www.trustedcarbon.org



# GERBERAL RULES 2025

VERSION 1



# **TRUSTED CARBON GENERAL RULES**

# CONTENTS

		Page
1.	PURPOSE AND GOVERNANCE	1
2.	DESCRIPTION OF THE CERTIFICATION PROCESS	8
3.	REGISTRY TRANSACTIONS	11
4.	CERTIFICATE TRADING AND TRANSFER OF OWNERSHIP	16
5.	REPORTS FROM THE REGISTRY	17
6.	ADDITIONAL CLAUSES	17
7.	OBLIGATIONS FOR CO2 REMOVAL SUPPLIERS	18
8.	APPENDICES	27



# 1. PURPOSE AND GOVERNANCE

#### Trusted Carbon, Registry and System

The goal is to establish a fully operational market for enduring, long-term CO2 removal, characterized by reliability, efficiency, and geographic independence. This endeavor seeks to create incentives for CO2 removal, offering corporations a channel to contribute to reversing climate change through societal engagement.

Trusted Carbon, along with the Trusted Carbon Registry, serves as an initiative and a platform respectively, for the issuance, transfer, and retirement of CO2 Removal Certificates (CRDs). Within this system, facilities that are capable of CO2 removal undergo thorough audits and certification. CRDs are granted for the verified amount of long-term net CO2 removal achieved within these facilities over time. These CRDs can then be exchanged among different account holders. The CRD's value is realized upon its retirement, removing it from active circulation and assigning the sole claim of the CO2 Removal

Attributes to the Retirement Beneficiary.



#### Figure 1. Lifecycle of Carbon Removal Certificates

The system is designed to prevent the issuance of multiple CRDs for the same quantity of CO2 removal, ensuring that a CRD serves as the exclusive evidence of ownership for the corresponding CO2 Removal Attributes.



Every participant in the system must be a registered Account Holder and have agreed to the Platform Agreement. The Issuing Body conducts standard due diligence checks for each Account Holder.

The Registry maintains records of all issued, transferred, and retired CRDs.

#### **Purpose of the General Rules**

These regulations establish the responsibilities and duties of various stakeholders within the system and provide a framework for evaluating contractual adherence. Their objective is to safeguard the rights of the system's Account Holders and to ensure they are treated fairly.

These rules, along with the Methodologies, define approved CO2 Removal Methods and outline the procedures for verifying CO2 Removal activities for CRD issuance and conservative CRD quantification.

These rules should be interpreted and applied in alignment with the Trusted Carbon requirements, which are authoritative documents endorsed and released by the Issuing Body to clarify and ensure compliance with the rules by all system participants.

# **Governance of Trusted Carbon**

The Advisory Board governs these rules. Any modifications to these rules require the approval of the Advisory Board.

The Advisory Board consists of a minimum of three and a maximum of seven members, all independent experts with insights into the Voluntary Carbon Markets. The Board nominates and approves new members as outlined in the Terms of Reference.

The Board may suggest revisions to Trusted Carbon and Methodologies as needed. A review is initiated when changes in regulations, technologies, carbon accounting, or other relevant aspects are identified by either an Advisory Board Member or Trusted Carbon management. A revision may lead to the alteration or discontinuation of a Methodology.

If the review leads to substantial revisions or new Methodologies, they are subject to public consultation before being finalized. Announcements for public consultations are made on the Trusted Carbon website and through newsletters to ecosystem members. Stakeholder feedback is considered, and the outcomes of the consultation are published on the website.

Methodologies are authoritative documents detailing the rules and procedures that CO2 Removal Suppliers must follow to receive CRDs. The methodology development process involves an independent expert group drafting the methodology, followed by public consultation and Advisory Board approval. The guiding principles for methodology development are i) scientifically sound, conservative estimation



of climate impact and ii) safety, encompassing environmental and social safeguards under the "do no harm" principal.

External methodologies may be proposed for Advisory Board approval.

External parties can submit methodologies for Advisory Board consideration. These methodologies undergo public consultation before submission. Any queries or comments raised during the consultation are addressed publicly, and any changes made to the methodology are included before it is presented to the Advisory Board for approval.

The methodology should cover:

- Applicability or eligibility criteria.
- Determination of the accounting boundary.
- Evaluation of additionality and the baseline scenario.
- Quantification of GHG removals, emissions, and leakage.
- Projected storage duration and reversal risks.
- Environmental and Social Safeguards.
- Monitoring practices.

The Advisory Board may seek expert external advice on the feasibility of a proposed methodology.

Upon Advisory Board approval, the methodology and any resulting amendments are made publicly accessible on the Trusted Carbon website for reference.

Approved external methodologies are subject to the same review process as existing ones and may be suspended or withdrawn if the Issuing Body determines that GHG emission removals are overestimated, or additionality is not assured.

#### **Other General Rules**

The Issuing Body is accountable for accrediting and supervising Auditors as per the Validation and Verification Requirements. A list of accredited Auditors is available on the Trusted Carbon website.

The Issuing Body is tasked with retaining all records for at least five years.

The Issuing Body must implement strong anti-money laundering procedures and adhere to stringent anti-bribery and anti-corruption guidelines and regulations.



The Issuing Body has the authority to conduct ad-hoc audits related to Retirement and claims made by Account Holders, ensuring CRDs are utilized in accordance with these rules.

Terms beginning with a capital letter in these rules are defined in the Definitions section

# DEFINITIONS

Account – account in the Registry in which CRDs held by Account Holders are stored. Account Holder – Legal person who has signed a Platform Agreement and who thereby possesses an Account in the System and rights to execute specified Transactions (Retirement, Transfer). Advisory Board – A governing body of these Trusted Carbon General Rules and the Methodologies. Attribute – A characteristic of Net Carbon Dioxide removal, which is recorded in the CRD, such as where, when and by which Methodology the CO2 Removal was achieved.

**Auditor –** An Independent 3<sup>rd</sup> party verifier appointed to perform Production Facility Audit or Output Audits

**Baseline** - The sequestration of greenhouse gases (natural or anthropogenic) that have occurred prior to the introduction of the activity accounted over a period. This historical data point acts as a counterfactual benchmark to evaluate the success of the activity to remove additional greenhouse gases and sequester them for the Long-Term.

**Beneficiary -** A legal person who is named as the benefitting party of the CRD Retirement. The Beneficiary is the sole owner of the Attributes represented by the CRDs, which are Retired for its benefit. Examples of beneficiaries might include, but are not limited to, companies, public entities, private or public organizations.

**CO2 Removal** – Carbon dioxide removal (CDR)<sup>1</sup> is an anthropogenic activity involving removal of CO2 from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes anthropogenic enhancement of biological, geochemical, or chemical CO2 sinks, but excludes natural CO2 uptake not directly caused by human activities.

**CO2 Removal Supplier** - An Account Holder registering a Production Facility capable of CO2 Removal according to the applicable Methodology.

**CO2 Removal Certificate (CRD)** - CO2 Removal Certificate is an electronic document, which records the Attributes of CO2 Removal issued to certified Production Facilities. Each CRD represents a Net Carbon Dioxide Removal volume of one (1) metric ton of Long-Term CO2 Removal.

**CRD100+, CRD1000+** - certificate labels used to communicate storage durability in years for different Methodologies. The label is for information only and does not express the exact duration that the carbon is retained in the storage.

**Country of Origin** – Host country. The country of location of the Production Facility generating Output for which the CRD was issued.

**Crediting Period** - The period in which verified CO2 removal Output attributable to a certified Production Facility can result in the issuance of CO2 Removal certificates (CRDs).

**Environmental and Social Safeguards** – Mechanisms to identify, mitigate and prevent adverse environmental and social impacts resulting from implementation of CO2 removal.



**GWP100** – Global Warming Potential (GWP) is a metric used to compare the potential warming effect of different greenhouse gases emitted to the atmosphere over a given time horizon. GWPs are commonlygiven for 20-year, 100-year and 500-year time horizons<sup>2</sup>. In life cycle assessment, GWPs can be used tocalculate the climate impact of a system expressed in carbon dioxide equivalent (CO2-eq). These valueshave been updated in different iterations of the IPCC assessment report and care must be taken in defining which version is being used.

**Issuance** – Transaction performed by the Issuing Body to create CRDs based on the Output from registered Production Facilities.

**Issuance Date** - The date of Issuance recorded in the CRD.

**Issuing Body** - The Body responsible for Issuing CRDs, operating the System and overseeing the reliability of the System. The Issuing Body of the System is Trusted Carbon.

**Long-Term** - Long-Term refers to the duration of carbon storage and is defined as a minimum length of 100 years.

**Methodology** – Methodology provides eligibility requirements and procedures to verify the compliance of the CO2 Removal activity. A Methodology provides robust CO2 Removal quantification rules specific to each carbon removal pathway. It specifies the activity boundaries, detailed calculation formulas and the proof needed for the activity performance. A Methodology may be revised. A List of the valid Methodologies is available on the Trusted Carbon website.

**Monitoring Period** – the time between the !start date" and !end date" of the Output Report, Monitoring Period is also called vintage or vintage year.

**Net Carbon Dioxide Removal (CDR)** – 1 metric ton of CO2 removed from the atmosphere net of any life- cycle process emissions and intended to be stored for the Long-Term. Net CDR means that the total removal-emission balance of the CO2 Removal activity is net negative.

**Output** – Volume of CO2 Removal within a certain Monitoring Period which is eligible to receive CRDs. CRDs are always Issued for Net Carbon Dioxide Removal in the production process, which means that the total volume of Output is determined by subtracting the CO2 emissions volume generated directly or indirectly due to the production process or materials used according to the applicableMethodology from the CO2 Removal volume.

**Output Report** – The CO2 Removal Supplier reports the Output of a Production Facility periodically to the Issuing Body by submitting an Output Report. An Output Report can be generated manually or automatically.

**Output Audit** – Verification performed by a 3rd party to determine the volume of CRD Issuance corresponds to the Output of CO2 Removal of that Monitoring Period from a Production Facility according to Methodology.

Output Audit Report – A report generated by the Output Auditor based on the Output Audit.

**Output Audit Statement** – A statement published by the Issuing Body about the outcome of a Output Audit.

Platform Agreement - A contract made between the System and the Account Holder.

**Production Facility** – A facility or natural location capable of CO2 Removal according to one or several Methodologies.



**Production Facility Audit** – Audit performed by a 3rd party to validate the details and eligibility of a Production Facility according to the relevant Methodology.

**Production Facility Audit Report** – A report generated by the Auditor based on the Production Facility Audit.

**Production Facility Audit Statement** – A statement published by the Issuing Body about the outcome of a Production Facility Audit.

**Trusted Carbon** – Standard defining the rules for the System, the eligibility requirements for CO2 Removal Suppliers and quantification rules for the number of CRDs to be issued.

**Registry** – The electronic database of the System in which CRDs are deposited and transacted.

**Registry Operator** – Body responsible for the technical operation of the Registry. The Registry Operator of the System is Trusted Carbon.

**Removal**– Method for a) absorbing CO2 from or b) preventing its entrance to the atmosphere and keeping it stored for the Long–Term. Removal Methods include capture, conversion of CO2 to a stable, durable format, with Long-Term storage.

**Retirement** – Retirement of a CRD from circulation by realizing its value and making the Beneficiary of the Retirement the sole owner of the CRD and its Attributes.

**Retirement Request** – A request to be filled out by an Account Holder for initiating a Retirement.

**Start Date** - The calendar date on which the mitigation activity proponent committed to implementing

the mitigation activity (e.g., the date when contracts for the purchase or installation of equipment required for the mitigation activity were executed or the date when the first expenditures are incurred).

In the case where a mitigation activity does not involve expenditure, it refers to the date when the first physical actions were taken to implement the mitigation activity (e.g., the discontinuation of the cultivation of land so that natural revegetation or succession may occur). (ICVCM CCP Définitions)

**System** –certification scheme operating under the Trusted Carbon and in the Trusted Carbon Registry. It

is managed by the Issuing Body and the Registry Operator.

**Trade Value** – The total monetary value of a trade of CRDs between the seller and the buyer. Trade Value = trade volume \* trade price per CRD.

**Transaction** – Processing of CRDs in the Registry database. Transactions include Issuance, Transfer, Retirement, and Withdrawal.

Transfer – The transfer of CRD from one Account Holder to another

**Transfer Request** – A request made by an Account Holder to the Issuing Body to Transfer CRDs to another Account Holder.



# **2. DESCRIPTION OF THE CERTIFICATION PROCESS**

This section delineates the procedure for certification within the Trusted Carbon framework.

# 2.1 Project Development

CO2 Removal activities are initiated for the purpose of long-lasting carbon sequestration and storage. The certification process is aimed at generating operational revenue for these activities.

The Start Date for a CO2 Removal activity is defined as the date on which the project initiator commits to the activity, either through financial or physical actions, such as signing equipment contracts or beginning physical implementation steps like halting land cultivation for natural regrowth.

# 2.2Design Validation for Engineered Carbon Removal Projects (not applicable to Nature Based Solutions)

This phase includes a Production Facility Audit conducted by a third-party auditor and a subsequent Review by the Issuing Body. Every CO2 Removal Supplier is required to submit their data for validation within three years from the Start Date.

#### Production Facility Audit

The audit process commences when the CO2 Removal Supplier:

- (a) Enters into the Platform Agreement.
- (b) Registers their Production Facility.
- (c) Submits a comprehensive audit package as per the relevant Methodology.

#### This includes:

- I. Life-Cycle Assesment (LCA) Report, CRD computation
- II. Evidence of adherence to methodology requirements
- III. Plans for Monitoring and Reporting
- IV. Assessment of Additionality
- V. Stakeholder Consultation
- VI. Environmental and Social Safeguards
- VII. Sustainable Development Goals (SDGs) benefits



The CO2 Removal Supplier must validate the information's accuracy. An independent third-party auditor, appointed by the Issuing Body, assesses this package and provides a detailed report and statement.

#### Production Facility Review

Conducted by the Issuing Body, this review examines the audit report and associated documentation from the CO2 Removal Supplier. The review outcome could either be a certification of the facility or identification of non-conformities.

A successful review leads to the preparation phase for the Output Audit.

# 2.3 Performance Verification (Applicable to ALL projects)

This involves an independent third-party Output Audit, followed by an Output Review by the Issuing Body.

#### Output Audit

Initiated upon the submission of an Output Report for a Monitoring Period, the audit includes both a desk study and a site visit (which can be remote) to verify the facility's performance against Trusted Carbon and the Methodology. The auditor's evaluation is documented in a report and statement.

#### Output Assessment

The Output Assessment is undertaken by the Issuing Authority. This process encompasses the examination of the Output Audit Report along with the supporting documentation provided by the CO2 Removal Supplier pertaining to the Output Audit.

The assessment of a Facility's output can conclude with either:

- (a) A positive Outcome of the Output Assessment.
- (b) A negative Outcome of the Output Assessment.

In cases where the Output Assessment is positive:

- (a) The CO2 Removal Supplier is authorized to proceed with CRD Issuance.
- (b) The Output Audit Report is disclosed publicly within the Trusted Carbon Registry.



- (c) Relevant information about the Facility is also made available in the Trusted Carbon Registry, including:
  - (i) The Facility's Location.
  - (ii) The CO2 Removal Supplier's details.
  - (iii) The employed Methodology.
  - (iv) Reports on Baseline and Additionality Assessment.
  - (v) Records of Stakeholder Consultation.
  - (vi) Evaluations of Environmental and Social Safeguards.
  - (vii) Descriptions of the positive impacts on Sustainable Development Goals (SDGs).
  - (viii) Confirmation of the Verified Output for the Monitoring Period.
  - (ix) Life Cycle Assessment (LCA) Report, CRD computation

#### (ci) Combining Audits

In the case of engineered carbon removal projects, the Issuing Body may opt to merge the design validation and performance verification steps. In this case, the CO2 Removal Supplier provides all necessary documents for both audits in their initial submission. The auditor assesses both aspects simultaneously and prepares a combined report.

#### **2.4 Timescales and Frequency**

The Crediting Period, lasting five years (unless specified differently in the Methodology), commences from the first day of the first Monitoring Period and can be extended with a successful new audit. Each Production Facility must submit an Output Report annually, covering up to 18 months of activity. Failure to submit these reports within the specified timeframes can lead to suspension or deregistration of the facility. Adjusted timelines may be applicable in exceptional circumstances like pandemics or natural disasters. The Issuing Body reserves the right to mandate ad-hoc audits, with the CO2 Removal Supplier responsible for providing necessary documentation and access.



# 3. REGISTRY TRANSACTIONS

#### CRD (CO2 Removal Certificates) Management

In the Registry, each CO2 Removal Certificate (CRD) is distinctly identified, and its entire history, from issuance to transfer or retirement, is transparently tracked. All transactions involving CRDs incur service fees as stipulated in the Platform Agreement.

#### **3.1 Registration and Deregistration of Production Facilities**

- The process to register a Production Facility begins with the CO2 Removal Supplier providing detailed information about the facility. This includes:
  - (d) The name of the CO2 Removal Supplier registering the facility.
  - (e) The associated Registry Account.
  - (f) Facility Name and Location.
  - (g) The host country and sector.
  - (h) The employed Methodology.
  - (i) Additional specific details as required by the Methodology.
  - (j) Proof of facility ownership and legal rights to the CRDs.
- CO2 Removal Suppliers must promptly inform the Issuing Body of any changes at the Production Facility that could affect the Attributes of issued CRDs or compromise Environmental and Social Safeguards. The Issuing Body may suspend the facility's operations, necessitating a new Production Facility Audit.
- The Issuing Body reserves the right to suspend any transactions related to a Production Facility and its CRDs. Delays or failures in report submission can lead to temporary suspension until issues are resolved.
- A CO2 Removal Supplier can deregister a Production Facility by notifying the Issuing Body. Deregistration takes effect within a month of notification receipt. The supplier will receive official deregistration documentation, specifying the date from which the facility is no longer certified under Trusted Carbon. The supplier remains responsible for any outstanding fees.



# 3.2 CRD Issuance

- CRDs are issued exclusively to certified Production Facilities linked to an approved Account Holder's Registry Account.
- CRDs are granted based on an Output Report for a defined Monitoring Period from a certified facility.
- CRDs are allocated to facilities verified to adhere to requirements in Chapter 7 and the relevant Methodology for:
  - (a) Considering long-term storage
  - (b) Additionality
  - (c) Environmental and Social Safeguards, and Sustainable Development Goals (SDGs)
- CRDs represent the Net Carbon Dioxide Removal (CDR) Output, calculated by subtracting greenhouse gas emissions from the total CO2 Removal volume.
- Each CRD denotes one metric ton of Net Carbon Dioxide Removal. CRDs include specific Attributes such as:
  - (a) unique identifier
  - (b) issuance date
  - (c) removal methodology
  - (d) storage durability labels (CRD100+ or CRD1000+)
  - (e) facility identity, location
  - (f) host country & sector
  - (g) monitoring period dates (vintage)
  - (h) other relevant methodology-specific information
- CRD Issuance is initiated when a CO2 Removal Supplier submits an Output Report according to the agreed reporting frequency.
- The Issuing Body selects the issuance method from two options:
  - (I) Annual Issuance: Applicable to all certified facilities, based on performance verification for the specified Monitoring Period.
  - (II) Ongoing Issuance: For regularly operating and monitored certified facilities, with details in Appendix B.
- CRDs are issued as whole numbers. Remaining fractions less than one metric ton are recorded and added to the next issuance.



#### **3.3 CRD Retirement**

- Retirement validates the removal of CO2 corresponding to the retired CRDs volume, granting exclusive ownership of the quantity and Attributes of the CO2 Removal to the beneficiary.
- Account Holders can retire CRDs for themselves or others.
- Retirement initiation requires a Retirement Request, specifying CRD sets:
  - (a) beneficiary details
  - (b) usage purpose and period
- The Issuing Body may approve or reject Retirement Requests. Approved retirements are removed from circulation, with transaction details publicly available through the Trusted Carbon Registry.

# 3.4 CRD Withdrawal

- The Issuing Body may withdraw CRDs from an Account Holder's Account in cases of:
  - (a) Issuing, transferring, or processing errors.
  - (b) Material breaches of Trusted Carbon.
  - (c) Balancing accounts in case of CO2 Removal reversals.
- The Issuing Body can amend CRD details to correct errors, subject to Account Holder agreement, ensuring no unjust enrichment.

# **3.5 Preventing Double Counting**

The Trusted Carbon Registry aims to avoid double counting of CO2 Removal activities and CRDs. Procedures include preventing:

- Double registration within and outside the Trusted Carbon Registry.
- Double issuance of CRDs for activities credited elsewhere during the same period.
- Double retirement and usage, counting towards multiple mitigation targets.
- Double usage within the supply chain.
- Double counting under Article 6 of the Paris Agreement.



#### 1. Preventing Double Registration Within the Trusted Carbon Registry

To ensure unique registration within the Trusted Carbon Registry, the Issuing Body verifies that no Account Holder registers the same CO2 Removal Activity more than once and that no two Account Holders register the identical CO2 Removal activity at the same location. The Registry keeps a record of ownership proof for each Production Facility to be certified and legal entitlement to the CRDs produced from the activities of all supply chain parties. All Account Holders must be registered and sign the Platform Agreement, committing to adhere to its defined procedures.

#### 2. Preventing Double Registration Outside of the Trusted Carbon Registry

The Issuing Body checks that the same Account Holder hasn't registered the same CO2 Removal activity for the same time frame with another carbon-crediting program. An activity can be registered with another program for a different period. The Trusted Carbon Registry mandates disclosure of any previous registrations of the same CO2 Removal activity with other crediting programs. The CO2 Removal Supplier must declare if the same activity is registered or has been rejected by another program and provide the reason for rejection.

In cases where an activity moves from another crediting program to the Trusted Carbon Registry, there must be no overlap in periods. The CO2 Removal Supplier must provide documentation of deregistration from the other program, indicating from which date the activity is no longer credited there. The carbon removal Output post-registration in the Trusted Carbon Registry will be credited under Trusted Carbon.

For activities moving from the Trusted Carbon Registry to another program, the CO2 Removal Supplier will receive a deregistration document from the Trusted Carbon Registry stating from which date the activity is no longer certified under Trusted Carbon. Transfers of CRDs outside of the Trusted Carbon Registry are not permitted.

Simultaneous registration with other programs that credit activities other than CO2 Removals, such as biodiversity or renewable energy credits, is permissible in the Trusted Carbon Registry. However, disclosure of such simultaneous registrations is required.

#### 3. Preventing Double Issuance

Double issuance of CRDs, where another program has issued credits for the same project activity and period, is prevented as described in the previous section.



#### 4. Preventing Double Retirement and Use

The full lifecycle of CRDs, from issuance to retirement, is tracked in the Trusted Carbon Registry, ensuring avoidance of double retirement and use. Each CRD is uniquely identified by a serial number, and retirements, including beneficiary and purpose data, are published in the Registry. Retirements are final, prohibiting any CRD from being retired more than once.

#### 5. Preventing Double Use Within the Supply Chain

The CO2 Removal Supplier is responsible for preventing double use or reporting of CO2 Removal within the supply chain. This is ensured through contracts, statements, or other measures. In instances where a physical product or material stores CO2, preventing its reemission into the atmosphere, it must not be associated with any CO2 Removal claims or other Attributes represented by the CRD.

#### 6. Preventing Double Counting in the Context of Paris Agreement Article 6

Article 6 of the Paris Agreement facilitates international cooperation to achieve the goal of netzero emissions by the second half of this century. CRDs used within Article 6 mechanisms and other international frameworks, like CORSIA, must comply with double counting and corresponding adjustment requirements. Detailed procedures and requirements to prevent double counting under Article 6 are outlined in Appendix A of this document.



# 4. CERTIFICATE TRADING AND TRANSFER OF OWNERSHIP

- Account Holders are permitted to engage in the trading of CRDs across any authorized platform. However, they must immediately report all such transactions to the Registry Operator and remit the service fee required for the ownership transfer.
- The exchange of CRDs must adhere to the designated uses outlined under Article 6 of the Paris Agreement, particularly concerning NDC international mitigation (CORSIA) and other relevant applications. Further details on this are available in Appendix A of this document.
- To commence the ownership transfer process, either the Account Holder, an individual authorized by the Account Holder, or a representative of the Account Holder must submit a trade report. This report should include:
  - (a) The account number from which the CRDs will be transferred.
  - (b) The account number receiving the CRDs.
  - (c) The quantity of CRDs or the specific unique identifiers of the CRDs being transferred.
  - (d) The total value of the trade.
  - (e) Additional information as specified by the involved parties.
- Upon receiving a trade report from the seller, the Registry Operator will execute the transfer of CRDs between accounts as detailed in the trade report.



# 5. REPORTS FROM THE REGISTRY

- The Issuing Body makes several types of reports accessible to the public:
  - (f) Audit Statements, Audit Reports, registrations, and Project Descriptions can be found in the Registry. The CO2 Removal Supplier has the option to request the omission of proprietary information from these reports, subject to the approval of the Issuing Body.
  - (g) A database, updated daily, lists issuances and retirements, providing specifics about the Beneficiary, the Monitoring Period (also known as vintage), and the CO2 Removal Supplier's Production Facility. Beneficiaries have the right to request a delay, not exceeding 12 months, in the publication of their details.
- Reports that can be requested from the Registry Operator include:
  - (a) An Account Statement for the Account(s) held by the requesting Account Holder.
  - (b) A Retirement Statement detailing the Retirement Transaction and the CRDs involved.

# ADDITIONAL CLAUSES

- The commitment of the Account Holder to adhere to these regulations becomes effective upon the signing of the Platform Agreement and remains in effect until the termination of said agreement.
- In the absence of specific instructions, the selection of CRDs for Transfer will prioritize those with the oldest Issuance Date.



# 7. OBLIGATIONS FOR CO2 REMOVAL SUPPLIERS

#### (a) Carbon Removal Quantification

The CO2 Removal Supplier is responsible for calculating the Net CO2 Removal amount as per the Methodology relevant to their project. Typically, this involves subtracting any greenhouse gas emissions produced directly or indirectly by the Production Facility from the total gross CO2 Removal. These calculations follow the specific rules set out in the chosen Methodology and the guidelines for Life Cycle Assessment.

For estimating the climate impact, CO2 Removal Suppliers must use GWP100 factors from the most recent IPCC Assessment Report, unless the chosen Methodology specifies otherwise.

#### (b) Leakage Assessment

CO2 Removal Suppliers must carry out an assessment of leakage as stipulated in the applicable Methodology. Leakage refers to indirect effects related to the removal activity that, based on the established baseline, may lead to an increase, or decrease in greenhouse gas emissions or removals outside the activity's system boundaries. To address this, leakage must be either avoided, minimized, or mitigated.

Methodologies under Trusted Carbon must:

- (i) Identify and list potential sources of leakage relevant to the included removal pathways.
- (ii) Incorporate requirements aimed at avoiding, minimizing, or mitigating leakage effects.
- (iii) Provide robust and conservative methods for quantifying any unavoidable leakage.

Leakage categories considered in Trusted Carbon Methodologies include ecological leakage, market leakage, activity-shifting leakage, and upstream/downstream emissions. Typically, upstream/downstream emissions are accounted for as direct emissions of the activity using appropriate life-cycle emission factors.

The Methodologies must differentiate between positive and negative leakage effects. Positive leakage, which reduces climate change impact, is not included in CRD quantification but can be noted as co-benefits. Negative leakage, which increases climate impact, must be factored into CRD quantification, resulting in a reduction of claimable CRDs.



In situations where a single leakage effect leads to both an increase and decrease in emissions (net leakage effects), the net effect is considered if specified in the applicable Methodology. This can result in either positive or negative leakage.

3 IPCC Sixth Assessment Report https://www.ipcc.ch/assessment-report/ar6/ 4 CCP Definitions https://icvcm.org/wp-content/uploads/2023/07/CCP-Section-5-R2-FINAL-26Jul23.pdf

#### (c) Uncertainty and Conservativeness

- CO2 Removal Suppliers are required to adopt conservative approaches, values, and methods to ensure the authenticity and accuracy of CO2 Removal quantified for CRDs.
- CO2 Removal Suppliers need to evaluate the uncertainty in their reported CO2 Removal Output volume.
- They must create a detailed uncertainty estimation that reflects the impact of all significant sources of uncertainty on the Output volume. A significant source is defined as any factor that impacts (or is likely to impact) the Output volume by at least 1%. However, the total effect of all minor sources of uncertainty should not exceed 10% of the Output volume.
  - (i) The uncertainty estimation must include the effects of significant sources arising from:
  - (ii) Assumptions, such as baseline scenarios.
  - (iii) Estimation equations or models.
  - (iv) Parameters, like the appropriateness of default values.
  - (v) Measurements, including the precision of measurement methods.
  - (vi) Any additional factors specified in the applicable Methodology.
  - (vii) Other factors that could materially affect CO2 Removal quantification.
- The estimation should encompass the overall uncertainty in the Output, assessed as a cumulative effect from individual sources, and should detail the uncertainty linked to each significant source.
- The uncertainty estimation should be quantitative, expressing the overall uncertainty as a percentage of the Output volume.
- The estimation must be scientifically justified, outlining methods used to evaluate and minimize uncertainty. This includes a description of methods for calculating individual uncertainty values and references to any literature used.
- When direct quantification of error by the CO2 Removal Supplier is not feasible (as in the case of equations or parameters sourced from scientific literature or local regulations), the Supplier may use error estimations from external sources such as peer-reviewed scientific literature or local guidelines. Using Monte Carlo simulations or conservative estimation input parameters is also acceptable.



• CO2 Removal Suppliers should conservatively incorporate the estimated uncertainty into the quantified CO2 Removal Output volume.

#### (d) Environmental and Social Safeguards

A CO2 Removal Supplier must demonstrate that Production Facility activities do not harm the natural environment or local communities and comply with the following criteria set by the Integrity Council for the Voluntary Carbon Market (IC-VCM):

5 It shall be noted that the responsibility of the Production Facility operator extends to the imminent environmental and human health related impacts of the use of manufactured product as far as concerned in the Environmental Impact Assessment or environmental permit.

#### • Adherence to Regulations and Rights

- (i) Comply with all relevant national, local, and, where applicable, international laws, objectives, programs, and regulations.
- (ii) Uphold human rights, preventing discrimination, in accordance with the International Bill of Human Rights and universally accepted instruments ratified by the host country.
- (iii) Respect and protect the rights of Indigenous Peoples and Local Communities (IPs & LCs) following international human rights law, including the United Nations Declaration on the Rights of Indigenous Peoples and the International Labor Organization (ILO) Convention 169

#### • Labor Standards and Equal Opportunities

- (iv) Observe labor rights and maintain proper working conditions, including forbidding forced or child labor and ensuring fair treatment and safe environments for employees.
- (v) Ensure gender equality, offering equal pay for equal work and taking measures against violence towards women and girls.



#### Pollution and Health Impact Management

- (vi) Prevent pollution, controlling emissions to air, water, and soil, and manage noise, vibration, waste, hazardous materials, chemical pesticides, and fertilizers.
- (vii) Minimize adverse effects on community health and safety.

#### Biodiversity and Natural Resource Management

(viii) Conserve biodiversity and manage natural resources sustainability, avoiding negative impacts on terrestrial and marine life, protecting habitats of endangered species, minimizing soil degradation, soil erosion, and water consumption.

#### Cultural Heritage Preservation

(ix) Preserve cultural heritage and protect cultural and religious sites.

#### • Minimization of Displacement and Restriction

(x) Avoid or minimize physical or economic displacement and, where not possible, address it responsibly. Respect customary rights and access to land and resources.

#### Informed Consent for Indigenous Peoples

 (xi) Obtain Free, Prior, Informed Consent (FPIC) from Indigenous Peoples when their livelihoods, ancestral knowledge, or cultural heritage are directly or indirectly impacted.
FPIC is also recommended for local communities.

#### Impact Assessment and Documentation

(xii) Provide comprehensive documentation addressing all significant environmental and social impacts, both within and beyond the activity boundary. Include mitigation measures appropriate to the identified risks. Documentation can include Environmental Impact Assessments (EIA), environmental permits, and other relevant reports.



#### Risk Assessment Tools and Guidelines

(xiii) Utilize screening tools and guidelines approved by the Issuing Body to demonstrate low risk for negative impacts.

#### Stakeholder Engagement

(xiv) Conduct Stakeholder Consultations in line with local regulations and Trusted Carbon Stakeholder Engagement Requirements. Implement a policy for ongoing stakeholder feedback during the operation of the Production Facility.

#### Additionality

- CO2 Removal Suppliers must prove that their projects are not mandated by current laws, regulations, or other binding commitments.
- They are required to show that their carbon removal exceeds what would likely occur under baseline conditions. Baselines should be project-specific, conservative, and updated periodically.
- Financial additionality must be demonstrated, indicating that the carbon removals are directly attributable to carbon finance.
- To establish additionality, CO2 Removal Suppliers must adhere to the Additionality Assessment Requirements specified by Trusted Carbon.
- Trusted Carbon may develop standardized methods for baseline determination. These methods should be created following the process outlined in the Core Carbon Principles. Production Facilities that meet the criteria of these standardized approaches are permitted to use them for proving additionality.

#### Positive SDG Impacts

- CO2 Removal Suppliers are expected to provide qualitative descriptions of the anticipated positive impacts on Sustainable Development Goals (SDGs) before conducting the Production Facility Audit.
- For the Output Audit, both qualitative and quantitative evidence of positive SDG impacts is required, following the SDG Assessment Requirements set by the Issuing Body.
- Suppliers should also present how their mitigation activities align with the SDG objectives of the host country, where relevant and feasible.

<sup>6</sup> CCP Criterion 8.8 https://icvcm.org/wp-content/uploads/2023/07/CCP-Section-4-R2-FINAL-26Jul23.pdf



#### (g) DURABILITY AND REVERSALRISK MANAGEMENT

The Certified Carbon Dioxide Removal (CDR) methodologies under Trusted Carbon involve sequestration of carbon in storages that are highly durable. When carbon is sequestered in a certified storage and quantified according to the prescribed Methodology, the likelihood of reemission is notably low. Nevertheless, CO2 Removal Suppliers are obligated to evaluate the risk of potential reversals linked to their CO2 Removal activities and implement necessary measures to mitigate and manage any significant reversal risks.

#### **Definitions Pertaining to Reversal Risks**

**Reversal**: This refers to any event that nullifies, either partially or completely, the effects of Long-Term CO2 Removal. Essentially, it's any incident that results in the re-release of carbon into the atmosphere or the inability to assure long-term, safe, and durable storage of the removed carbon.

**Inherent Reversal**: This type of reversal is an expected outcome due to the high likelihood of material risks inherently associated with certain CO2 Removal technologies. Examples include the gradual decay of biochar in soil or the dissolution of mineral carbonates in water through enhanced rock weathering. Methodologies separately quantify and account for Inherent Reversals.

**Unexpected Reversal** Any reversal, other than Inherent Reversal, caused by the materialization of a significant risk. For instance, the destruction of stored biomass by fire.

**Material Risk:** A risk of reversal is considered material if its effect on the stored Output volume is 1% or greater. However, if the combined effect of several non-material risks exceeds 10% of the Output volume, they collectively constitute a material risk.

**Risk Impact**: This term denotes the potential adverse effect or damage a risk might cause to the CO2 Removal if it materializes. It is quantified as a percentage of the total cumulative Output volume over the long-term storage period.

**Risk Likelihood**: This refers to the probability or frequency of a risk materializing under current conditions and assumptions. It's expressed as a percentage (0–100%) indicating the likelihood of a particular risk occurring during the long-term storage period.

**Risk Effect**: The realistic expected outcome or damage resulting from a specific risk, derived from an overall assessment of its Risk Impact and Risk Likelihood. For each risk, the Risk Effect is calculated by multiplying the Risk Impact by the Risk Likelihood. It's quantified as a percentage of the total cumulative Output volume over the long-term storage period.



#### Overall Risk Effect: This is the aggregate of the Risk Effects for all material risks associated with Unexpected Reversal. It's evaluated as a percentage of the total cumulative Output volume over the long-term storage period.

7 IPCC special report on CCS https://www.ipcc.ch/site/assets/uploads/2018/03/ srccs\_chapter5-1.pdf

#### **Reversal Risk Assessment Documentation**

- The CO2 Removal Supplier must create a comprehensive document assessing the risk of Unexpected Reversal, including the probability and impact of all relevant risks.
  - (i) This assessment should encompass all Unexpected Risks such as:
  - (ii) Environmental risks like climate conditions or impacts on local flora and fauna.
  - (iii) Risks originating from human activities, including design and operational errors.
  - (iv) Geopolitical risks, including potential impacts arising from the legal and political landscape.
  - (v) Any other risks identified in the Methodology, excluding Inherent Risks that are already quantified.
  - (vi) Other factors that could pose a substantial risk of CO2 Removal reversal.
- The assessment must calculate the Overall Risk Effect and provide detailed analysis for each Material Risk.
- The risk assessment should be numerical, with the Overall Risk Effect expressed as a percentage of the Output volume.

#### **Risk Estimation Methodology**

- The risk estimation process must be thorough and tailored to the specific activities of the CO2 Removal Supplier.
- The methods used for risk assessment must be scientifically valid and clearly outlined in the risk estimation document. This includes how individual Risk Impacts, Likelihoods, and Effects are estimated or calculated, along with references to any literature values used.
- If direct quantification of reversal risk is not feasible, the CO2 Removal Supplier may use estimates from external sources such as peer-reviewed literature or local guidelines.



#### **Risk Consideration in CO2 Removal Output**

• The CO2 Removal Supplier is required to conservatively incorporate the estimated risk into the quantified CO2 Removal Output, adjusting the Output volume by the Overall Risk Effect.

#### **Proactive Risk Mitigation and Management**

- The CO2 Removal Supplier must implement proactive risk mitigation, management, and reporting practices in line with the applicable Methodology.
- On-site monitoring should be conducted to ensure that CO2 removed during project operations remains securely stored for the Long-Term.

#### **Monitoring and Compensation for Reversals**

- In the event of identified material risks, the CO2 Removal Supplier commits to monitoring, reporting, and compensating for avoidable reversals for at least 40 years from the start of the CO2 Removal activity, unless otherwise directed by the relevant authority or Methodology.
  - (i) Should an Unexpected Reversal occur or be suspected, the CO2 Removal Supplier must:
  - (ii) Take immediate action to prevent further reversal.
  - (iii) Promptly inform the Issuing Body.
  - (iv) Calculate and quantify the volume of CO2 reversed.
- The CO2 Removal Supplier is initially liable for any Unexpected Reversal during the storage period. However, liability may be transferred to a third party, like the local government or other authority, where permitted by law.



#### **Responsibility and Mechanisms for Reversal Compensation**

- The CO2 Removal Supplier is responsible for compensating any Unexpected Reversal during the Long-Term storage period unless liability is assumed by a third party.
  - (i) Compensation for Unexpected Reversals can be executed through various methods, at the discretion of the Issuing Body:
  - (ii) Deducting the volume of Unexpected Reversals from the Output volume for the Monitoring Period in which the reversal occurred, or the subsequent Monitoring Period.
  - (iii) Withdrawing an equivalent volume of CRDs from the CO2 Removal Supplier's Account.
  - (iv) Requiring the CO2 Removal Supplier to procure CRDs of similar type or comparable permanence, with the Issuing Body withdrawing an equivalent volume of CRDs.
  - (v) Employing specific compensation mechanisms or contractual frameworks outlined in the Methodology, if available, to safeguard CO2 Removal against reversals.





# **APPENDIX A \_ ARTICLE 6 PROCEDURES FOR USE OF CRDS FOR NATIONALLY**

# DETERMINED CONTRIBUTIONS (NDCS), INTERNATIONAL MITIGATION (CORSIA), OR OTHER PURPOSES

# **Objective of this Appendix**

The purpose of this appendix is to outline the protocols and guidelines established by Trusted Carbon for the systematic tracking of mitigation results or carbon removal credits (CRDs) produced under the standard and registered within the Trusted Carbon Registry. These procedures are designed to foster collaboration among involved parties and prevent the double counting of CRDs between the Nationally Determined Contributions (NDCs) of the Paris Agreement and other international mitigation initiatives.

Consequently, countries with NDCs must sanction the utilization of carbon credits or mitigation outcomes for global trade. Additionally, these nations are required to report to the UNFCCC any

approved usage of carbon credits within their territories and make the corresponding accounting adjustments to their National GHG Inventory.

#### **Definitions :**

- **Host Country**: The nation where the CDR project is based and where mitigation outcomes (i.e., CRDs) are generated. Also known as the host party or transferring party.
- **Using Country**: The nation that utilizes the mitigation outcomes (i.e., CRDs) for fulfilling their NDC.
- **Participating Country**: Any country engaged in a collaborative approach under Article 6 of the Paris Agreement.

# Additional Requirements for CDR Projects under Article 6 of the Paris Agreement

#### Definition of Authorized Uses

Under Article 6 of the Paris Agreement, a host country has the discretion to permit the use of mitigation outcomes generated within its borders for international cooperative approaches. The objective of such authorization is to enable cooperation among participating countries for achieving effective mitigation results as part of their Nationally Determined Contributions (NDCs). This necessitates accounting for the mitigation outcomes in the National Inventory of the using country and preventing duplicate claims from other participating countries.



# Identification of Authorized Uses of Mitigation Outcomes

Mitigation outcomes are recognized as the nationally transferred mitigation outcomes" (ITMOs) and are uniquely marked in the Fusted Carbon Registry in accordance with IC-VCM standards. The Article 6 authorized uses and their respective labels include:

- (i) NDC Use:
- (ii) Purpose: For trade between countries to achieve their NDCs.
- (iii) Trusted Carbon Registry Label: ITMO-NDC
- (iv) International Mitigation Objectives:
- (v) Purpose: For meeting other international mitigation goals such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Compliance with relevant eligibility criteria is required.
- (vi) Other potential uses may be introduced in the future, for instance, allowing CRDs to comply with the International Maritime Organization (IMO) requirements.
- (vii) Trusted Carbon Registry Label: ITMO-IMP

#### Other Uses:

- (viii) Purpose: For private stakeholders aiming to reach net-zero targets or other compliance goals. This aligns with the use of the Voluntary Carbon Market by corporate or private entities.
- (ix) Trusted Carbon Registry Label: ITMO-OTH
- Trusted Carbon permits the application and authorization of multiple uses for their CRDs, allowing CRDs to have more than one authorized use.
- A host country may limit the volume and duration of these authorizations and retains the right to withdraw the authorization. This process will be refined and included in a future update of the General Rules.
- In situations where a country does not authorize the use of mitigation outcomes generated within its jurisdiction, those outcomes are exclusively used for National Inventory reporting in the host country.



# Procedure for Authorizing CRD Use under Article 6 of the Paris

# **Agreement Meeting Eligibility Criteria**

- CRDs are eligible for authorized uses under Article 6 if they represent carbon dioxide removals from vintages accepted by CORSIA and Article 6.
- For CRD authorization for other international mitigation objectives like CORSIA, evidence must be provided confirming the CRDs' eligibility for CORSIA or equivalent. This information is duly labeled in the Trusted Carbon Registry.
- The host country is required to issue a Letter of Authorization for the desired use, following the process detailed in subsequent sections.

# Letter of Authorization (LoA)

- The CO2 Removal Supplier must request the LoA from the host country"s designated authority.
  - (i) The LoA should include:
  - (ii) Date of authorization.
  - (iii) Competent authority: The designated authority by the host country to issue authorizations under Article 6 of the Paris Agreement.
  - (iv) Authority representative and contact details: Name, title, mailing address, phone number, and email address of the person executing the LOA on behalf of the Authority.
  - (v) Issuing program: Trusted Carbon as the crediting program listing the production facility or expected issuance.
  - (vi) Project identification: Production Facility Name and ID number as listed on the Trusted Carbon Registry.
  - (vii) Project Country: Host country or party.
  - (viii) Authorized uses: The host Party"s authorization of the mitigation outcomes in the form of CRDs for specified uses.
  - (ix) Specify the volume of CRDs and/or time-related limits for this authorization.
  - (x) Define the first transfer condition for Corresponding Adjustment.
  - (xi) Commitment of the host country to corresponding adjustments.
- The contents of the LoA will be part of the Trusted Carbon Registry and publicly available.



# **Authorization Process Description**

• The process diagram shows how the CO2 Removal Supplier requests an LoA from a Host Country, along with details of CRD retirements, accounting adjustments, and responsibilities of all parties involved.