitted at Validation and is not updated after Validation approval.

### Sub-criteria

#### 4.3.1. Parameter classification and sourcing

All parameters contributing to the Equation 1 calculation shall be classified as measured, estimated, or calculated, defined as follows:

- A. Measured parameters are obtained directly via instruments or tools designed for this purpose.
- B. Estimated parameters are quantified through expert judgement, surveys, or peer-reviewed studies, including emission factors and default activity data.
- C. Calculated parameters result from calculations based on measured and/or estimated inputs using defined equations or models.

The source of each parameter shall be documented with sufficient specificity to allow independent verification:

- D. For measured parameters, the instrument, calibration record, and measurement method.

- E. For estimated parameters, the specific study, database, or inventory and its version, as well as justification for any parameters quantified through expert judgement.
- F. For calculated parameters, the equation and the sources of all inputs.

Where activity-specific measured data is practicable to obtain, it shall be used over estimated or default values. Where estimated or default values are used in place of measured data, the Operator shall document the justification and confirm that the selected value is conservative.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if parameters material to the net CDR calculation lacks documented sources or classifications, or if estimated or default values are used in place of practicably obtainable measured data without justification.
- Minor NC if the parameter register is present and substantially complete but individual parameters are incompletely documented in a manner that does not affect the net CDR result.

#### 4.3.2.Measurement and calibration standards

The Operator shall ensure that all measurement instruments used to collect data for the net CDR calculation are installed, operated, and calibrated in accordance with the manufacturer's specifications or an appropriate industry consensus standard. Calibration records shall be maintained and made available to the auditor. Where instruments are outsourced to third-party service providers, the Operator shall document the providers' qualifications and confirm that calibration standards equivalent to those required under this criterion are applied.

Where laboratory analyses are required by the applicable methodology-specific criteria, the Operator shall ensure that the laboratories used meet the requirements of EN ISO/IEC 17025, evidenced by accredited certification or equivalent documented quality management procedures acceptable to Puro. Laboratory results shall be provided with their corresponding uncertainty estimation.

Where accredited laboratory facilities are not accessible in the applicable region, the Operator may use an alternative procedure of equivalent data quality, provided the alternative is documented and justified in the Monitoring Plan, and the VVB confirms it does not materially affect the reliability of the data. Where the applicable methodology permits on-site measurement as an equivalent to laboratory analysis, on-site measurement with a calibrated instrument is acceptable without further justification.

**Applies to:** Validation (instrument plan and laboratory qualifications) and Verification (calibration records and laboratory results).

**Default finding if not met:**

- Major NC if instruments material to the net CDR calculation have not been calibrated in accordance with applicable standards during the monitoring period, or if laboratory analyses required by the methodology-specific criteria have been conducted by a laboratory that cannot demonstrate equivalent conformity to ISO/IEC 17025.
- Minor NC if calibration records are present but incomplete for a subset of instruments, or if laboratory qualification documentation is present but not fully current.

NOTE: Where evidence of deliberate falsification of activity data, measurement records, or laboratory results used in the net CDR calculation is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

#### 4.4. Common Criterion: Quality Control System

The Operator shall implement and maintain a quality control (QC) system covering all aspects of data collection, processing, and reporting for the net CDR calculation and associated environmental and social monitoring. The QC system shall be documented in the Monitoring Plan and shall be updated when methodological advances, monitoring experience, VVB findings indicate that improvements are warranted, or at least every five (5) years.

**Monitoring Plan content requirements:** the QC system section shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 4.4.1 and 4.4.2 below.

The QC system shall document the following components:

1. **Roles and responsibilities:** identification of the personnel responsible for each data stream and quality task, with a responsibility matrix and available contact information and clear segregation of duties. The responsibility matrix shall identify named roles at management level; individual data-entry operators need not be named. A designated QC manager shall be identified as the primary contact for all quality-related matters.
2. **Documentation and data traceability:** complete documentation of all data sources, assumptions, and emission factors; version control for data management tools; and an audit trail for data collection, processing, storage, and reporting.
3. **Activity data verification:** independent checks of activity data – including feedstock measurements, land-use data, and energy or fuel inputs – and cross-verification of field data with source documentation including invoices, satellite imagery, and sensor logs.
4. **Emission factor validation:** confirmation of the appropriateness and consistency of default or project-specific emission and removal factors, with reference to database sources or peer-reviewed studies.
5. **Data entry and transcription checks:** double data entry or automated error-checking for manual entries, and review of calculations and database queries for coding or logic errors where applicable.
6. **Uncertainty analysis:** identification of key data sources and quantification of uncertainties in accordance with methodology-specific criteria; where laboratory analyses are used, requirements for accreditation under ISO/IEC 17025 and for results to be accompanied by uncertainty estimates.
7. **Internal audits and peer review:** scheduled internal QC reviews by qualified personnel not involved in data collection.
8. **Data management and storage:** secure and redundant storage of all relevant data including field logs, photographs, and GIS files; access controls protecting data integrity while ensuring appropriate transparency; and confidentiality measures where required.
9. **Calibration and maintenance:** installation, operation, and regular calibration of measurement instruments in accordance with manufacturer specifications or applicable consensus standards; maintenance logs for all instruments.

10. **Training and competency assurance:** training for field staff, data analysts, and QC reviewers, with documented qualifications and records of continuous improvement activities.
11. **Reporting and corrective actions:** a mechanism for reporting QC findings and inconsistencies, tracking resolution, and integrating lessons learned into the QC procedures.

## Sub-criteria

### 4.4.1. Implementation and operational effectiveness of the QC system

The Operator shall demonstrate that the QC system described in the Monitoring Plan has been implemented during the monitoring period and is operationally effective, i.e., that the QC system is functioning as designed and is identifying and correcting errors, inconsistencies, and data quality issues in a timely manner. Evidence of QC system implementation shall include records of internal audits, calibration logs, corrective action reports, and training records.

**Applies to:** Verification.

#### Default finding if not met:

- Major NC if the QC system has not been implemented during the monitoring period or if material data quality issues have occurred that the QC system failed to identify or address.
- Minor NC if the QC system has been implemented but records of one or more components – such as internal audit reports or training records – are incomplete or not available to the auditor.

### 4.4.2. Review and continuous improvement of the QC system

The Operator shall review the QC procedures at each verification and update them where monitoring experience, methodological advances, or VVB findings indicate that improvements are warranted. The Monitoring Report shall describe any updates made to the QC system during the monitoring period, the reasons for those updates, and the effect on data quality. Where a VVB finding from a previous verification identified a QC deficiency, the Operator shall demonstrate that a corrective action has been implemented and is effective.

**Applies to:** Verification.

#### Default finding if not met:

- Major NC if a QC deficiency identified at a previous verification has not been addressed and the same deficiency is identified again.
- Minor NC if the QC review has been conducted but the documentation of updates or the rationale for not making changes is insufficiently detailed.

## 5.Principle: Permanence and Reversal Risk

Carbon dioxide removals certified under the Puro Certification Framework shall be permanent: the carbon stored shall not be re-released to the atmosphere within the timeframe implied by the credit. The manner in which permanence is assured, and any residual reversal risk is managed depends on the physical characteristics of the carbon storage medium and the legal and regulatory framework governing the storage operation. To reflect these material differences across carbon removal pathways, the Puro Certification Framework assigns each pathway a Permanence Tier, as defined in Table 5, which determines the applicable compensation mechanism and the scope of the project operator’s monitoring obligations under this Principle.

The Operator shall demonstrate that the permanence of the carbon removal activity has been comprehensively assessed against the applicable Permanence Tier, that reversal risks within the project operator’s scope of responsibility are actively monitored throughout the applicable monitoring period, and that any reversal event within that scope is reported, quantified, and compensated in full. The Permanence Tier applicable to the activity is assigned by the methodology-specific criteria and governs the obligations under CC 5.1, CC 5.2, and CC 5.3.

NOTE: The three Permanence Tiers reflect distinct approaches to managing long-term storage risk. Tier I applies to activities with geological CO<sub>2</sub> storage backed by statutory operator liability under a recognized regulatory regime; permanence is guaranteed through legal obligations rather than activity-level monitoring. Tier II applies to activities where a defined and verifiable permanence condition can be established in the methodology-specific criteria (e.g., a minimum carbon stability threshold for biochar, or a mineral immobilization requirement for ERW); continued satisfaction of that condition is monitored and confirmed at each verification. Tier III applies to activities where neither a statutory liability regime nor a defined verifiable permanence condition is available; these activities require a program-level buffer pool and may only be onboarded once that mechanism is operational. The activities and methodologies that fall under each tier are specified in Table 5 and the applicable methodology-specific criteria.

**TABLE 5. PERMANENCE TIER CLASSIFICATION**

	<b>Tier I – Regulatory Liability Transfer</b>	<b>Tier II – Quantification-Managed Permanence</b>	<b>Tier III – Risk-Rated with Buffer Contribution</b>
<b>Conditions for applicability</b>	(a) Credits are issued only upon confirmed injection of CO <sub>2</sub> into a geological storage site operating under a regulatory regime recognized by Puro as providing adequate permanence assurance (see the Puro Recognized Regulatory Regimes List maintained under	Credit issuance is conditioned on a defined and verifiable permanence condition – such as confirmed application of biochar to a soil matrix or confirmed incorporation in a product – the satisfaction of which is documented and	Neither Tier I nor Tier II conditions are met for the applicable methodology, or the CC 5.1 risk assessment identifies a material residual reversal risk that cannot be fully addressed through regulatory liability

	<b>Tier I – Regulatory Liability Transfer</b>	<b>Tier II – Quantification-Managed Permanence</b>	<b>Tier III – Risk-Rated with Buffer Contribution</b>
	the Certification Procedures); and (b) the applicable regulatory regime assigns statutory liability for post-injection releases to the storage site permit holder and provides a mechanism for transfer of residual liability to a public authority following a defined post-closure monitoring period.	made available for VVB assessment at each monitoring period, in accordance with the applicable methodology-specific criteria. Where the applicable methodology incorporates a methodology-specific degradation or stability factor that reduces the issued credit volume to reflect expected carbon losses over time, that factor and its basis shall be identified in the applicable methodology-specific criteria.	transfer or quantification adjustment alone.  The activities and methodologies that fall under Tier III are specified in the applicable methodology-specific criteria.
<b>Scope of project operator monitoring obligation</b>	Operational phase: the period from activity commencement to confirmed injection and handover to the storage site operator. Post-injection monitoring obligations are as specified in the applicable methodology-specific criteria, covering the period until regulatory liability transfer to the relevant public authority is confirmed.	Pre-issuance phase: the period prior to satisfaction of the defined permanence condition. Post-issuance monitoring is limited to verification that the conditions defining the permanence fraction continue to be met during the monitoring period.	Full crediting period and, where specified in the methodology-specific criteria, any post-closure monitoring period.
<b>Compensation mechanism</b>	Operational-phase reversals: project operator compensation in	A permanence condition failure confirmed by standalone reversal	Unavoidable reversals: program-level buffer pool

	<b>Tier I – Regulatory Liability Transfer</b>	<b>Tier II – Quantification-Managed Permanence</b>	<b>Tier III – Risk-Rated with Buffer Contribution</b>
	accordance with CC 5.3. Post-injection releases: activation of the storage site operator’s statutory liability under the applicable recognized regulatory regime. The project operator’s obligation is notification and documentation in accordance with CC. 5.3; financial compensation is the statutory responsibility of the storage site operator.	audit under CC 5.3: project operator compensation in full for the verified volume of carbon re-released, in accordance with CC 5.3 and the Certification Procedures.	drawdown in accordance with the Certification Procedures. Avoidable reversals: project operator compensation in accordance with CC 5.3.
<b>Buffer pool contribution required</b>	No	No	Yes. Activities classified as Tier III may only be onboarded once the Puro program-level buffer pool mechanism is operational, as notified by Puro in the Certification Procedures.

**Note on non-exhaustive list of carbon removal methodologies classification.**

Methodologies approved to be certified under the Puro Certification Framework shall define and substantiate the permanence tier classification applicable to their scope.

**Note on the Puro Recognized Regulatory Regimes List.** Puro shall maintain and publish a Recognized Regulatory Regimes List specifying the national or supranational regulatory frameworks recognized as providing adequate permanence assurance for Tier I activities. A regulatory regime shall be eligible for recognition where it: (a) requires geological storage site permitting prior to injection; (b) assigns statutory liability for post-injection CO<sub>2</sub> releases to the permit holder; (c) mandates a defined post-closure monitoring period; and (d) provides a mechanism for transfer of residual liability to a public authority following satisfactory completion of that monitoring period. Puro may recognize a regime on the basis of demonstrated equivalence to a reference framework. The Recognized Regulatory Regimes List shall be maintained as a Registry-published document under the Certification Procedures and updated as regulatory frameworks are assessed. The criteria and process for recognition and periodic review shall be specified in the Certification Procedures.

The Tier I compensation mechanism for post-injection releases relies on the statutory liability of the storage site operator under the applicable recognized regulatory regime and on the transfer of residual liability to a public authority upon successful completion of the post-closure monitoring period. Tier I activities have no buffer pool contribution requirement on this basis. Where statutory liability fails to produce effective compensation – whether due to operator insolvency, a gap in the applicable regulatory regime, or other cause – no program-level financial backstop is available for post-injection releases from Tier I activities. This is an accepted residual risk of the Tier I design, conditional on the rigor with which the recognition criteria above are applied and maintained. Condition (d) – the liability transfer mechanism to a public authority – is specifically designed to ensure that residual post-closure liability does not remain with a potentially insolvent private operator indefinitely; its presence as a recognition criterion is the primary governance mechanism managing this residual risk. Puro shall assess the status of each recognized regulatory regime at intervals not exceeding five years, or promptly upon becoming aware of a material change to the applicable regulatory framework, to confirm that the conditions for recognition continue to be met. The outcome of each such assessment shall be published alongside the Recognized Regulatory Regimes List. Where an assessment identifies that a recognized regime no longer satisfies the recognition criteria, Puro shall specify in the Certification Procedures the transitional arrangements applicable to activities certified under that regime at the time of the assessment.

## 5.1. Common Criterion: Reversal Risk Assessment

The Operator shall demonstrate that the risk of reversal of the carbon removal impact has been comprehensively identified, assessed, and rated, and that a credible prevention and mitigation plan has been developed commensurately with the identified risk profile. The reversal risk assessment shall reflect the specific context, the storage medium, geography, technology, and operating environment of the activity as designed.

**PAD content requirements:** the reversal risk assessment section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 5.1.1, 5.1.2, and 5.1.3 below:

1. Identification of all potential causes of reversal applicable to the activity, drawn from at least the following categories: natural disturbances and extreme events – including fire, seismic activity, flooding, and adverse climate conditions; human-induced risks – including design and construction faults, operational failures, and management failures; geopolitical risks – including legal and regulatory changes in the host jurisdiction that could affect the continuity of the activity or the integrity of the storage; and any additional risk categories specified in the applicable methodology-specific criteria, including climate change impacts that could exacerbate any of the above.
2. For each identified risk: a description of the nature and mechanism of the potential reversal event; a rating of its qualitative absolute likelihood of occurrence and potential magnitude of carbon loss, based on scientifically justifiable methods, peer-reviewed literature, or applicable regulatory guidelines; and a classification as avoidable or unavoidable.
3. A description of the prevention measures in place or planned for each identified risk, and the monitoring and mitigation actions that would be taken in the event of a reversal.

4. A cross-reference to the applicable methodology-specific criteria governing the reversal risk assessment, including any methodology-defined risk categories, rating methods, or buffer contribution requirements.
5. The reversal risk assessment shall be structured as a risk register with a separate entry per identified risk. Each entry shall contain at a minimum: the risk description and mechanism; the likelihood rating; the magnitude rating; the avoidable or unavoidable classification; and the prevention measures and contingency response applicable to that risk.
6. Identification of the minimum permanence conditions applicable to the activity as specified in the applicable methodology-specific criteria, against which compliance will be assessed at each Verification.

NOTE 1: Qualitative likelihood ratings shall use a three-level scale: Low (a reversal event is unlikely to occur during the crediting period based on available evidence); Medium (a reversal event is plausible and requires active monitoring); High (a reversal event is probable without active mitigation).

NOTE 2: The avoidable/unavoidable classification at RRMP design is indicative. The final determination of whether a specific reversal event was avoidable or unavoidable is made post-hoc by the standalone reversal audit VVB under CC 5.3.2, based on the circumstances of the event and the mitigation measures reasonably available to the Operator at the time.

## Sub-criteria

### 5.1.1. Comprehensiveness of the risk identification

The reversal risk assessment shall identify all material reversal risks applicable to the activity, the storage medium, and the operating context. The assessment shall not be limited to risks deemed probable, but low-probability, high-magnitude risks shall be identified and assessed even where their likelihood is considered remote. The risk identification shall be specific to the activity – generic descriptions applicable to the technology category as a whole are insufficient where project-specific characteristics create distinct risk exposures.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if a material risk category is omitted – in particular, if unavoidable risks applicable to the geography or storage medium such as flooding, fire, or seismic activity in a known high-risk area are not addressed.
- Minor NC if the risk identification is substantively complete but the description of specific risks lacks the precision needed to assess their magnitude or likelihood.

### 5.1.2. Permanence Tier Identification and Confirmation

The Operator shall identify and confirm in the PAD the applicable Permanence Tier for the activity, with reference to the methodology-specific criteria assigning that tier and the conditions in Table 5.

- A. Where the activity is classified as Tier I, the Operator shall additionally: confirm the regulatory regime governing the geological storage site and provide evidence that the regime is included on the Puro Recognized Regulatory Regimes List; confirm the storage site permit reference and its current validity;

and describe the post-injection monitoring arrangements in place for the period until regulatory liability transfer to the relevant public authority is confirmed, in accordance with the applicable methodology-specific criteria.

- B. Where the activity is classified as Tier II, the Operator shall: identify, with reference to the applicable methodology-specific criteria, the permanence conditions the satisfaction of which is required for credit issuance and which shall continue to be fulfilled throughout the applicable monitoring period; describe the assessment methodology by which continued satisfaction of each condition will be monitored and documented during the monitoring period; and confirm that the defined permanence conditions, the assessment methodology, and the baseline condition state established at validation will be published by Puro as a discrete Registry record upon validation approval. That Registry record constitutes the fixed reference against which any permanence condition failure is assessed by the standalone reversal audit VVB under CC 5.3.2 and shall not be amended except through a formal re-validation. Where the applicable methodology incorporates a methodology-specific degradation or stability factor that reduces the issued credit volume to reflect expected carbon losses over time, the Operator shall additionally identify that factor and its methodology-specific basis.
- C. Where the activity is classified as Tier III, the Operator shall confirm that the activity will not proceed to registration until the Puro program-level buffer pool mechanism is operational.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the applicable Permanence Tier is not identified or if the conditions for the claimed tier are not satisfied by the activity as designed.
- Major NC if the activity claims Tier I and the storage site operates under a regulatory regime not on the Puro Recognized Regulatory Regimes List, or if permit validity cannot be confirmed.
- Major NC if the activity claims Tier II and no defined permanence condition is established in the applicable methodology-specific criteria, or if the permanence conditions, assessment methodology, and baseline condition state are not published as a discrete Registry record upon validation approval.
- Minor NC if the tier is correctly identified and the conditions are satisfied but the documentation cross-referencing the methodology-specific criteria is incomplete or insufficiently precise.

### 5.1.3. Credibility of risk rating and classification

The risk rating shall be based on methods that are scientifically justifiable and transparent. Likelihood and magnitude ratings shall be supported by evidence – statistical data, peer-reviewed literature, local regulatory guidance, or expert assessment with documented qualifications – not by assertion alone. The classification of risks as avoidable or unavoidable shall be consistent with the applicable methodology-specific criteria and shall reflect the actual operational characteristics of the activity. Avoidable risks shall be accompanied by a credible prevention plan; unavoidable risks shall be reflected in the buffer contribution if such a contribution is required under the applicable methodology.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the risk rating is not supported by credible evidence or methods, or if the avoidable/unavoidable classification is inconsistent with the applicable methodology-specific criteria.
- Minor NC if the rating methodology is sound but the supporting evidence is thin – for example, relying on a single source – in a manner that is correctable without changing the risk profile conclusion.

**5.1.4. Periodic review of the risk assessment**

The Operator shall review the reversal risk assessment at intervals not exceeding five years, or at crediting period renewal if earlier, and shall update it where changes to the activity, the operating environment, or the applicable methodology-specific criteria indicate that the risk profile has materially changed. Where no material change to the risk profile has occurred, the review may be completed as a documented confirmation of unchanged conditions; a full re-assessment of all risks is not required in that case. The review shall be submitted for VVB assessment as part of the verification audit at the applicable interval.

**Applies to:** Verification (at the five-year review interval or crediting period renewal, whichever is earlier).

**Default finding if not met:**

- Major NC if the required review has not been conducted within the applicable interval, or if a material change to the risk profile has occurred and has not been reflected in an updated assessment.
- Minor NC if the review has been conducted but the documentation of the review process or its conclusions is incomplete.

NOTE: For the purposes of this criterion, materiality is assessed on a probability-weighted basis considering both the likelihood and the potential magnitude of carbon loss. A low-probability risk is not exempt from RRMP coverage solely on account of low probability if the potential magnitude of loss, were the event to occur, would be material in the context of the activity's credited carbon storage.

**5.2. Common Criterion: Reversal Risk Monitoring**

The Operator shall demonstrate that the monitoring system is designed to detect, track, and respond to reversal risks and events throughout the applicable monitoring period as determined by the Permanence Tier assigned to the activity under Table 5 and, where required by the applicable methodology-specific criteria, during any post-closure monitoring period. The reversal risk monitoring system shall be integrated with the Monitoring Plan and shall be commensurate with the risk profile established in the reversal risk assessment under CC 5.1.

**Monitoring Plan content requirements:** the reversal risk monitoring section of the Monitoring Plan shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 5.2.1 and 5.2.2 below.

1. A Reversal Risk Monitoring Plan (RRMP) as a dedicated component of the Monitoring Plan. The scope and content of the RRMP are determined by the Permanence Tier assigned to the activity under Table 5, as follows:
  - a. Tier I activities: the RRMP shall cover the operational phase only, defined as the period from activity commencement to confirmed injection and

handover to the storage site operator. The RRMP shall specify the monitoring parameters, methods, and frequencies applied to detect and quantify carbon losses occurring prior to injection and shall include procedures for documenting the confirmed injection event and handover. Post-injection monitoring obligations are as specified in the applicable methodology-specific criteria and the applicable recognized regulatory regime; these obligations do not form part of the RRMP.

- b. Tier II activities: the RRMP shall specify the monitoring methods, frequencies, and quality control procedures that the Operator will utilize to confirm that the permanence conditions defined in the applicable methodology-specific criteria and confirmed at validation continue to be fulfilled for each monitoring period. Records of each monitoring assessment shall be maintained in a form that enables the VVB to determine, for each monitoring period, whether any permanence condition was not met and the date on which non-compliance was first identifiable.
  - c. Tier III activities: the RRMP shall specify, for each reversal risk identified in the CC 5.1 risk assessment: the parameters to be monitored; the monitoring methods and measurement frequencies; the threshold values or trigger conditions – as defined in the applicable methodology-specific criteria – that would indicate the onset or escalation of a reversal event; the threshold values that constitute monitoring anomalies to be recorded and reported but do not invoke the standalone reversal audit process; and quality control procedures applicable to all monitoring activities. Records of all trigger condition assessments, including assessments where the trigger was not exceeded, shall be maintained in a form and at a level of detail that enables the MR VVB to independently determine whether any trigger condition was exceeded during the monitoring period, regardless of whether a reversal event was declared by the Operator.
2. Roles and responsibilities of activity personnel for monitoring, reporting, and responding to reversal risks and events, with clear lines of accountability and available contact information.
  3. A contingency plan describing the actions to be taken if a monitoring trigger is exceeded or a reversal event is detected, including:
    - a. immediate containment actions.
    - b. the process for quantifying the extent of the reversal.
    - c. the process for notifying Puro in accordance with CC 5.3.
    - d. the steps for implementing compensation.
  4. Post-closure monitoring provisions where required by the applicable methodology-specific criteria, specifying the duration, parameters, and responsible parties for monitoring after the activity's operational phase ends.

## Sub-criteria

### 5.2.1. Adequacy of the RRMP design

The RRMP shall cover all material reversal risks identified in the reversal risk assessment under CC 5.1, with monitoring parameters, methods, and frequencies proportionate to the likelihood and magnitude of each risk. For high-rated risks, monitoring shall be sufficiently frequent and sensitive to allow timely detection before a reversal event reaches a scale that cannot be contained. The RRMP shall be internally

consistent with the reversal risk assessment – risks rated as higher in terms of probability or severity shall receive more intensive monitoring than those rated lower.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the RRMP does not cover a material reversal risk identified in CC 5.1, or if the monitoring parameters or frequencies for high-rated risks are insufficient to allow timely detection.
- Minor NC if the RRMP is substantively complete but lacks specific detail on methods or frequencies for one or more risks in a manner correctable before the monitoring period begins.

### 5.2.2. Implementation of the RRMP

The Operator shall demonstrate at each verification that the RRMP has been implemented as designed throughout the monitoring period. Evidence of RRMP implementation shall include monitoring records for each parameter at the specified frequency, records of any trigger conditions assessed, and records of any contingency actions taken. Where the RRMP was updated during the monitoring period, the updates and their rationale shall be documented in the Monitoring Report.

As part of each verification of a Tier II or Tier III activity, the VVB shall assess whether the RRMP records for the monitoring period indicate any breach of a permanence condition for Tier II activities, or of an RRMP trigger condition for Tier III activities that has not been declared as a reversal event by the Operator. This assessment shall draw on the supporting verification evidence made available under CC 1.3.3. Where the VVB identifies such a breach and determines that its estimated magnitude is at or above the *de minimis* threshold defined in the applicable methodology-specific criteria, the VVB shall notify Puro in accordance with the procedure specified in the Audit Guidance. Upon receipt of such notification, Puro shall initiate the standalone reversal audit process under CC 5.3 as if a five-day notification had been received from the Operator on the date the exceedance was first identifiable from the monitoring records.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if the RRMP has not been implemented in a manner that the stability of carbon storage during the monitoring period can be verified, as evidenced by absent or incomplete monitoring records for material risk parameters.
- Major NC if the VVB identifies a trigger condition exceedance or permanence condition failure, at or above the *de minimis* threshold, that was not declared by the Operator. Where an apparent breach is identified but the Operator demonstrates to the VVB that it results from a data-entry or calculation error, and the corrected data confirms no actual permanence condition failure, the VVB shall raise a Minor NC for the documentation error rather than initiating the standalone reversal audit process.
- Minor NC if monitoring records are present for all material parameters but are incomplete in their documentation or quality control records for a subset of the monitoring period.

NOTE: Where evidence of deliberate non-monitoring of known risk areas, or of deliberate modification of monitoring records to conceal negative trends in storage

permanence, is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

### 5.3. Common Criterion: Reversal Event Reporting and Compensation

The Operator shall demonstrate that any reversal event is reported promptly, is quantified accurately, and is compensated in full and in accordance with the applicable methodology-specific criteria and the Certification Procedures. A reversal event is defined by reference to the Permanence Tier assigned to the activity under Table 5, as follows:

- Tier I activities: a reversal event occurs when evidence of CO<sub>2</sub> release from the geological storage site, post confirmed injection and handover, is identified by the storage site operator, a competent regulatory authority, or the storage site monitoring system. The project operator's obligations under this criterion are triggered by receipt of notification of such a release from the storage site operator or regulatory authority, or from any other credible evidence source.
- Tier II activities: a reversal event occurs when a permanence condition defined in the applicable methodology-specific criteria and confirmed as met at the most recent validation or verification is demonstrably no longer met. Detection may arise from the Operator's monitoring activities under the RRMP, from a VVB finding during verification under CC 5.2.2, or from any other credible evidence source.
- Tier III activities: a reversal event occurs when: (a) RRMP monitoring parameters exceed the trigger conditions defined in the applicable methodology-specific criteria and reflected in the approved RRMP; or (b) the Operator, the VVB, or Puro identifies credible evidence that stored carbon has been re-released to the atmosphere, regardless of whether RRMP trigger conditions have been formally exceeded. The definition of a reversal event, the specific trigger conditions, and the method for estimating the magnitude of a reversal applicable to each Tier III activity are as specified in the applicable methodology-specific criteria.

For Tier III activities, a trigger condition exceedance does not invoke the standalone reversal audit process where the estimated magnitude of the event in terms of tCO<sub>2</sub>e – assessed using the preliminary estimation method specified in the applicable methodology-specific criteria – falls below the *de minimis* threshold defined in those criteria. Below that threshold, the exceedance shall be recorded as a monitoring anomaly in the RRMP implementation statement in the Monitoring Report and shall be assessed by the MR VVB under sub-criterion 5.2.2. The standalone reversal audit under this criterion is invoked only for trigger exceedances or reversal events at or above the *de minimis* threshold, and for all permanence condition failures under Tier II.

**Monitoring Report content requirements:** where a reversal event has occurred, the Monitoring Report shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 5.3.1, 5.3.2, and 5.3.3 below.

1. A reversal event report containing: the date of detection; the cause or causes of the reversal event, classified as avoidable or unavoidable and assessed against the risk categories identified in the CC 5.1 risk assessment; an estimate of the quantity of carbon re-released to the atmosphere in tCO<sub>2</sub>e; the methodology-specific calculation method applied to quantify the reversal; and a description of the containment actions taken immediately following detection.

2. A compensation plan describing the steps to be taken to compensate for the reversal, the timeline for compensation, and the mechanism by which the compensation will be applied in the Puro Registry, in accordance with the Certification Procedures.
3. Documentation confirming the outcome of the out-of-cycle verification of the reversal event quantification and the completion of compensation, provided to Puro for publication in the Registry in accordance with the Certification Procedures. Where this documentation is not available at the time the Monitoring Report is submitted – because the out-of-cycle verification process is still underway – the Monitoring Report shall include a status update on the quantification and compensation process and a reference to the separate Registry record that will be published upon completion.

## Sub-criteria

### 5.3.1. Timely notification of the reversal event

The Operator shall notify Puro of a reversal event within five days of detection. The notification shall include: an initial estimate of the magnitude of the event, using the preliminary estimation method specified in the applicable methodology-specific criteria; a description of the immediate containment actions taken; and a statement of whether the estimated magnitude is at or above the *de minimis* threshold defined in the applicable methodology-specific criteria. The five-day obligation is triggered by detection, defined as the point at which the Operator first has evidence that a reversal event has occurred – whether from RRMP monitoring data, a permanence condition assessment, a physical observation, or any other source. Where the initial estimate is subject to significant uncertainty, the Operator shall indicate this in the notification and provide a timeline for a more precise quantification.

Upon receipt of a reversal notification from the Operator, or upon receipt of a VVB notification under CC 5.2.2, Puro shall formally initiate the standalone reversal audit process within the number of working days specified in the Certification Procedures. Initiation includes: confirming or appointing a VVB for the standalone audit; establishing the audit timeline in accordance with the Certification Procedures; and notifying the Operator in writing. Where the standalone audit is initiated by VVB notification under CC 5.2.2, the date of that notification is treated as equivalent to the date of detection for the purposes of this sub-criterion and CC 5.3.2.

**Applies to:** Verification (triggered by event).

#### Default finding if not met:

- Major NC if the Operator has evidence of a reversal event at or above the *de minimis* threshold and does not report it, or if the report is delayed significantly beyond five days from detection.
- Major NC if the Operator's notification does not include an estimate of magnitude or a *de minimis* threshold assessment, such that Puro cannot determine whether the standalone audit process is to be initiated.
- Minor NC if the notification was submitted but slightly beyond the five-day window and the delay did not prevent timely program response, provided the underlying information was complete and accurate.

### 5.3.2. Accuracy of reversal quantification

The Operator shall quantify the full extent of the reversal event in accordance with the applicable methodology-specific criteria. The quantification shall include all carbon

re-released as a result of the event, including secondary effects where these are material and quantifiable. The quantification methodology shall be documented with sufficient transparency to allow independent reproduction of the calculation.

The substantive accuracy of the reversal quantification is assessed exclusively as part of the standalone reversal audit conducted under this criterion. The standalone reversal audit VVB shall independently verify the quantification and shall confirm or revise the preliminary avoidable or unavoidable classification stated in the MR reversal event report. This assessment is outside the scope of the MR verification; the MR VVB's role is limited to confirming the completeness and internal consistency of the reversal event report as a document, in accordance with CC 1.3 sub-criterion 1.3.1. The confirmed classification and verified quantification shall be published in the Registry as a standalone record in accordance with the Certification Procedures.

**Applies to:** Standalone reversal audit (triggered by reversal event notification under CC 5.3.1).

**Default finding if not met:**

- Major NC if the reversal event is not quantified, or if the quantification cannot be traced to the applicable methodology-specific criteria or reproduced from the available data.
- Minor NC if the quantification is present and methodologically sound but contains minor calculation errors or ambiguities in the cause description that do not change the compensation volume.

### 5.3.3. Compensation obligation

The scope of the project operator's compensation obligation and the mechanism by which compensation is effected are determined by the applicable Permanence Tier as set out in Table 5 and as follows:

- A. Tier I activities: The project operator's compensation obligation extends to reversal events occurring during the operational phase, defined as the period prior to confirmed injection and handover to the storage site operator. For releases occurring in the post-injection phase, the project operator's obligation is to notify Puro without delay after receiving notification from the storage site operator, in accordance with CC 5.3 sub-criterion 5.3.1, and to document the notification and the storage site operator's response. Financial compensation for post-injection releases is the statutory responsibility of the storage site operator under the applicable recognized regulatory regime. Where a post-injection release is identified and the storage site operator fails or is unable to fulfil its compensation obligation, Puro shall document the failure and take such action as is available to it under the Certification Procedures. The outcome of the notification and response process shall be published in the Registry alongside the project documentation.
- B. Tier II activities: the compensation obligation is triggered by standalone reversal audit confirmation of a permanence condition failure under CC 5.3.2. The Operator shall compensate in full for the total volume of carbon confirmed as re-released as a result of the permanence condition failure, as verified by the standalone reversal audit VVB in accordance with CC 5.3.2 and the applicable methodology-specific criteria. Compensation shall be completed within the timeline specified in the Certification Procedures.

- C. Tier III activities: The project operator shall compensate in full for the verified volume of any reversal classified as avoidable. For unavoidable reversals, compensation shall be drawn from the program-level buffer pool in accordance with the Certification Procedures. In either case, the Operator shall additionally demonstrate that the root cause of an avoidable reversal has been identified and addressed to prevent recurrence.

Regardless of the applicable tier, where a reversal is classified as avoidable, compensation shall be completed within the timeline specified in the Certification Procedures and shall be confirmed as complete by the standalone reversal audit VVB. The outcome shall be published in the Registry as part of the standalone reversal audit record in accordance with the Certification Procedures.

**Applies to:** Standalone reversal audit (triggered by reversal event notification under CC 5.3.1).

**Default finding if not met:**

- Major NC if operational-phase or Tier II excess compensation is not completed within the required timeline, if the compensation volume does not correspond to the verified reversal quantification, or if an avoidable reversal recurs without documented root cause analysis and corrective action.
- Major NC if a Tier I post-injection release notification is not made or is materially delayed, or if the Operator cannot demonstrate engagement with the storage site operator following detection.
- Minor NC if compensation is completed and notification is timely but the documentation of the process or its publication in the Registry is incomplete or delayed.

**NOTE:** Where evidence of intentional failure to notify Puro of a material reversal event, fraudulent classification of an avoidable reversal as unavoidable, or deliberate concealment of the cause or extent of a reversal, is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

## 6.Principle: Environmental and Social Safeguards

The Operator shall identify, assess, manage, and report on the environmental and social impacts of the carbon removal activity throughout its lifecycle. The safeguard system shall be proportionate to the nature and scale of the identified risks, shall incorporate the feedback of affected stakeholders, and shall ensure that negative impacts are avoided, minimized, or compensated. Where the activity affects indigenous peoples or local communities, free, prior, and informed consent shall be obtained and maintained.

The safeguard requirements in this Principle are grounded in internationally recognized standards including the IFC Performance Standards on Environmental and Social Sustainability, the UN Guiding Principles on Business and Human Rights, and the ICVCM Core Carbon Principles Criterion 7 on sustainable development benefits and safeguards. Methodology-specific criteria may specify additional environmental and social requirements applicable to the carbon removal pathway; this Principle establishes the common framework applicable to all activity types.

NOTE: Where the Operator wishes to demonstrate positive environmental or social impacts beyond the minimum requirements of this Principle, including contributions to the Sustainable Development Goals, it shall follow the requirements of Principle 7 – SDGs and Co-Benefits.

### 6.1. Common Criterion: Environmental and Social Impact Assessment

The Operator shall demonstrate that the environmental and social impacts of the activity have been systematically identified, assessed, and incorporated into the project design. The scope and depth of the assessment shall be proportionate to the risk category of the activity as determined by the criteria in Table 6. The findings of the assessment shall inform the Environmental and Social Management Plan (ESMA) required under CC 6.3.

**PAD content requirements:** the Environmental and Social Requirements section of the PAD shall contain the following, scaled by the risk category of the activity as determined under Table 6. These are document content specifications; substantive conformity is assessed under sub-criteria 6.1.1 and 6.1.2 below:

1. A Safeguard Screening Report (SSR) for all activity categories, containing: identification of stakeholders potentially affected by the activity; determination of applicable national regulations and methodology-specific criteria relating to environmental and social risks; identification of the relevant competent authority and the outcome of any engagement with that authority; and the resulting risk category determination.
2. For Category A and B1 activities: a full Environmental and Social Impact Assessment (ESIA) report, including a public consultation plan and report in accordance with CC 6.2, and, where the competent authority requires it, an environmental license or environmental impact statement.
3. For Category B2 activities: a simplified ESIA based on a defined scoping report, prepared with competent authority approval or in alignment with international best practice where no competent authority exists, and including a public consultation.
4. For Category C activities: documentation confirming the risk category determination and the basis for it, with reference to the specific criteria in Table 6 that support the low-risk classification.

5. For all categories: an Environmental and Social Management Plan (ESMA) in accordance with CC 6.3, incorporating the findings and requirements of the full or simplified ESIA, the feedback from the public consultation, and, where applicable, Free, Prior and Informed Consent (FPIC) documentation.
6. Where applicable: evidence of FPIC from indigenous peoples and local communities in accordance with CC 6.2.3.
7. Where the activity is a retrofit of an existing operation for which an ESIA was previously conducted: a demonstration that the retrofit does not substantially alter the previously identified impacts or risks. Where it does, an updated SSR defining the revised scope.

**TABLE 6. CRITERIA FOR CATEGORIZATION OF ACTIVITY ENVIRONMENTAL AND SOCIAL RISK**

<b>Category</b>	<b>Criteria for categorization</b>	<b>Required studies</b>
<b>A – High risk</b>	Activity may cause significant negative environmental or social impacts or have profound implications for natural resources. Indicators include: deployment of physical assets with significant resource demand; involuntary displacement or resettlement; potential adverse impacts on critical habitats; potential adverse impacts on the rights, lands, or livelihoods of indigenous peoples, women and girls, or other vulnerable groups; potential impacts on cultural heritage sites; operating in jurisdictions where labor rights are not regulated or guaranteed; and mandatory environmental license requirement.	SSR, full ESIA, ESMA, public consultation, and site-specific baseline studies
<b>B1 – Medium-high risk</b>	Activity may cause mostly local and short-term negative environmental or social impacts for which effective mitigation measures are known and available. Impacts as listed for Category A apply but are limited in geographic extent, duration, or reversibility. Environmental license required.	SSR, full ESIA, ESMA, (public consultation)
<b>B2 – Medium risk</b>	Activity involves physical interventions with medium-level environmental and social risks manageable through an ESMA. Involuntary resettlement, or impacts on critical or legally protected areas, indigenous peoples, and cultural heritage sites are not anticipated. Environmental license not required.	SSR, simplified scoping-based ESIA, ESMA
<b>C – Low risk</b>	Activity likely to cause at most minimal environmental or social impacts. Limited physical intervention. Negligible or no adverse environmental and social risks. Involuntary resettlement, or impacts for critical habitats, indigenous people, or cultural heritage sites are not anticipated.	SSR and ESMA

Note: Risk categorization criteria adapted from UN-Habitat ESS3, Appendix 1. Where local regulation specifies a different categorization for the activity, the more stringent classification shall apply.

### Sub-criteria

### 6.1.1. Proportionality and adequacy of the impact assessment

The Operator shall demonstrate that the risk category assigned to the activity correctly reflects its characteristics and context against the criteria in Table 6, and that the scope and depth of the environmental and social assessment conducted are proportionate to that category. The categorization shall not be based on a selective reading of Table 6 – all applicable criteria shall be considered, and where any single Category A or B1 indicator is present, the activity shall be assigned to that category regardless of other characteristics that might suggest a lower risk level.

Where the applicable competent authority defines a different scope or depth of assessment than that implied by Table 6, the more stringent requirement shall apply.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the activity has been assigned a lower risk category than the criteria in Table 6 support, particularly where Category A indicators are present and a full ESIA has not been conducted.
- Major NC if the required ESIA or scoping study has not been conducted or is absent from the PAD.
- Minor NC if the risk categorization is correct but the assessment contains limited documentation or procedural gaps that do not indicate unmanaged harm risk and are correctable without changing the categorization or its conclusions.

### 6.1.2. Incorporation of ESIA findings into project design

The Operator shall demonstrate that the findings and requirements arising from the ESIA – including any measures required by the competent authority and any feedback from the public consultation conducted under CC 6.2 – have been incorporated into the project design and are reflected in the ESMA. The incorporation of ESIA findings shall be explicit and traceable: the PAD shall identify each material finding or requirement and explain how it has been addressed in the project design or management plan. Where a finding or requirement has not been incorporated, the Operator shall provide a documented justification.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if material ESIA findings or competent authority requirements have not been incorporated into the project design without documented justification.
- Minor NC if the incorporation is demonstrable from the project documentation but the traceability between ESIA findings and design decisions is insufficiently explicit.

## 6.2. Common Criterion: Stakeholder Engagement

The Operator shall demonstrate that affected and interested stakeholders have been engaged in an inclusive public consultation during project planning, and that an ongoing feedback and grievance mechanism is operational throughout the lifecycle of the activity. Where the activity affects indigenous peoples or local communities, the

Operator shall additionally obtain and maintain Free, Prior and Informed Consent in accordance with CC 6.2.3.

**PAD content requirements:** the Stakeholder Engagement section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 6.2.1, 6.2.2, and 6.2.3 below.

1. A Public Consultation Plan, prepared before the consultation is conducted, describing: the responsible contact person and means of contact; the identification of affected and interested stakeholders; the information to be shared with stakeholders; the consultation activities planned and their timeline; the minimum period for receiving feedback, which shall not be less than 14 days; and the measures taken to ensure accessibility and inclusivity, including for socially vulnerable and marginalized groups.
2. A Public Consultation Report, prepared after the consultation is complete, documenting: the stakeholders invited and the basis for their identification; evidence of invitations and the consultation activities conducted; a record of all feedback received without distortion; the Operator's responses to that feedback; and an explanation of how the feedback was incorporated into the project design, or, where it was not, the justification for that decision. The Report shall be submitted with the validation documentation and shall be made available to the VVB for review prior to the issuance of the validation conclusion; the VVB shall not issue an unmodified validation conclusion where the Report has not been reviewed.
3. An Ongoing Feedback and Grievance Mechanism, submitted for validation, describing: the designated contact person; the accessible and culturally appropriate channels through which feedback and grievances can be submitted, including provision for anonymous feedback; the process for assessing, responding to, and documenting feedback; and the process for incorporating feedback into project decisions where warranted.
4. Where FPIC is applicable: the documentation required under CC 6.2.3.

NOTE: Operators shall use the Puro Stakeholder Engagement Report template for the Public Consultation Report. Where a public consultation was conducted before registration under the Puro Standard as part of an EIA or regulatory requirement, the Operator may satisfy the public consultation requirement provided it can demonstrate that no substantial changes have been made to the project since that consultation. A summary prepared using the Puro template shall be submitted with the PAD. Where the activity is subject to substantial post-validation changes affecting E&S impacts, a further public consultation shall be conducted before those changes are implemented, documented in a re-validation in accordance with Certification Procedures CC 6.6.1.

## Sub-criteria

### 6.2.1. Public consultation

The Operator shall demonstrate that the public consultation was conducted inclusively and in good faith – that is, with genuine intent to incorporate stakeholder feedback into the project design, not merely to fulfil a procedural requirement. The consultation shall have reached the stakeholders most likely to be affected by the activity, including those in the immediate environment of the activity boundary, land tenure rights holders, local authorities, relevant NGOs, and representatives of vulnerable and marginalized groups. No stakeholder category falling within these groups shall have been excluded without documented justification. The consultation shall have been conducted before the project design was finalized, so that feedback could materially influence the outcome.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the public consultation was not conducted, was conducted after the project design was finalized such that feedback could not have influenced it, or if a required stakeholder category was systematically excluded without justification, or if the Public Consultation Report was not made available to the VVB prior to the issuance of the validation opinion.
- Minor NC if the consultation was conducted but the documentation of the process is incomplete, for example, a missing invitation evidence or an insufficiently detailed feedback response, in a manner correctable without re-conducting the consultation.

### 6.2.2. Ongoing feedback and grievance mechanism

The Operator shall demonstrate at validation that an ongoing feedback and grievance mechanism is in place and operational and shall confirm at each verification that it has been active and responsive throughout the monitoring period. The mechanism shall be accessible to all relevant stakeholders, including provision for anonymous submission and for stakeholders with limited digital access. All feedback and grievances received during the monitoring period shall be logged in the Monitoring Report, along with the Operator's responses and the resolution status of any outstanding issues. Where feedback has not been incorporated into project decisions, the justification shall be documented.

**Applies to:** Validation (mechanism design) and Verification (operational evidence).

**Default finding if not met:**

- Major NC if the ongoing feedback and grievance mechanism is absent or demonstrably inaccessible to affected stakeholders.
- Minor NC if the mechanism is present and accessible but the monitoring report log is incomplete, response times are not documented, or individual items of feedback lack documented resolution status.

### 6.2.3. Free, Prior and Informed Consent

Where the carbon removal activity directly or indirectly affects indigenous peoples or local communities – including in relation to their rights, lands, resources, territories, livelihoods, ancestral knowledge, or cultural heritage – the Operator shall develop and implement the activity with Free, Prior and Informed Consent. FPIC shall be documented before the activity commences and shall be maintained throughout the activity lifecycle. The ESMA shall include procedures to monitor and verify ongoing FPIC in accordance with CC 6.3.

FPIC shall be: free – obtained without coercion, manipulation, or undue incentives; prior – sought sufficiently in advance of any decision that could affect the communities concerned, allowing adequate time for internal decision-making processes; and informed – based on complete, accurate, and understandable information about the nature, scale, and potential impacts of the activity.

**Applies to:** Validation (where FPIC is applicable) and Verification (ongoing confirmation).

**Default finding if not met:**

- Major NC if FPIC has not been obtained where the activity affects indigenous peoples or local communities.
- Major NC if FPIC was obtained but cannot be demonstrated to have been free, prior, and informed – for example, if consent was sought after construction commenced or if the information provided was incomplete or misleading.
- Minor NC if FPIC is documented and substantively sound but the monitoring and verification procedures in the ESMA are incomplete.

### 6.3. Common Criterion: Environmental and Social Management Plan

The Operator shall demonstrate that the findings of the environmental and social impact assessment under CC 6.1 have been translated into an operational management and monitoring system capable of preventing, identifying, and responding to negative environmental and social impacts throughout the activity lifecycle. The Environmental and Social Management Plan (ESMA) is the primary instrument for this demonstration and shall be prepared as part of the PAD and updated when material changes to the activity or its impacts occur. The ESMA constitutes the design-stage framework for environmental and social management submitted at Validation. The Environmental and Social Monitoring Plan (ESMP) section of the Monitoring Plan constitutes the operational instrument governing implementation during the crediting period; its requirements are set out in CC 1.2 and the Monitoring Plan content requirements of this criterion.

**PAD and Monitoring Plan content requirements:** the ESMA shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 6.3.1, 6.3.2, and 6.3.3 below.

1. An Environmental and Social Monitoring Plan (ESMP) as an integral component of the ESMA, developed in accordance with the data collection format and quality control procedures of CC 4.3 and CC 4.4, and containing: environmental and social indicators covering each material risk identified in the ESIA; threshold or trigger values for each indicator; monitoring methods, frequencies, and the responsible personnel for each parameter; and procedures for responding to threshold exceedances.
2. Roles and responsibilities of activity personnel for ESMA implementation, with clear accountability and segregation of duties.
3. Where FPIC applies: procedures for monitoring and verifying ongoing FPIC, including the use of a recognized FPIC monitoring tool (e.g., FPIC-360) where available.
4. The ongoing feedback and grievance mechanism required under CC 6.2.2, referenced and integrated into the ESMA. NOTE: The mechanism shall be incorporated into the ESMA by cross-reference to the governing PAD section rather than restated in full. Where the ESMA includes a description, it shall be consistent with CC 6.2.2 and shall not create requirements additional to or inconsistent with that criterion.
5. A Corrective Action and Preventive Action (CAPA) plan establishing: procedures for emergency preparation and response triggered by ESMP threshold exceedances; procedures for identifying the root cause of negative environmental or social incidents; corrective actions to avoid, minimize, and restore or compensate for negative impacts; and procedures for verifying the effectiveness of corrective actions and updating the ESMP where required.

The content requirements in this criterion shall be prepared and presented in accordance with the applicable Puro submission template as published by Puro and identified in the Compatibility Matrix maintained under the Certification Procedures. The applicable template does not create obligations additional to or independent of the requirements above; where a discrepancy arises, this criterion governs.

## Sub-criteria

### 6.3.1. Completeness and adequacy of the ESMP

The Operator shall demonstrate that the ESMP covers all material environmental and social risks identified in the ESIA and is designed to generate monitoring data sufficient to detect the onset of a negative impact before it becomes material. The indicators, thresholds, and monitoring frequencies shall be commensurate with the risk category of the activity – higher-rated risks shall receive more intensive monitoring. The ESMP shall be internally consistent with the ESIA: risks rated as higher shall not receive less monitoring attention than those rated as lower.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the ESMP does not cover a material environmental or social risk identified in the ESIA, or if the monitoring parameters or frequencies for high-rated risks are insufficient to allow timely detection.
- Minor NC if the ESMP is substantively complete but lacks specific detail on methods, frequencies, or threshold justification for one or more indicators in a manner correctable before the monitoring period begins.

### 6.3.2. CAPA plan operational effectiveness

The Operator shall demonstrate at validation that the CAPA plan is designed to respond effectively to threshold exceedances and environmental or social incidents and shall demonstrate at each verification that the CAPA plan has been applied where warranted during the monitoring period. Evidence of CAPA application shall include records of threshold exceedances assessed, root cause analyses conducted, corrective actions taken, and verification of their effectiveness. Where the CAPA plan was updated during the monitoring period, the update and its rationale shall be documented in the Monitoring Report.

**Applies to:** Validation (design adequacy) and Verification (operational evidence).

**Default finding if not met:**

- Major NC if the CAPA plan has not been applied following a threshold exceedance or environmental or social incident during the monitoring period.
- Minor NC if the CAPA plan has been applied but documentation of root cause analysis, corrective actions, or effectiveness verification is incomplete.

### 6.3.3.ESMA implementation and reporting

The Operator shall demonstrate at each verification that the ESMA has been implemented as designed during the monitoring period and shall report on the environmental and social performance of the activity – including any incidents, corrective actions taken, and changes to the ESMA – in the Monitoring Report. The reporting shall be sufficient to allow the VVB to confirm that the activity has operated within the parameters established by the ESMA and that material environmental or social incidents have not been suppressed or omitted from the record.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if the ESMA has not been implemented during the monitoring period, or if material environmental or social incidents have been omitted or suppressed from the Monitoring Report.
- Minor NC if implementation is evidenced but monitoring records for one or more ESMP parameters are incomplete, or if the Monitoring Report description of ESMA performance lacks sufficient detail.

## 7. Principle: SDGs and Co-Benefits

All carbon removal activities certified under the Puro Certification Framework contribute to SDG 13, Climate Action,<sup>5</sup> by virtue of their certification. This contribution is mandatory and universal: it requires no separate demonstration beyond successful completion of the preceding Principles.

Contributions to all other Sustainable Development Goals are voluntary. An Operator that elects to claim a positive contribution to one or more additional SDGs shall do so in accordance with the two-tier claims system established in this Principle, using only the indicators approved in the Puro SDG Indicator Register (see CC 7.3). Claims shall be direct, attributable to the carbon removal activity, and free from double counting with other certification standards or environmental credit instruments.

NOTE: This Principle supersedes and deprecates the standalone Puro SDG Assessment Requirements v1.0. All substantive obligations previously contained in that document are incorporated into this Principle. Until the first version of the Puro SDG Indicator Register maintained under CC7.3 is published and made publicly accessible, Section 4 of the SDG Assessment Requirements shall serve as the operative list of approved indicators, defining the requirements of each indicator.

### 7.1. Common Criterion: SDG 13 Climate Action

The Operator's contribution to SDG 13 is demonstrated by the successful certification of the carbon removal activity under the Puro Certification Framework. The net CDR quantified and verified in accordance with Principle 4 and the applicable methodology-specific criteria constitutes the evidence of contribution to SDG 13. No separate claim, indicator, or monitoring obligation is required under this criterion.

Where the carbon removal activity generates additional co-benefits in reducing GHG emissions outside the LCA boundary as defined in the applicable methodology – for example, displacement of fossil fuels through renewable energy co-products – these benefits may be reported under the voluntary SDG contribution framework in CC 7.2, where an applicable approved indicator exists. They do not affect the SDG 13 contribution, which is defined exclusively by the net CDR.

**Applies to:** All activities. No conformity assessment is required under this criterion – it is satisfied automatically upon successful certification.

### 7.2. Common Criterion: Voluntary SDG Contributions and Co-Benefits

Where an Operator elects to claim a positive contribution to one or more SDGs beyond SDG 13, it shall select from the approved indicators listed in the Puro SDG Indicator Register maintained under CC 7.3. Claims shall be categorised as either a Puro SDG Descriptor or a Puro SDG Attribute in accordance with the definitions below.

A Puro SDG Descriptor covers qualitative, informational, semi-quantified, or indirect positive impacts that have a credible causal link to a specific SDG target but that may

<sup>5</sup> For a list of currently up to date SDG targets, see the [current official SDG indicator list](#) hosted at the United Nations Statistics Division website. Furthermore, the United Nations Department of Economic and Social Affairs website provides a [browsable SDG indicator list](#).

not be precisely quantified or that replicate a quantified Attribute applicable to a related SDG. Descriptors are validated as part of the Validation audit.

A Puro SDG Attribute covers direct, quantifiable, positive impacts that are not already claimed in another certification standard or as another Puro SDG Attribute. Attributes are verified ex-post as part of the Verification audit, after qualitative and quantitative evidence is available. Where the demonstration of impact requires more time than the carbon removal evidence, the VVB shall verify the impact when possible and may assign the Attribute retrospectively to the relevant carbon credit vintages or reporting periods, provided that the qualitative description of the expected positive impact was validated during the Validation audit.

SDG impacts are monitored and reported at the production facility level. All carbon credits produced by a facility in a given reporting period receive the same SDG Attributes.

**PAD content requirements:** where the Operator elects to claim a voluntary SDG contribution, the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 7.2.1, 7.2.2, 7.2.3, and 7.2.4 below.

1. A declaration of the SDG target(s) and approved indicator(s) selected from the SDG Indicator Register, specifying for each whether the claim is a Descriptor or an Attribute.
2. A qualitative description of the expected positive impact and the causal link between the carbon removal activity and the SDG target, with reference to the host country's SDG objectives where available and relevant.
3. Identification of the monitoring indicators and evidence that will be collected during the monitoring period to support Verification of the claim, in accordance with the requirements for each approved indicator in the SDG Indicator Register.
4. A commitment that the claimed SDG impact is not simultaneously claimed under another certification standard, sustainability certification, or environmental credit instrument, in accordance with CC 7.2.3.

## Sub-criteria

### 7.2.1. Validation of qualitative SDG claims

The Operator shall demonstrate at Validation that the qualitative description of the expected positive impact is credible, specific, and consistent with the approved indicator requirements in the SDG Indicator Register. The description shall establish a clear and inherent cause-and-effect relationship between the carbon removal activity and the claimed SDG impact, shall refer to a specific individual outcome rather than a broad or abstract benefit, and shall identify the monitoring approach that will generate the evidence needed for Verification or retrospective Attribute labelling. A Puro SDG Attribute shall not be claimed retrospectively for monitoring periods prior to the Validation of a compliant qualitative description under this sub-criterion.

**Applies to:** Validation.

**Default finding if not met:**

- Major NC if the Operator has declared an SDG claim but the qualitative description does not establish a credible causal link to the claimed target, or if the selected indicator is not in the SDG Indicator Register. Where the qualitative description is absent or insufficient to establish a credible causal link, the finding shall be raised under this sub-criterion.

- Minor NC if the description is substantively credible but lacks specificity in the monitoring approach or the link to the host country's SDG objectives.

### 7.2.2. Verification of quantitative SDG claims

The Operator shall demonstrate at Verification that the positive SDG impact has occurred as described at Validation, providing qualitative and quantitative evidence in accordance with the evidence requirements for the applicable approved indicator in the SDG Indicator Register. The evidence shall be sufficient for the VVB to confirm that the impact is real, attributable to the carbon removal activity, and consistent with the quantitative metric specified for the indicator. The Operator shall make the information required to be published publicly available in the Registry in accordance with the SDG Indicator Register.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC where the Operator has committed to an SDG contribution at Validation and has undertaken monitoring activity but fails to provide evidence of ongoing monitoring or tangible outcomes consistent with the claimed impact.
- Minor NC if the evidence is present and the impact is plausible but minor gaps in documentation or quantification do not allow a confident conclusion – correctable through additional evidence submission before the opinion is issued.

NOTE: SDG contributions are voluntary. The absence of an SDG claim does not generate a finding. A finding under this CC arises only where the Operator has elected to pursue an SDG claim and subsequently fails to provide the required evidence.

### 7.2.3. No double counting of SDG claims

The Operator shall ensure that the positive SDG impact claimed as a Puro SDG Descriptor or Attribute is not simultaneously claimed under another certification standard, sustainability certification, or environmental credit instrument. Where the Operator generates Renewable Energy Certificates, biodiversity credits, or other environmental market instruments in respect of the same activity and monitoring period, the Operator shall either confirm that those instruments do not represent the same SDG impact as the Puro claim or shall limit the Puro claim to a Descriptor where an Attribute would create double counting. This CC shall be read in conjunction with CC 2.3 “No double claiming from other environmental credits”.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if the same SDG impact is simultaneously claimed as a Puro SDG Attribute and represented in another certification standard or environmental credit instrument for the same activity and period.

#### 7.2.4. Retrospective attribution of SDG Attributes

Where the demonstration of a positive SDG impact requires more time than the carbon removal evidence—for example, where trial results or field measurements are not available within the standard verification timeline—the VVB may verify the impact at a later verification and retrospectively apply the SDG Attribute to prior carbon credit vintages or reporting periods. Retrospective attribution is conditional on the validation of the qualitative description of the expected positive impact during the Validation audit; and the VVB determining the carbon credit vintages and reporting periods to which the Attribute retrospectively applies, based on the evidence available. The possibility of retrospective attribution shall be noted in the PAD at Validation.

**Applies to:** Verification (retrospective).

**Default finding if not met:**

- Major NC if retrospective attribution is claimed without a validated qualitative description from the Validation audit

#### 7.2.5. Approved SDG indicators – current status

The following Table 7 sets out all currently approved Puro SDG Descriptors and Attributes from the SDG Indicator Register, with their completeness status. Indicators marked as [In Development] are indicators that are being developed. Until completion, these indicators may be used only at the Descriptor level on the basis of the qualitative description requirement in CC 7.2.1.

The detailed evidence requirements, quantitative metrics, and public disclosure obligations for each complete indicator are as set out in the SDG Indicator Register maintained under CC 7.3. The Operator shall refer to the current version of the SDG Indicator Register at the time of the Validation audit to confirm the applicable requirements for each claimed indicator.

**TABLE 7. SDG INDICATOR REGISTER**

<b>Indicator ID</b>	<b>Name of Indicator</b>	<b>Applicable methodology</b>	<b>Category</b>	<b>SDG target</b>	<b>Completeness status</b>
<b>IND 1</b>	Improved agricultural productivity using biochar	Biochar	SDG Attribute	2.4	Complete
<b>IND 2</b>	Improved agricultural productivity using enhanced rock weathering	ERW	SDG Attribute	2.4	Complete
<b>IND 3</b>	Increase in renewable energy production	Biochar, GSC	SDG Attribute or SDG Descriptor	7.2	Complete
<b>IND 4</b>	Increase in solar power production	Any	SDG Descriptor	7.2	Complete
<b>IND 5</b>	Decarbonisation of industry	Biochar, GSC	SDG Descriptor	9.4	Complete
<b>IND 6</b>	Decarbonisation of district heating	Biochar, GSC	SDG Descriptor	11.6	Complete
<b>IND 7</b>	Treatment of municipal and assimilated waste streams	Biochar, GSC	SDG Attribute	11.6	Complete
<b>IND 8</b>	Increase in the buffer capacity of the ocean (Descriptor)	ERW	SDG Descriptor	14.3	Complete
<b>IND 9</b>	Increase in the buffer capacity of the ocean (Attribute)	ERW	SDG Attribute	14.3	Complete
<b>IND 10</b>	Exports from least developed countries	Any	SDG Attribute	17.11	Complete

### 7.2.6. CCP Attribute 3 registry tagging

Where a Puro SDG Attribute has been verified in accordance with CC 7.2.2, and where the conditions set out below are satisfied, Puro shall apply the ICVCM CCP Attribute 3 “Quantified positive SDG impacts”<sup>6</sup> tag to the carbon credits issued in respect of the verified monitoring period in the Puro Registry.

Puro shall maintain a unique CCP Attribute 3 tag in the Registry that is distinct from all other CCP Attribute tags. The tag shall be applied at the credit level and shall be limited to the vintage or vintages and monitoring period to which the verified SDG Attribute applies, as determined by the VVB in accordance with CC 7.2.2 and, where relevant, CC 7.2.4.

The CCP Attribute 3 tag shall be applied only where all of the following conditions are satisfied:

- A. A Puro SDG Attribute – not a Puro SDG Descriptor – has been verified by the VVB in accordance with CC 7.2.2;
- B. The SDG impact has been monitored and quantified ex-post in accordance with the evidence requirements and quantitative metric for the applicable indicator in the current version of the SDG Indicator Register;
- C. The applicable indicator is marked as complete in the current version of the SDG Indicator Register at the time of the verification audit, in accordance with CC 7.3;
- D. The verified positive SDG impact relates to one or more SDGs other than SDG 13.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if the operator asserts entitlement to CCP Attribute 3 tagging for credits where the VVB has determined that one or more of conditions (A) through (D) is not satisfied – for example, where the claim is a Descriptor rather than a verified Attribute, where the applicable indicator is incomplete in the current version of the SDG Indicator Register, or where the verified impact relates only to SDG 13.
- Minor NC if the verification opinion does not clearly address whether each of conditions (A) through (D) is satisfied in respect of an SDG Attribute claim where the operator has indicated an intent to request CCP Attribute 3 tagging, such that Puro cannot determine from the opinion alone whether the tag may be applied.

NOTE 1: The obligation to apply the CCP Attribute 3 tag rests with Puro as program owner once the verification opinion confirms that conditions (A) through (D) are satisfied. A failure by Puro to apply the tag does not generate an operator-level finding but shall be addressed as a program governance matter.

NOTE 2: A Puro SDG Descriptor does not satisfy condition (A) and cannot ground a CCP Attribute 3 tagging request regardless of whether the underlying indicator is complete. The Descriptor and Attribute tiers are defined in CC 7.2.

<sup>6</sup> Integrity Council for the Voluntary Carbon Markets. 2024. Core Carbon Principles. Section 4: Assessment Framework. Version 1.1. 102 p.

### 7.3. Common Criterion: SDG Indicator Register

Puro shall maintain a current and publicly accessible SDG Indicator Register containing all approved Puro SDG Descriptors and Attributes, their applicable methodologies, SDG targets, evidence requirements, quantitative metrics, and public disclosure obligations.

NOTE: Until the first version of the Puro SDG Indicator Register maintained under CC7.3 is published and made publicly accessible, Section 4 of the SDG Assessment Requirements shall serve as the operative list of approved indicators, defining the requirements of each indicator.

The Register shall be updated when new indicators are approved, or existing indicators are revised in accordance with the process set out below. Each entry in the Register shall include the approval or revision date and the effective date from which the indicator may be used in Validation audits. In addition, sub-criterion CC 7.3.1 provides an obligation to the Puro program to revise and update when appropriate the SDG Indicator Register associated with a methodology developed.

#### CCP Attribute 3 designation

Puro designates the SDG Indicator Register, maintained under this criterion, as the method and standard used within the Puro Certification Framework for the purposes of CCP Attribute 3 (Quantified Positive SDG Impacts) of the ICVCM Core Carbon Principles Assessment Framework. The evidence requirements, quantitative metrics, and MRV procedures specified for each approved Puro SDG Attribute in the Register constitute the recognized quantification method for CCP Attribute 3 purposes within this framework.

An indicator in the Register is eligible to ground a CCP Attribute 3 claim only where it is marked as complete in the current version of the Register at the time of the verification audit. An indicator marked as incomplete, or for which the quantitative metric or evidence publication requirements are not fully specified, shall not be used to support a CCP Attribute 3 tagging request until those fields are defined and the indicator's completeness status is updated in accordance with the approval process set out in this criterion.

NOTE: This subsection is addressed to Puro as program owner. It does not generate Operator-level conformity assessment obligations beyond those already established in CC 7.2.2. The VVB confirming a Puro SDG Attribute at verification shall note in its verification opinion whether the applicable indicator is complete in the current version of the Register.

#### Process for approving new or revised SDG indicators

Any party may propose a new SDG Descriptor or Attribute using the standard submission template published by Puro. A proposal shall include: a short name; the applicable methodology or methodologies; the proposed classification as Descriptor or Attribute; the proposed evidence requirements; the proposed public disclosure obligations; and an assessment against the following criteria (adapted from Day et al.

2020<sup>7</sup>): specific individual outcome, cause-and-effect relationship, quantitative metric, accuracy, manageable MRV, and internal monitorability. Puro shall screen each proposal for completeness and relevance, and shall either approve, request modifications, or reject the proposal with documented reasons. Approved proposals shall be incorporated into the SDG Indicator Register and the Common Criteria shall be updated accordingly at the next scheduled revision.

NOTE: This criterion is addressed to Puro as program owner and does not generate Operator-level findings. The VVB assessing an SDG claim shall confirm that the indicator relied upon appears in the current version of the SDG Indicator Register and that its requirements are met; it shall not assess whether the Register itself is current – that is a program governance obligation. The following version governance rules apply: (i) the version of the Register current at the date of the Validation audit governs the set of permissible indicators and their requirements for that audit; (ii) the version current at the date of each subsequent Verification audit governs for that audit; (iii) where Puro revises or removes an indicator on which an Operator has relied at Validation, Puro shall notify affected Operators and provide a transition period of not less than six months before the revised requirements take effect for Verification purposes.

### 7.3.1. Methodology-linked SDG Indicator Register review

Puro.earth shall conduct a review of the SDG Indicator Register for the applicable activity pathway whenever either of the following trigger events occurs:

- A. A new methodology-specific criteria document for a pathway is first published and takes effect; or
- B. A revision of an existing methodology-specific criteria document materially changes the co-benefit opportunities identified in the CC 7.2 delegation table for that pathway, including by adding or removing opportunities, changing the available claim type for an opportunity, or introducing a new pathway-specific sub-opportunity.

A change in the CC 7.2 delegation table that affects only evidence requirements, monitoring cross-references, or SDG target classification – without changing the list of opportunities or their available claim types – does not constitute a material change for the purposes of this sub-criterion.

Within **six months** of the effective date of the triggering methodology publication or revision, Puro.earth shall publish a **Register Update Statement** for the affected pathway. The Register Update Statement shall:

- i. Identify new co-benefit opportunities, including Descriptor and Attribute indicator introduced by any of the above cases, and incorporate them into the SDG Indicator Register.
- ii. Identify each co-benefit opportunity listed in the methodology's CC 7.2 delegation table that is currently restricted to Descriptor level due to the absence of an approved Attribute indicator in the SDG Indicator Register;
- iii. for each such opportunity, state one of the following:

<sup>7</sup> Day, T., Schiefer T., Tewari R., Kachi, A., Warnecke C., Mooldijk S., Dransfeld B., Wehner S., and Brauhardt L. (2020). Indicators for the promotion of sustainable development in carbon market mechanisms. Final report. No. FB000345/1. Umweltbundesamt.

- a new or updated Attribute indicator has been approved, specifying its effective date, quantitative metric, evidence requirements, and public disclosure obligations; or
- no Attribute indicator is being introduced at this time, with a brief statement of the reasons, including any technical, scientific, or market development conditions that Puro.earth considers would need to be met before an indicator could be approved.

The Register Update Statement shall be published on the Puro.earth website and notified to all operators currently certified under the affected methodology, using the contact mechanism established in the Certification Procedures.

**Applies to:** Puro.earth as program owner. This sub-criterion is a program governance obligation. It does not generate operator-level audit findings and is not assessed within the conformity assessment framework applicable to individual activities. Puro.earth's compliance with this sub-criterion is subject to review by the program governance and appeals structure as established in the Certification Framework.

**NOTE:** The Register Update Statement obligation is prospective and applies from the effective date of this version of Common Criteria. Methodologies published or revised prior to this version are not subject to a retrospective Register Update Statement obligation. Puro.earth will publish an initial Register Update Statement for each existing published methodology within twelve months of this version's effective date, to establish a baseline record of indicator gaps for all current pathways.

## 8. Principle: Contribution to Net-Zero Transition

The carbon removal activity shall be consistent with the long-term objective of limiting global warming to 1.5 °C and shall not create pathway dependencies that undermine national or sectoral decarbonization trajectories. All activities shall meet the baseline net-zero alignment obligations in this Principle regardless of technology readiness level. Where applicable, activities shall additionally demonstrate that biomass feedstocks are sustainably sourced in accordance with the Puro Biomass Sourcing Criteria and that energy inputs are sourced from renewable sources.

The net-zero alignment obligations in CC 8.1 apply to all activity types. The sustainable biomass sourcing obligations in CC 8.2 apply to any activity where biomass is used as a feedstock. The sustainable energy sourcing obligations in CC 8.3 apply to all activity types. Where methodology-specific criteria impose additional or stricter requirements relating to net-zero alignment, biomass sourcing, or energy sourcing, those requirements prevail.

### 8.1. Common Criterion: Net-Zero Alignment

The Operator shall demonstrate that the carbon removal activity is consistent with the host country's long-term net-zero transition trajectory, and does not directly lead to increased extraction and production of fossil fuels or to reliance on unabated fossil fuel electricity as the primary energy source for the carbon removal process.

This criterion establishes a universal baseline applicable to all activity types regardless of technology readiness level. It does not replace the technology lock-in risk analysis required under CC 3.5.2 for activities where that analysis is triggered – it establishes the minimum obligations that apply before that analysis is conducted and that cannot be waived by the TRL-based exemption in CC 3.5.

**PAD content requirements:** the net-zero alignment section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 8.1.1 and 8.1.2 below.

1. A declaration confirming that the activity does not directly increase fossil fuel extraction and does not rely on unabated fossil fuel (e.g., coal) electricity as its primary energy source other than new gas-fired generation that is part of increased zero-emissions generation capacity in support of national low carbon energy transitions, with specific reference to the energy and fuel inputs used in the carbon removal process.
2. A brief assessment of the activity's consistency with the host country's Nationally Determined Contribution and, where available, its long-term low-emission development strategy, identifying any known policy, regulatory, or infrastructure constraint that would affect the activity's contribution to the net-zero transition.
3. Where the activity involves infrastructure, contractual commitments, or resource dependencies with an operational lifetime extending beyond the crediting period, a description of how those commitments are consistent with the host country's decarbonization trajectory.

#### Sub-criteria

##### 8.1.1. Fossil fuel exclusions

The carbon removal activity shall not:

- A. Use coal as a fuel or process input at any stage of the carbon removal process, including feedstock preparation, thermal conversion, and product conditioning. This prohibition applies to all coal grades and to coal-derived fuels. Activities that process coal-containing waste streams as feedstock shall demonstrate that coal content in the feedstock is incidental and that the activity does not create a financial or operational incentive for increased coal use. For the avoidance of doubt, this prohibition applies to coal used as a fuel or combustion input for energy. Coal-derived materials used exclusively as non-energy process inputs (e.g., activated carbon used for filtration or purification) are not covered by this prohibition, provided their use does not create an operational or financial incentive for increased coal extraction.
- B. Directly cause or enable increased extraction or production of fossil fuels as a primary output or co-product of the carbon removal activity, such as in enhanced oil recovery (EOR) activities. Carbon capture and utilization activities that supply CO<sub>2</sub> to enhance oil recovery shall not be eligible for carbon credit issuance under the Puro Certification Framework. For the purposes of this prohibition, "directly cause or enable" requires that a contractual arrangement, agreement, or operational dependency exists at the time of validation between the carbon removal activity and oil extraction operations. Injection of CO<sub>2</sub> into a depleted geological formation listed on the Puro Recognized Regulatory Regimes List for permanent storage, where no such arrangement exists, is not prohibited by this criterion.
- C. Rely on unabated fossil fuel electricity as the primary energy source for the carbon removal process. Unabated fossil fuel electricity may be used as a transitional or back-up source provided the Operator demonstrates in the PAD that: the share of unabated fossil fuel electricity does not exceed the threshold specified in the applicable methodology-specific criteria; a credible transition plan with defined milestones exists for achieving the energy sourcing standard required under CC 8.3; and the lifecycle GHG saving requirement in CC 8.3.5 is met notwithstanding the temporary use of unabated fossil fuel electricity.

**Applies to:**

- Validation.
- Verification (at crediting period renewal, only where material changes to the energy or feedstock profile of the activity have occurred).

**Default finding if not met:**

- Major NC if the activity uses coal as a fuel or process input.
- Major NC if the activity directly enables fossil fuel extraction as a primary output or co-product.
- Major NC if the primary energy source is unabated fossil fuel electricity and no transition plan is in place or the lifecycle GHG saving threshold is not met.
- Minor NC if unabated fossil fuel electricity is used as a transitional source with a credible transition plan in place but the plan lacks specific milestones or the timeline is insufficiently documented.

### 8.1.2. Paris Agreement alignment

The Operator shall demonstrate that the carbon removal activity is consistent with the host country's Nationally Determined Contribution and, where available, its long-term low-emission development strategy. The demonstration shall address whether the activity type and technology pathway are aligned with the host country's stated decarbonization objectives and whether any known policy, regulatory, or infrastructure development in the host country would affect the long-term viability of the activity's contribution to the net-zero transition.

Where the activity involves physical infrastructure, contractual commitments, or resource dependencies, including fuel supply agreements, grid connections, or processing contracts, with an operational lifetime extending materially beyond the crediting period, the Operator shall confirm that those commitments do not foreclose lower-emission alternatives or create pathway dependencies inconsistent with the host country's decarbonization trajectory.

This CC sets the baseline Paris Agreement alignment obligation applicable to all activities. For activities at TRL 8 or above, the more detailed technology lock-in risk analysis required under CC 3.5.2 supplements this CC and addresses the same risk in greater depth.

#### Applies to:

- Validation.
- Verification (at crediting period renewal, only where material changes to the host country's NDC, long-term low emissions development strategies (LT-LEDS), or relevant policy framework have occurred).

#### Default finding if not met:

- Major NC if the activity is demonstrably inconsistent with the host country's NDC or LT-LEDS – for example, where a national policy explicitly phases out the technology or fuel pathway on which the activity depends within the crediting period – and this inconsistency has not been addressed.
- Minor NC if the Paris alignment assessment is present but the assessment of long-term infrastructure commitments is incomplete or the cross-reference to the host country's LT-LEDS is absent where one exists.

NOTE: Where evidence of deliberate misrepresentation of the activity's fossil fuel dependencies or of its consistency with the host country's climate commitments is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

## 8.2. Common Criterion: Sustainable Biomass Sourcing

The Operator shall demonstrate that all biomass feedstocks used in the carbon removal activity are sustainably sourced, legally obtained, socially compliant, and traceable from origin to point of use. This criterion applies to any activity where biomass is used as a feedstock, regardless of methodology. The Operator and VVB shall determine the applicability of this criterion based on whether biomass is used in the activity as designed.

The operative requirements for each feedstock category, including traceability information, sustainability criteria, and evidence options, are set out in the Puro Biomass Sourcing Criteria (BSC), which is maintained as a standalone living instrument updated with approval of Puro's Scientific Advisory Board. The Operator shall apply the

version of the BSC current at the time of Validation. At each Verification, the Operator shall confirm whether a revised version of the BSC has been published since the previous audit and, if so, whether the revised requirements apply to the monitoring period.

**PAD content requirements:** the biomass sourcing section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 8.2.1, 8.2.2, 8.2.3, and 8.2.4 below.

1. A biomass sourcing declaration identifying: each feedstock type used or planned; the applicable BSC category or categories for each feedstock, with justification for the classification; the country and region of origin; and the estimated volumes by category and origin over the crediting period.

**MP and MR content requirements:** the biomass sourcing section of the MP/MR shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria 8.2.1, 8.2.2, 8.2.3, and 8.2.4 below.

1. For each feedstock: the traceability information required by the applicable BSC category, collected for each delivery in accordance with the format specified in the BSC.
2. For each feedstock: the sustainability evidence required by the applicable BSC category, identifying the evidence option or combination of options applied.
3. A chain of custody declaration identifying the CoC model applied – segregation or mass balance – and the basis for that selection, in accordance with section 3.2 of the BSC.
4. Where Category P (land clearing biomass) is processed: a declaration confirming the volume processed and confirmation that carbon stored from this feedstock is excluded from the carbon credit calculation and that corresponding adjustments have been made to the net CDR calculation.

The content requirements in this criterion shall be prepared and presented in accordance with the applicable Puro submission template as published by Puro and identified in the Compatibility Matrix maintained under the Certification Procedures. The applicable template does not create obligations additional to or independent of the requirements above; where a discrepancy arises, this criterion takes precedence.

NOTE 1: The Puro Biomass Sourcing Criteria is updated with approval of the Puro's Scientific Advisory Board independently of the Common Criteria revision cycle. The Operator shall apply the most current version of the BSC at the time of Validation. Where a material revision to the BSC is published after Validation and before the next Verification, Puro shall confirm whether the revised criteria apply to the current monitoring period and notify the Operator accordingly. The BSC version applicable to each project activity and methodology version is identified in the Compatibility Matrix maintained under the Certification Procedures; where multiple BSC versions are in circulation, the Compatibility Matrix governs which version applies.

NOTE 2: The Puro Biomass Sourcing Criteria for aquatic biomass feedstock (Category O), including macroalgae, microalgae, and aquatic plants requires further development. Where an activity uses aquatic biomass as a feedstock, this criterion applies in principle but cannot be fully assessed until Puro publishes the applicable BSC category. Until that publication, the VVB shall confirm that aquatic biomass is used and document this as a criterion gap in the validation or verification opinion; carbon credit issuance for carbon stored from aquatic biomass feedstocks is deferred until the applicable BSC category is in force. Puro shall notify Operators and VVBs of the

publication date and effective date of the aquatic biomass BSC category through the standard framework update process.

## Sub-criteria

### 8.2.1. Feedstock categorization and eligibility

The Operator shall correctly identify the applicable BSC category for each biomass feedstock used in the activity. Where a feedstock could fall under more than one category, the most directly applicable category shall be selected and the basis for the selection documented. Puro reserves the right to make a final determination on the classification of ambiguous feedstocks.

Category P feedstock (land clearing biomass) may be processed by the Operator but shall not result in carbon credit issuance. Where Category P feedstock is processed alongside eligible feedstocks, the Operator shall maintain a documented separation of volumes sufficient to exclude Category P carbon stored from the net CDR calculation. The VVB shall confirm that the carbon credit calculation does not include carbon stored from Category P biomass.

**Applies to:** Validation and Verification.

#### Default finding if not met:

- Major NC if a feedstock is assigned to a lower-obligation category than the BSC supports, or if Category P biomass has not been identified and excluded from the carbon credit calculation.
- Minor NC if the category classification is correct but the documented justification for the selection is incomplete, or if the volume tracking for Category P biomass is present but insufficiently detailed.

### 8.2.2. Cross-cutting sustainability principles

Regardless of feedstock category, all biomass sourcing shall comply with the following cross-cutting principles:

- A. **Cascading use.** The Operator shall source and use biomass feedstocks with the least economic and environmental added value, prioritizing feedstocks that do not compete with material, food and feed<sup>8</sup> production and use. The cascading use principle shall be evidenced through the feedstock category classification in CC 8.2.1 and through the content of the biomass sourcing declaration. For feedstocks in categories where competition for higher-value uses is a relevant risk – in particular forest biomass (Category G), non-food agricultural crops (Category I), food agricultural crops (Category J), and palm oil biomass (Category M) – the Operator shall specifically demonstrate that the feedstock used is not suitable for higher-value material or food applications.
- B. **Legality.** The Operator shall comply with all applicable national and sub-national laws governing biomass feedstock production, including land use rights, environmental protection, and waste management regulations. Legal compliance shall be demonstrated through the sustainability evidence required for the applicable BSC category.
- C. **Social safeguards.** The Operator shall source biomass feedstock from operations that respect human and labor rights. Where biomass is sourced from operations affecting indigenous peoples or local communities, the

FPIC requirements of CC 6.2.3 apply. The social safeguards obligation is satisfied through the sustainability evidence required for the applicable BSC category, supplemented by the ESMA requirements of CC 6.3 where relevant.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if there is evidence that the feedstock competes with established food or material supply chains without documented justification, or if legal compliance with applicable land use, environmental, or waste management law cannot be demonstrated.
- Minor NC if the cascading use justification is present but lacks specificity for a high-competition-risk feedstock category, or if legal compliance documentation is present but contains minor gaps correctable without changing the eligibility conclusion.

### 8.2.3. Category-specific sustainability conformity

The Operator shall demonstrate conformity with all applicable sustainability criteria for each feedstock category as specified in the current version of the BSC. The VVB shall assess conformity against the BSC version applicable to the monitoring period, verifying that the evidence provided meets the sustainability criteria and evidence options specified for each category.

Where multiple evidence options are available under the BSC for a given criterion, the Operator shall identify which option or combination of options is applied and confirm that the evidence meets the standard required. Where a recognized third-party certification scheme is used as evidence, the Operator shall confirm that the certification is current and covers the supply chain to the point of delivery at the carbon removal facility.

For forest biomass (Category G), pulp and paper sludge and black liquor (Category H), non-food agricultural crops (Category I), food agricultural crops (Category J), and palm oil biomass and derivatives (Category M): where the BSC requires primary evidence verified by a third party in accordance with ISAE 3000 limited assurance<sup>9</sup>, the Operator shall confirm that such verifications have been conducted annually and are current at the time of the audit. This verification is separate from the Puro Validation and Verification audits.

**Applies to:** Validation and Verification.

**Default finding if not met:**

- Major NC if the Operator cannot demonstrate conformity with one or more mandatory sustainability criteria for the applicable BSC category, in particular high-value ecosystem protection, carbon stock requirements, and prohibition of deliberately produced waste.
- Major NC if a certification relied upon as evidence is expired, suspended, or does not cover the relevant supply chain.
- Minor NC if the sustainability evidence is substantially present but minor documentation gaps exist that are correctable without changing the eligibility conclusion for the affected feedstock category.

<sup>9</sup> International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information.

#### 8.2.4. Chain of custody and traceability

The Operator shall maintain a complete and auditable evidence trail of biomass sourcing from the point of origin to the carbon removal facility, in accordance with the traceability requirements of the applicable BSC category and the chain of custody model applied.

The Operator shall apply either a segregation CoC model – in which eligible feedstock is physically kept separate from non-eligible material throughout the supply chain – or a controlled mass balance CoC model – in which eligible and non-eligible materials may be mixed if volumes are reconciled at batch and site level to ensure that eligible claims do not exceed eligible inputs. Where a segregation model is feasible, it shall be preferred. Where a mass balance model is applied, the Operator shall document the basis for the choice and confirm that the mass balance reconciliation is maintained and updated continuously.

For non-certified feedstocks where full geolocation traceability is required by the applicable BSC category: the Operator shall collect geolocation coordinates – polygons for larger areas – for all plots of land where the biomass was produced, including the first gathering point, processing units, and storage sites up to the point of delivery at the operational site.

The Operator shall document the biomass sourcing process for each delivery with the identification attributes required by the applicable BSC category, including batch identification numbers, delivery dates, amounts, species or material types, and the name of each entity in the supply chain.

**Applies to:** Validation (CoC model and traceability plan) and Verification (delivery records and mass balance reconciliation).

**Default finding if not met:**

- Major NC if the chain of custody model applied does not meet the mass balance requirements of the BSC, or if the evidence trail cannot be reconstructed from origin to point of use for a material share of the feedstock processed during the monitoring period.
- Major NC if geolocation traceability required for non-certified feedstock has not been collected.
- Minor NC if records are maintained and substantially complete but are not easily accessible during the audit or contain minor gaps in batch-level documentation that do not affect the overall traceability conclusion.

NOTE: Where evidence of fraudulent feedstock classification, deliberate production of waste or residues to qualify for incentives, or intentional false declaration of a material's type or origin is identified during audit, Puro shall be notified immediately. See the Audit Guidance for the applicable escalation procedure.

### 8.3. Common Criterion: Sustainable Energy Sourcing

The Operator shall demonstrate that the energy used in the carbon removal process is sourced from renewable or low-carbon sources, avoiding net increases in GHG emissions. The Operator shall declare all energy sources used within the carbon removal activity and its supply chain and maintain up-to-date records throughout the crediting period. The energy sourcing standard in this criterion shall be met subject to the operational needs of the activity and in accordance with the applicable methodology-specific requirements.

**PAD content requirements:** the energy sourcing section of the PAD shall contain the following. These are document content specifications; substantive conformity is assessed under sub-criteria CC 8.3.1, 8.3.2, 8.3.3, 8.3.4, and 8.3.5 below.

1. An operational and supply chain energy sourcing plan identifying: all energy inputs used in the carbon removal process and its upstream supply chain; the renewable energy sources applied or planned; the Renewable Energy Certificate or equivalent instruments used to demonstrate renewable properties; and the timeline for achieving full renewable energy sourcing where transitional fossil fuel use is declared under CC 8.1.1. The scope of energy input identification shall be consistent with the activity boundary defined under CC 4.1. The energy sourcing plan is a PAD content item assessed under CC 8.3.1.
2. The following are supporting verification evidence items – operational records made available to the VVB at Verification but not authored as sections of the PAD, assessed under the applicable sub-criteria below and not under CC 1.1.1: REC cancellation records, temporal and spatial correlation evidence, incrementality documentation, and lifecycle GHG saving calculations.

## Sub-criteria

### 8.3.1. Energy Attribute Certificate and tracking

The Operator shall transfer and cancel Energy Attribute Certificate (EAC) or equivalent renewable energy certificates (e.g., Renewable Energy Certificate for electricity) to prove that the renewable properties of the electricity used were claimed exclusively for the carbon removal process and only once. EACs shall not be sold to a third party or claimed in more than one end-use sector. Where the Operator generates renewable energy on-site, it shall confirm whether EACs or equivalent certificates have been issued for that generation and, where issued, cancel them before claiming the renewable properties for the carbon removal process.

This CC shall be read in conjunction with CC 2.3 – No double claiming from other environmental credits – which governs the broader double claiming risk. A finding arising from double claiming of EAC renewable properties shall be raised under CC 2.3; this CC governs the tracking and cancellation obligation specific to energy sourcing.

**Applies to:** Verification.

#### Default finding if not met:

- Major NC if EACs have been sold to a third party or the renewable properties of electricity used in the carbon removal process have been claimed in more than one end-use sector.
- Minor NC if EAC metadata contains minor gaps in non-essential information that do not affect the core proof of origin or unit size.

### 8.3.2. Temporal correlation

The Operator shall synchronize renewable electricity generation and carbon removal process energy consumption within the following timeframes:

- A. For all operations occurring until 31 December 2029: within the same calendar month.
- B. For all operations starting from 1 January 2030: within the same one-hour period, in the jurisdictions where available.

- C. For energy sourced from storage assets: the storage shall have been charged during the same calendar month or one-hour period, as applicable, in which renewable energy was produced.

The temporal correlation requirement is deemed met during periods when electricity prices are so low that fossil-based generation is not economically viable – thereby triggering additional renewable production rather than fossil demand. Within the European Union, this condition is met when the clearing price is at or below EUR 20 per MWh or at or below 0.36 times the price of an EU carbon emission allowance. For activities located outside the EU, the Operator shall apply the equivalent national or regional regulatory threshold where one exists or documents the basis for an equivalent determination.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if significant periods exist where energy consumption occurred in a different calendar month (pre-2030) or one-hour period (post-2030) than the renewable generation, without a valid price signal exemption.
- Minor NC if temporal correlation records contain minor gaps for limited periods that do not materially affect the overall renewable sourcing conclusion.

### 8.3.3. Spatial definition

The Operator shall locate renewable energy generation and the carbon removal facility within the same bidding zone to prevent exacerbation of grid congestion.

The Operator may source renewable electricity from an interconnected bidding zone only where the day-ahead electricity price in the generating zone is equal to or higher than the price in the zone where the carbon removal facility is located.

The Operator may source renewable energy from an offshore bidding zone that is directly interconnected with the onshore bidding zone of the carbon removal facility.

The Operator is exempt from the grid-related spatial correlation requirements for electricity sourced via a direct line, provided the renewable installation is not grid-connected, or a smart metering system proves that no electricity was drawn from the grid for the renewable portion claimed.

For activities located outside EU bidding zone structures: the Operator shall apply the equivalent national or regional regulatory framework governing spatial correlation of renewable energy claims, where one exists, or document the basis for an equivalent determination with reference to the underlying principle that renewable generation and consumption shall be connected to the same or an adequately linked grid segment.

**Applies to:** Verification.

**Default finding if not met:**

- Major NC if renewable electricity is sourced from an interconnected bidding zone during periods when the price in the generating zone was lower than the consumption zone, potentially causing grid congestion.
- Major NC if a direct line claim is made where the installation is also grid-connected and no smart metering system proves the renewable portion.
- Minor NC if spatial documentation is present but the evidence of price parity for interconnected zone sourcing is incomplete for minor periods.

#### 8.3.4. Incrementality

The Operator shall source renewable electricity from generation installations that came into operation no earlier than 36 months before the carbon removal activity became operational. The Operator shall ensure that the renewable energy generation installation has not received state support in the form of operating or investment aid, unless that aid has been fully repaid before the renewable properties are claimed for the carbon removal process.

**Applies to:**

- Validation (installation commissioning date and state aid status).
- Verification (confirmation of continued compliance).

**Default finding if not met:**

- Major NC if the renewable installation cannot be shown to have come into operation within the 36-month window, or if state aid was received and has not been fully repaid.
- Minor NC if documentation of the commissioning date or state aid status is present but contains minor gaps that are correctable without changing the incrementality conclusion.

## References

Commission Delegated Regulation (EU) 2026/285 of 3 February 2026 supplementing Regulation (EU) 2024/3012 of the European Parliament and of the Council by establishing the certification methodologies for permanent carbon removals activities, OJ L 285 (2026). [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L\\_202600285](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202600285)

Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, OJ L 334, 1–93 (2018). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R2066>

Day, T., Schiefer T., Tewari R., Kachi, A., Warnecke C., Mooldijk S., Dransfeld B., Wehner S., and Brauhardt L. (2020). Indicators for the promotion of sustainable development in carbon market mechanisms. Final report. No. FB000345/1. Umweltbundesamt.

Ellison, S. L. R., & Williams, A. (Eds.). (2012). Quantifying uncertainty in analytical measurement (3rd ed.). Eurachem/CITAC. <https://repository.oceanbestpractices.org/handle/11329/1449>

Integrity Council for the Voluntary Carbon Market. (2024). Core Carbon Principles: Assessment framework (Version 1.1). ICVCM. <https://icvcm.org/assessment-framework/>

Intergovernmental Panel on Climate Change. (2013). Climate change 2013: The physical science basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (T. F. Stocker et al., Eds.). Cambridge University Press. <https://www.ipcc.ch/report/ar5/wg1/>

Intergovernmental Panel on Climate Change. (2021). Climate change 2021: The physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (V. Masson-Delmotte et al., Eds.). Cambridge University Press. <https://doi.org/10.1017/9781009157896>

Intergovernmental Panel on Climate Change. (2022). Climate change 2022: Mitigation of climate change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (P. R. Shukla et al., Eds.). Cambridge University Press. <https://doi.org/10.1017/9781009157926>

International Auditing and Assurance Standards Board. (2013). International Standard on Assurance Engagements 3000 (Revised): Assurance engagements other than audits or reviews of historical financial information. International Federation of Accountants. <https://www.iaasb.org/publications/international-standard-assurance-engagements-isa-3000-revised-assurance-engagements-other-audits>

International Finance Corporation. (2012). IFC performance standards on environmental and social sustainability. World Bank Group. <https://www.ifc.org/content/dam/ifc/doc/2012/ifc-performance-standards.pdf>

International Organization for Standardization & International Electrotechnical Commission. (2008). Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurement (GUM: 1995) (ISO/IEC Guide 98-3:2008). ISO/IEC. <https://www.iso.org/standard/82708.html>

ISO 14064-2:2019 – Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.

**ISO 14064-3:2019** – Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.

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

United Nations Department of Economic and Social Affairs. (n.d.). Sustainable Development Goals. United Nations. <https://sdgs.un.org/goals>

United Nations Framework Convention on Climate Change. (2015). Paris Agreement. UNFCCC. [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)

United Nations Framework Convention on Climate Change. (n.d.-a). Long-term low greenhouse gas emission development strategies. UNFCCC. <https://unfccc.int/process/the-paris-agreement/long-term-strategies>

United Nations Framework Convention on Climate Change. (n.d.-b). NDC Registry. UNFCCC. <https://unfccc.int/NDCREG>

United Nations General Assembly. (2007). United Nations Declaration on the Rights of Indigenous Peoples (Resolution 61/295). United Nations. <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>

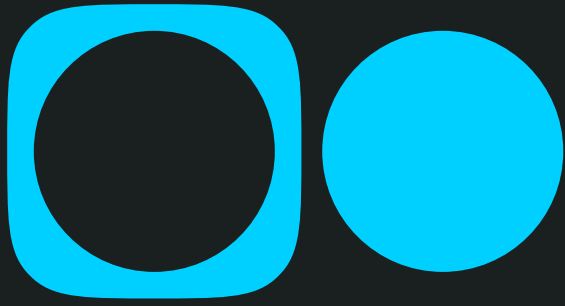
United Nations Human Rights Office of the High Commissioner. (2011). Guiding principles on business and human rights: Implementing the United Nations "Protect, Respect and Remedy" framework. United Nations. [https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\\_en.pdf](https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf)

United Nations Statistics Division. (n.d.). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. United Nations. <https://unstats.un.org/sdgs/indicators/indicators-list/>

## Document History

The new version of the document is effective on Issue Date.

Version	Issue Date	Comment
V 1.0	28.05.2026	Initial version published



# puro earth

contact@puro.earth  
www.puro.earth

Puro.earth is the world's leading market infrastructure provider for engineered carbon dioxide removal (CDR). Backed by Nasdaq, we provide the certification frameworks, scientific standards, and digital systems that allow engineered CDR to scale and operate as an investment-grade market.

At the core of this infrastructure is the Puro Standard - the world's first dedicated standard for engineered carbon removals. Our methodologies are used by suppliers to certify their carbon removal solutions that durably store carbon dioxide for at least 100 years, and in many cases, over 1000 years. We have certified over 100 engineered carbon removal projects to date, resulting in the issuance of CO<sub>2</sub> Removal Certificates (CORCs) in the Puro Registry as verified, traceable, investable assets. Our infrastructure is trusted by over 600 companies worldwide to purchase carbon removals with confidence, including Microsoft, McKinsey and BCG. It supports both voluntary and compliance pathways, including integration with CCS+ methodologies and readiness for emerging frameworks such as the EU CRCF.

Puro.earth is an ICVCM Eligible Carbon Crediting Program.  
For more information, visit <https://puro.earth>, and follow us on LinkedIn.