

Cercarbono's Protocol for Voluntary Carbon Certification



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® CERCARBONO

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Acronyms and abbreviations

| ASOCARBONO CCMP CDM CEn CO2e DispG DOE EE FS | Colombian Association of Carbon Market Actors Climate Change Mitigation Programme or Project Clean Development Mechanism Coordinating Entity Carbon dioxide equivalent Displacement of a more-GHG-intensive output Designated Operational Entity Energy efficiency Fuel or feedstock switch |
|--|---|
| GDest | GHG destruction |
| GEA | GHG emissions avoidance |
| GHG | Greenhouse Gases |
| Grem | GHG removal |
| IAF | International Accreditation Forum |
| ID | Identification number or code |
| IETA | International Emissions Trading Association |
| IPCC | Intergovernmental Panel on Climate Change |
| ISO | International Organization for Standardization |
| LCE | Low Carbon Electricity |
| LPG | Liquefied Petroleum Gas |
| NDC | Nationally Determined Contributions |
| ONAC | National Accreditation Body (Colombia) |
| PAs | Climate Change Mitigation Programme Activities |
| PDD | Project Description Document |
| РоА | Programme of Activities for Climate Change Mitigation |
| RDF | Refuse Derived Fuels |
| RE | Renewable energy |
| REDD+ | Reduction of Emissions from Deforestation and Forest Degradation |
| _ | and other actions in this sector |
| SB | Stabilised biomass |
| SDGs | Sustainable Development Goals |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VVB | Validation and Verification Body |

Terms and definitions

Terms and definitions guiding the understanding of this protocol and the carbon market context have been deposited in the *Terms and Definitions of the Voluntary Certification Programme of Cercarbono*, available at <u>www.cercarbono.com</u>, section: Documentation.

- above ground biomass
- accreditation
- accreditation period
- activity data
- additionality
- agricultural activity
- agricultural land
- alternative fuel
- alternative raw material
- anaerobic digestion
- associated gas
- automobile fleet
- avoidance of greenhouse gas emissions
- baseline scenario
- below ground biomass
- biomass
- biomass waste
- calibration
- carbon buffer
- carbon credit
- carbon credit emission certificate
- carbon credit registry
- carbon dioxide equivalent
- carbon market
- carbon pool
- carbon stock
- Carboncer
- CCMP activity
- CCMP area
- CCMP developer
- CCMP duration
- CCMP holder
- CCMP legal representative
- CCMP lifespan
- CCMP operator

- CCMP ownership
- CCMP start date
- certification
- certification programme
- certifier user
- claim
- client
- climate change mitigation
- climate change mitigation initiative
- climate change mitigation programme
- climate change mitigation programme or project
- climate change mitigation project
- co-composting
- co-generation
- commitment
- complaint
- composting
- concrete
- confidential information
- conflict of interest
- contract
- criteria
- cumulative rounding error
- dead wood
- deforestation
- destruction of greenhouse gas
- developer user
- displacement of a more-GHG-intensive output
- displacement of greenhouse gas emissions
- double counting
- electric power generation
- electrical energy
- electronic signature

- eligibility
- emission factor
- energy crop
- energy efficiency
- evaluation
- evidence
- field
- forest activity
- forest degradation
- Forest Emissions Reference Level
- forest land
- fossil fuel
- fuel or feedstock switching
- fugitive emission
- gasification
- general account user
- global warming potential
- governance
- greenhouse gas
- greenhouse gas emissions
- greenhouse gas emissions source
- greenhouse gas information system
- greenhouse gas removal
- greenhouse gas storage
- grouped project
- holdership
- information and communication technologies
- instance
- interested party
- inventory
- land use
- landfill gas
- leakage
- level of assurance
- level of service
- liable party
- liquefied petroleum gas
- litter
- low carbon electricity

- marketer user
- material error or discrepancy
- materiality
- methodological tool
- methodology
- microbus
- monitoring
- monitoring report
- natural gas
- no carbon taxation
- non-compliance
- non-permanence
- offset mechanism
- overlap
- pooled carbon buffer
- potentially significant emission
- principle
- project cycle
- Project Description Document
- project limits
- project scenario
- proof
- property right
- raw material
- reasonable assurance
- reduction of greenhouse gas emissions
- reforestation
- regasification
- regulated carbon market
- removal factor
- renewable energy
- requirement
- restoration
- retroactivity period
- reversal
- rising gas
- rounding
 - sectoral scope
 - segment
 - soil organic carbon

- start date of crediting period
- sustainable development
- term of commitment
- thermal energy
- torch
- traditional knowledge
- tricycle
- uncertainty
- unit of energy
- useful life of areas, machinery, equipment, and technology
- validation
- Validation and Verification Body
- validation and verification body user

- validation or verification opinion
- validation report
- validation statement
- validator
- verification
- verification period
- verification report
- verification statement
- verifier
- voluntary carbon market
- voluntary certification protocol
- waste management
- woody biomass
- woody crop

Summary

This document presents the regulatory and technical framework governing Cercarbono's international voluntary carbon certification programme for certifying climate change mitigation initiatives with which different carbon market actors can participate, highlighting the most important principles that must be considered by this type of initiative and the results derived from them, as well as the different sectors in which they can operate.

The protocol presents a detailed guide aimed at holders and developers with the most essential elements that should be considered in the formulation and development of these initiatives (which give rise to environmental information), such as additionality, eligibility, and non-permanence criteria, as well as the bases that support the identification and selection of baseline and project scenarios, including emission sources and carbon pools. In addition, it presents some elements that strengthen the development of these initiatives, such as effective participation scenarios, the contribution to the Sustainable Development Goals and legal and documentary management.

The protocol also highlights the requirements that these initiatives must contemplate within the validation and verification processes, under which the validation and verification bodies intervene to evaluate and support the evidence presented and issue or not the respective validation and verification statements. Finally, it details the entire process that these initiatives must comply with to be registered and subsequently certify the emission and register the carbon credits achieved by the programme or project activities.



Foreword

Cercarbono is a standard with a voluntary carbon certification programme, whose mission is to facilitate and guarantee to individuals, companies, and the public the registration of Climate Change Mitigation Programmes or Projects (CCMPs), the certification of emissions and the registration of carbon credits obtained by these CCMPs.

This protocol has been developed by Cercarbono's technical team and endorsed by its Board of Directors and CEO.

| Developers | | | | | |
|----------------------------|--|--|--|--|--|
| Author | Cercarbono. | | | | |
| Carlos Trujillo | CEO. | | | | |
| Technical development team | | | | | |
| Álvaro Vallejo Rendón | Programme Director - Cercarbono. | | | | |
| Catalina Romero Vargas | Technical Director - Cercarbono. | | | | |
| Support and review | | | | | |
| Natalia Arango | Business director - Cercarbono. | | | | |
| Graphic design | | | | | |
| Santiago Arboleda | Graphic Designer - Latin Checkout - Mutek. | | | | |
| Editing and proofreading | | | | | |
| Claudia Valdés Pérez | Content Coordinator and Technical Reviewer - Cercarbono. | | | | |
| Natalia Forero Vargas | Content Assistant - Cercarbono. | | | | |

The protocol will be updated eventually to adapt it to international circumstances and the needs of national contexts.

A draft of this document (Version 4.0) was made available for consideration by society at large through a public consultation posted on the Cercarbono website and through invitations to individuals and public and private companies. This version of the protocol (4.1) incorporates the relevant changes suggested by the participants in the public consultation and other modifications that strengthen its understanding. It takes effect from the date of its publication.

Cercarbono is grateful for the participation of companies and independent individuals who expressed their opinions and recommendations, which helped to strengthen this document.

List of companies and individuals who participated in the consultation

- AGI AMBIENTAL S.A.S.
- ALLCOT
- AMERICAN TIRE RECICYCLING
- ANCE
- ATMOSPHERE ALTERNATIVE
- BIOGAS COLOMBIA
- CAIA INGENIERÍA S.A.S.
- CEMENTOS ARGOS S.A.
- CO2CERO
- CODE REDD
- CORPORACIÓN MASBOSQUES
- EBT SAS
- ECOPETROL
- EMAS PASTO BY VEOLIA
- EMPRESAS PÚBLICAS DE MEDELLÍN ESP
- ENEL
- ESTUDIOS Y PROYECTOS DE INVESTIGACIÓN S. A. DE C. V.
- FORESTY CONSULTING GROUP
- GOODCOMMERCE
- GREEN CROSS UNITED KINGDOM

- GREEN LOGIC SCHWEIZ AG
- GRUPO ARGOS
- ICONTEC
- MERE PLANTATIONS LTD
- MGM INNOVA
- REGENTE FORESTAL NICARAGUA
- RUBY CANYON ENVIRONMENTAL
- SECRETARÍA DE AMBIENTE DE BOGOTÁ
- SOUTH POLE
- TERMINAL DE PASTO
- TMM
- UCSS
- UNICARBO
- UNIVERSIDAD DE LA AMAZONIA
- UNIVERSIDAD DE LA SALLE
- UNIVERSIDAD LIBRE CALI
- UNIVERSIDAD NACIONAL DE COLOMBIA
- VERSA EXPERTOS EN CERTIFICACION SAS
- WALDRETTUNG

The following is an updated version of the document with new elements that allow both the participation of various economic sectors and different actors in the solution of the environmental problem of climate change.

1 Introduction

Cercarbono is a certification standard with an international voluntary carbon certification programme, which certifies Greenhouse Gas (GHG) removals and GHG emission reductions (see its classification in *Section 4*) from climate change mitigation initiatives carried out in different sectoral areas¹. This certification occurs primarily in the framework of the commitments that countries have made under the United Nations Framework Convention on Climate Change (UNFCCC) to address climate change by stabilising GHG concentrations at a level that prevents dangerous anthropogenic interference with the climate system, resulting in the Kyoto Protocol in 1997, the Paris Agreement in 2015 and its Article 6.

In line with this Article, specifically sub-point 6.2 which provides for market mechanisms aimed at voluntary cooperation between countries, the Cercarbono registry (EcoRegistry) has been designed to facilitate the exchange and integration of data with other registries and to contribute to the meta-registration of the international emissions market in a way that prevents double counting, also facilitating national accounting and enabling the international transfer of carbon credits between countries. In this regard, Cercarbono comprehensively and accurately identifies the characteristics of its credits based on 13 independent parameters that allow the attributes associated with each credit to be unequivocally identified.

For their part, countries are developing different regulatory or voluntary schemes to encourage compliance with their GHG emissions mitigation targets, in which the development of Climate Change Mitigation Programmes or Projects (CCMP) and the purchase of carbon credits from this type of initiative are encouraged.

This protocol describes the formalisation process and the requirements that CCMPs must meet to obtain the issuance of carbon credits through the international Cercarbono certification programme, which are unique, real, and measurable credits called "Carboncer".

In this way, CCMP holders, Carboncer buyers and sellers or any other entity participating in the international voluntary carbon market can count on the support of adequate, reliable, impartial, transparent, and relevant validation, verification, and certification processes.

The protocol, while providing guidelines for carrying out the validation and verification processes² focuses on defining the principles governing the registration of CCMPs and emission certification and the registration and conversion of carbon credits from the distinct types of CCMPs accepted by Cercarbono. It also describes in general terms the procedures and steps required for the Cercarbono voluntary carbon certification process, as well as some

¹ To develop climate change mitigation initiatives, the UNFCCC established 15 sectoral areas: 1. Energy; 2. Energy distribution; 3. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride; 12. Use of solvents; 13. Waste management and disposal; 14. Cercarbono covers 14 of these sectors, which are grouped and described in *Section 4*.

² The Validation and Verification Bodies (VVBs) authorised by Cercarbono are listed in *Section 7*.



specific methodological aspects. However, the specific methodological aspects of the distinct types of CCMPs are defined in the methodologies accepted or developed by Cercarbono.

The protocol is based on *ISO 14066:2011, ISO 14064-1:2018, ISO 14064-2:2019, ISO 14064-3:2019, ISO/IEC 17029:2019* and *ISO 14065:2020*³. Its structure is global and governed by the requirements of international voluntary carbon markets. It also considers and adopts the regulations established by a given country or offset mechanism according to the final use or destination of the carbon credits.

³ See *Section 12.2*.

2 Governance

2.1 Programme objectives

- Align the climate change mitigation objectives generated at the international level with the requirements of the Cercarbono programme, as a guarantee of legal compliance of the CCMPs.
- Consolidate a registration system that complies with all the rigorous requirements of the carbon market, generating security, and transparency of all CCMPs that are part of the programme.
- Promote the international dynamics of the carbon market, generating confidence through transparency in its actions and providing greater accessibility using technol-ogies that facilitate the management and access to information.
- Establish, advise, or approve guidelines or methodologies that allow the development of CCMPs, which can be adapted to the dynamics of the different economic sectors, complying with regulations and with the ultimate intention of promoting initiatives that generate real and proven GHG removals, and GHG emission reductions.
- Support and coordinate actions that contribute to the fulfilment of the Sustainable Development Goals (SDGs) by CCMPs.
- Register and certify CCMPs that meet the criteria set out in this protocol.
- Promote a friendly, efficient, and effective environment in which all actors involved in the project cycle interact.

2.2 Organisational structure

Figure 1 presents the organisational and governance structure of the Cercarbono voluntary carbon certification programme, along with the roles and responsibilities of each functional unit.





| Board of Directors Directorate General | Strategic management and decision-making. Suppor to the Directorate General. Resource management. Strategic direction of the company. Credits issuance. | | | | | |
|--|---|--|--|--|--|--|
| | Secretariat 1. Administrative support. 2. Invoicing. | | | | | |
| Programme Directorate | Update of programme requirements and guidelines. Adjustment of the programme to new regulations. Development of methodologies, methods and ancillary tools. | | | | | |
| Technical Directorate | Project review and certification. Supervision of consultants. Interaction with other stakeholders. | | | | | |
| Commercial Directorate | Stakeholders relations (customers, VVBs, market associations). Coordination of application to international schemes. | | | | | |
| Communication and Technology Directorate | Positioning of the standard through communication channels. Development and support to the registry platform - EcoRegistry | | | | | |
| Financial and Accounting Directorate | Financial management. Accounting. | | | | | |

- The **Board of Directors** is made up of elected or appointed persons. It is responsible for the management of the certification standard, its strategic orientation, and for approving proposed changes.
- The Directorate General executes the guidelines of the Board, manages the financial resources of the programme and is responsible for the issuance of carbon credits through signed certifications. It accompanies and oversees the performance of the following directorates:
 - **Programme Directorate:** responsible for establishing and updating the regulatory and technical frameworks required for the operation of Cercarbono.

- Technical Directorate: responsible for all stages of project certification and carbon credit conversion. It interacts with and supervises the assigned certifiers in the certification stages. Interacts with other actors such as VVBs, developers, owners, proponents, among others, to support and respond to specific needs. It also supports the programme management in the development of technical documents.
- Commercial Directorate: responsible for providing information and answering customer queries, establishing, or supporting contractual decisions between the customer and Cercarbono, providing feedback to the programme and technical directorates, together with which responses to customer needs are provided.
- Communication and Technology Directorate: in charge of positioning the standard through communication channels, developing, and updating EcoRegistry⁴ and the Cercarbono website.
- **Financial and Accounting Directorate:** in charge of the financial and accounting management necessary for the continuous operation of the standard.
- The Secretariat: provides administrative support and is responsible for invoicing.

2.3 Decision-making

Cercarbono follows a governance structure based on the dynamic interplay of the use of technologies, information, and constant and effective interaction of its human capital. This structure reduces risks, time, costs, and environmental impacts, while increasing control, security, and confidence in decision-making.

⁴ Cercarbono's registry platform: <u>www.ecoregistry.io/</u>.





Figure 2. Cercarbono's governance and decision-making model.

The establishment of new requirements, procedures or standard documents or the modification of existing ones may be triggered by any of the following situations:

- International obligations of the market or of any compensation scheme.
- Requests from different market players.
- Strategic decisions aligned with the objectives of the standard.

The programme management is responsible for carrying out and managing the development of all Cercarbono requirements, procedures, and documents. To this end, it relies on the technical support team and external consultants or reviewers when required. However, it is the Board of Directors that makes the decision to accept or reject such requirements, procedures, and documents.

Decisions of the board of directors must be supported by minutes of the meetings, which are available for external or internal audit processes of Cercarbono.

Public consultation of the documents produced by the programme is a fundamental element in decision-making.



3 Principles

The principles listed in this section set out the fundamental rules or concepts governing Cercarbono's international voluntary carbon certification programme. They are presented to facilitate the general interpretation of the requirements established under the programme.

The principles set out the basis for the justifications and explanations that the holder or developer of the programme or project⁵ must consider in the formulation and implementation of climate change mitigation initiatives. They should refer to the relevant principles and how they have been applied.

Validation and Verification Bodies (VVBs) during validation and verification processes should explicitly note compliance with the Cercarbono principles, referencing them in audit reports and reporting any conflicts or non-compliance with them to the CCMP.

3.1 Principles to be considered by CCMPs

Listed below are all the principles that should be considered by holders, CCMP developers and any other actor wishing to have their climate change mitigation initiatives certified by Cercarbono.

Accuracy

Measurements made at the CCMPs agree with or close to the actual values.

Accurateness

Efforts should be made to reduce the variability or dispersion (standard deviation) of the information obtained in the measurement of GHG emissions and removals, and CCMP GHG emission reductions by minimising the standard deviation between data. Efforts should also be made to ensure the accuracy of the information, raising its credibility, and strengthening the principles of accuracy and transparency.

Coherence

The results of GHG emission inventories in both the baseline and project scenarios must be comparable over time. Any changes in data, scope, calculation methods, or other factors that are relevant to the time series need to be clearly documented.

The calculations performed by the CCMP must be reproducible and technically validated, so that they can generate consistently coherent, and well-supported results.

Comparability

The results obtained by the CCMP activity should be comparable against the use of methodologies, guidelines, and protocols, among others, so that the estimation and calculation

⁵ Throughout this document these are also referred to as the CCMP holder or developer, for short.

of GHG emissions and removals and GHG emission reductions achieved by the CCMP can be independently assessed and comparable.

Comprehensiveness

All relevant information should be included to support decision-making, minimising uncertainty, increasing confidence in the data and results expected or achieved by the CCMP, as well as the procedures for reaching those results, to generate comprehensive, accurate, consistent, comparable, complete, and reproducible accounting and reporting of the GHG emissions and removals and GHG emission reductions considered.

Completeness

All significant GHG emission sources generated by the CCMP shall be included, as appropriate to the type of programme or project. Sources that do not exceed 5 % of the total emissions generated by the CCMP over its results accounting period are considered non-significant. All relevant information to support decision-making and the results expected or achieved by the CCMP, as well as the procedures to achieve these results, must also be included.

Consistency

The assumptions, values and procedures used by the CCMP for the calculation of GHG emissions and removals and GHG emission reductions shall be technically correct, consistent, comparable, and reproducible.

Conservatism

Conservative assumptions, methodologies, values, and procedures should be used to ensure that CCMP GHG emissions are not underestimated and that CCMP GHG removals and GHG emission reductions are not overestimated.

The data, assumptions, and procedures used for the calculations of GHG emissions and removals, and GHG emission reductions shall be technically correct, consistent, and reproducible. On the feasibility of using two values of the same parameter at the same scale, the more conservative one should be used.

Evidence

The evidence used by the CCMP must be sufficient and appropriate to ensure that rational, reliable, and reproducible methods are used to ensure that GHG removals and GHG emission reductions are genuine and correctly calculated.

Integrity

All relevant GHG emission sources and carbon pools should be included along with quantification of their GHG emissions and removals in the baseline scenario, as well as GHG emissions and removals and GHG emission reductions generated in the project scenario, using data and parameters from recognised sources, as well as technically supported modelling.



No net harm

The programme or project activities of the CCMP must not generate a net damage on the surrounding areas or communities, in social, environmental, or legal aspects, due to the climate change mitigation benefits.

Relevance

The CCMP must be appropriate and relevant to the sector under which it operates.

Reliability

Data and parameters from recognised sources should be included, as well as technically substantiated models that support the GHG removals and GHG emission reductions calculated, accounted for, or monitored by the CCMP. The data, variables, and parameters must be representative of the reality or context in which the CCMP is developed, so direct measurement methods that integrate statistical representativeness are encouraged.

Recognised sources are those included in the Good Practice Guidance of the Intergovernmental Panel on Climate Change (IPCC) in its most updated version, or in previous versions if their use is technically justified, as well as the methodological tools of the Clean Development Mechanism (CDM). Academic articles published in indexed journals are also valid.

Transparency

Genuine, clear, honest, justified, justified, appropriate, understandable, truthful, timely, transparent, robust, sufficient, and auditable information related to the CCMP's procedures, assumptions, processes, and intrinsic limitations should be used, so that the reliability and credibility of its GHG removal and GHG emission reduction results can be guaranteed. All references and sources of information must be explicitly mentioned and made available to third parties, ensuring that it is public and permanent, so that any calculations can be reconstructed and generate results equal to those obtained by the CCMP.

3.2 Principles considered in carbon credits

Cercarbono presents below the principles that additionally and complementarily the CCMP should consider, in the validation, verification, and certification processes. Stakeholders involved in these processes should review and support their compliance.

Carbon credits generated by GHG removal, or GHG emission reduction programme or project activities should be:

Actual

All GHG removals and GHG emission reductions generated by the CCMP must be demonstrated to have occurred.

Additional

Carbon credits generated by CCMPs must demonstrate their additionality as a requirement to participate in the carbon market. For this, CCMPs should implement *Cercarbono's Tool*



to Demonstrate Additionality of Climate Change Mitigation Initiatives, available at <u>www.cercarbono.com</u>, section: Documentation.

Independently verified

All GHG removals and GHG emission reductions generated by the CCMP must be verified to a reasonable level of assurance, by an independent verification body, authorised by Cercarbono and accredited in the sector in which it is being undertaken. See *Section 7*.

Measurable

All GHG emissions and removals and GHG emission reductions generated by the CCMP must be quantified, using recognised measurement tools (including adjustments for uncertainty and leakage), considering and against a credible baseline scenario.

The CCMPs have at their disposal different technical documents developed by Cercarbono, including its methodologies and normative guidelines, available at <u>www.cercarbono.com</u>.

No double counting

A tonne of carbon dioxide equivalent (tCO₂e) resulting from GHG removals or GHG emission reductions generated by the CCMP may not:

- Be counted more than once to demonstrate compliance with the same GHG mitigation target.
- Be counted to demonstrate compliance with more than one GHG mitigation target.
- Used more than once to obtain remuneration, benefits, or incentive.
- Be verified, certified, or accredited through the implementation of more than one GHG mitigation initiative.

Complementary elements to this principle are provided in the *Procedures of Cercarbono's Certification Programme* document, available at <u>www.cercarbono.com</u>, section: Documentation.

Permanent

Carbon credits generated by CCMPs must be permanent over a 100-year horizon.

GHG removal programmes or projects that present a risk of reversibility of GHG removals to the atmosphere should consider *Cercarbono's Tool to Estimate Carbon Buffer in Initia-tives to Mitigate Climate Change in the Land Use Sector*, which is available at <u>www.cercarbono.com</u>, section: Documentation.



Unique

Each GHG removal and each GHG emission reduction is associated with a single carbon credit, corresponding to one tonne of carbon dioxide equivalent (tCO₂e) as a unit. Carbon credits are registered and retired through the EcoRegistry platform.

3.3 Principles to be considered by VVBs

The following principles shall be considered by accredited VVBs, in accordance with *ISO/IEC 17029:2019 and ISO 14065:2020*, thereby supporting that the validation and verification statement complies with the requirements specified in this protocol.

Competence

Staff have the knowledge, skills, experience, training, supporting infrastructure, and capacity to effectively perform the activities in the validation and verification processes.

Confidentiality

Confidential information obtained or created during validation and verification activities is protected and not improperly disclosed.

Impartiality

Decisions made by the VVB are based on objective evidence obtained through the validation and verification processes and are not influenced by other interests or parties. Threats to impartiality may include:

- **Self-interest:** a threat that comes from a person or entity acting out of self-interest. An example of a threat to impartiality in validation and verification processes is financial self-interest.
- **Self-review:** a threat that arises when a person or entity reviews work done by them-selves.
- **Familiarity (or trust):** a threat that arises when a person or entity is overly familiar or trusting of another person rather than seeking evidence to support the validation and verification processes.
- Intimidation: a threat that arises from a person or entity having the perception of being overtly or covertly coerced, such as the threat of being replaced or reporting a supervisor.

Openness

The VVB must provide public access to or disclose information on its validation and verification process in a timely manner.

Professional scepticism

Attitude of personnel involved in validation and verification processes, based on recognition of potential circumstances that may cause a material error in a validation and verification



statement. Therefore, any assertions made in the PDD or monitoring report must be supported by complete and reliable evidence.

Responsiveness to complaints

Parties involved in the validation and verification processes may submit complaints. These are handled and resolved appropriately. Responsiveness to complaints is necessary to demonstrate credibility to all parties about the integrity of the validation and verification results.

Responsibility

The client, and not the VVB, has the responsibility for the declared information, as well as for its conformity with the specified and applicable requirements. The VVB has the responsibility that a validation and verification statement is based on objective, sufficient and appropriate evidence.

In addition to complying with the above principles, the VVB must have a documented description of its legal status including, if applicable, the names of its owners and, where applicable, the names of its controlling persons. It should also have an organisational structure, management, and operational control.

Risk-based approach

The VVB must consider the risks associated with providing competent, consistent, and impartial services in the validation and verification processes. Risks may include:

- The objectives of the validation and verification processes and the requirements of the certification programme.
- Actual and perceived competence, consistency, and impartiality.
- Legal, regulatory, and liability issues.
- The client's organisation, where the validation and verification processes are carried out, and its system management, operating environment, geographical location, among others.
- The susceptibility of any parameter included in the claim to generate a material error, even if there is a control system in place.
- The level of assurance achieved, and the corresponding collection of evidence used in the validation and verification processes must be reasonable (≥ 95 %) in accordance with *ISOs 14064-2, 14064:3* and *14065:2020*.
- Stakeholder perception.
- Misleading claims or misuse of trademarks by the customer.
- Control of risks and opportunities for improvement.

3.4 Principles to be considered in validation and verification processes

The following are the principles to be considered by VVBs in validation and verification processes in accordance with *ISO 14065:2020* and *ISO/IEC 17029:2019* Standards.



Documentation

The validation and verification processes are documented and establish the basis for the conclusion and decision on the conformity of the validation and verification statement with the specified requirements.

Evidence-based approach to decision making

Validation and verification processes must implement methods to reach reliable and reproducible conclusions based on objective, sufficient, and appropriate evidence. The validation and verification statement are based on evidence gathered through an objective validation and verification process.

Fair presentation

During validation and verification processes, findings, conclusions, and statements, including significant obstacles encountered during these processes, as well as unresolved divergent opinions between the VVB and the client shall be truthfully and accurately presented.

As set out in *ISO/IEC 17029:2019*, VVBs shall have a consistent validation and verification programme to carry out validation and verification processes considering the following elements:

- The scope of validation and verification.
- The specific competence criteria for the validation and verification team, and body.
- The validation and verification process.
- The evidence gathering activities in validation and verification.
- The validation and verification reports.

The following steps must be also completed in the validation and verification process:

- Establish a pre-commitment.
- Establish a final commitment.
- Plan the validation and verification process⁶.
- Execute the validation and verification process.
- Review documents and evidence.
- Decide and issue a validation and verification statement.
- If appropriate, generate uncovered facts after the issuance of the validation and verification statement.
- Process appeals.
- Handle complaints and grievances.
- Generate records.

⁶ A strategic analysis is necessary to understand the nature and complexity of the PDD and to determine the scope of validation and verification activities based on the type of engagement, as well as to assess the risk of non-compliance with the criteria. The level of assurance and materiality is included in the plan.

4 Scope

This protocol has been defined for the registration of CCMPs and for the certification of the emission and registration of carbon credits -Carboncer- from CCMPs through Cercarbono's Protocol for Voluntary Carbon Certification.

Activities allowed under the Cercarbono programme can be submitted at programme or project level and implemented in different countries according to their domestic regulations in line with the international voluntary carbon market and in compliance with the provisions of this protocol. According to the amount of GHGs removed or GHG emissions reduced by a CCMP during its crediting period, they can be considered in one of the two types of scale covered by Cercarbono:

CCMP Type 1: those that remove or reduce 10,000 or more tonnes of CO₂e, on average per year.

CCMP Type 2: those that remove or reduce less than 10,000 tonnes of CO₂e, on average per year.

Once the CCMP has been registered and has passed the validation stage it cannot change the type of scale.

CCMPs, according to their type and conditions, can use approved methodologies. The Cercarbono methodologies do not make this differentiation, but CCMPs must consider the applicability requirements of the selected methodology(ies).

4.1 CCMP activities

According to the sector, CCMPs can consider the following activities:

- GHG removal: activity that, through plant photosynthesis, removes CO₂ from the atmosphere, and stores it in the form of biomass in different carbon pools.
- Reduction⁷ of GHG emissions, which includes:
 - Displacement of a more-GHG-intensive output (DispG): adoption of technologies or processes that displace more GHG-intensive production. Includes:
 - Renewable energy (RE): generation or use of energy by hydro, photovoltaic, wind, geothermal, ocean, and biomass renewable sources. May include cogeneration actions (electricity, heat, water, steam, or gas).

⁷ Regulatory frameworks often highlight only GHG emission reduction activity without delving into the differences within this climate change mitigation outcome. Therefore, actions such as GHG emissions displacement (including renewable energy and low carbon electricity), energy efficiency, fuel or feedstock switching efficiency, avoidance, and destruction of GHG are considered under the GHG emissions reduction activity. Cercarbono, under this protocol, sets out the differences that exist between these programme or project actions or activities, which are highlighted (where applicable) in the issuance of carbon credits earned under a GHG emission reduction.

- **Low carbon electricity (LCE):** power generation based on lower GHG emitting fuels such as natural gas.
- Energy efficiency (EE) (including technology change): generation or use of energy by implementing or renewing processes, machinery, tools, or technologies that require less energy demand to achieve the same performance or perform the same function more efficiently. It may include cogeneration actions.
- Fuel or feedstock switching (FS): implementation of fuel or feedstock switching with lower GHG emissions. Includes electric, hydrogen, hybrid, natural gas, Liquefied Petroleum Gas (LPG), biodiesel or bioethanol sources or supply.
- **GHG emissions avoidance (GEA)**: adoption of technologies or processes that reduce, control, or avoid GHG emissions to the atmosphere.
- GHG destruction (GDest): adoption of technologies or processes for this purpose. CCMPs often include the capture or recovery of GHGs. Destruction is achieved by combustion or catalytic conversion of GHGs.

The CCMPs may consider more than one programme or project activity simultaneously if they are justified and supported by a methodology.

4.2 Sectoral areas

In line with the international carbon market and as adopted by the IPCC, the sectors covered by Cercarbono's voluntary certification programme for CCMP implementation are:

4.2.1 Energy sector

• Energy generation:

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching, avoidance and displacement (RE and LCE) of GHG emissions) GHG emissions by GHG sources in power plants, power grids or facilities that provide energy.

• Energy demand and distribution:

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching and displacement (RE) of GHG emissions) GHG emissions by GHG sources in power plants, energy networks or facilities that supply or demand energy.

4.2.2 Industry sector

• Manufacturing industry:

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching, avoidance, destruction, and displacement (RE and LCE) of GHG emissions) GHG emissions by GHG sources in manufacturing facilities or companies.

• Chemical industry:

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching, avoidance, destruction, and displacement (RE and LCE) of GHG emissions) GHG emissions by GHG sources at chemical facilities or companies.

4.2.3 Construction sector

Corresponds to CCMP Type 2 activities that reduce (including fuel or feedstock switching and displacement (LCE) of GHG emissions) GHG emissions from GHG sources in infrastructure construction.

4.2.4 Transport sector

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching and displacement (RE and LCE) of GHG emissions) GHG emissions by GHG sources in companies owning or using automotive (public and private), aviation and maritime fleets.

4.2.5 Mining and mineral production

Corresponds to CCMP Type 1 and 2 activities that reduce (including fuel or feedstock switching, destruction and displacement (RE) of GHG emissions) GHG emissions by GHG sources in mineral production plants or processes.

4.2.6 Metal production sector

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, fuel or feedstock switching, avoidance and displacement (RE) of GHG emissions) GHG emissions by GHG sources in metal production plants or processes.

4.2.7 Fugitive emissions sector

• Fugitive emissions from fuels:

Corresponds to CCMP Type 1 and 2 activities (mainly) that reduce (including avoidance and destruction) GHG emissions from fugitive emissions of fuels.

• Fugitive fuel emissions from the production and consumption of halocarbons and sulphur hexafluoride (SF6):

Corresponds to CCMP Type 1 and 2 activities that reduce (including GHG avoidance and destruction) GHG emissions from the production and consumption of halocarbons and SF6.

4.2.8 Waste management sector

Corresponds to CCMP Type 1 and 2 activities that reduce (including energy efficiency, avoidance, destruction, and displacement (RE) of GHG emissions) GHG emissions by GHG sources in solid and liquid waste management plants.



4.2.9 Land use sector

• Forest land:

Corresponds to CCMP Type 1 and 2 activities that remove GHGs or reduce (GHG emissions avoidance) GHG emissions by sources in forested areas. Projects focused on reforestation, forest restoration or REDD+ may be developed.

• Agricultural land:

Corresponds to CCMP Type 1 and 2 activities that remove GHGs or reduce (including fuel or feedstock switching, avoidance of GHG emissions) GHG emissions by sources in agricultural areas.

| | | CCMP activities | | | | | | |
|------------------|--------------------|---------------------------------|------------|---------------|----------|-----------|---------|--------------|
| Sectoral scope | | GHG re- GHG emission reductions | | | | | | |
| | | movals | Energy ef- | Fuel or feed- | GHG | GHG de- | Displac | ement of a |
| | | | ficiency | stock switch- | emission | struction | more-GH | IG-intensive |
| | | | | ing | avoid- | | 0 | utput |
| | | | | | ance | | Renewa- | Low carbon |
| | | | | | | | ble en- | electricity |
| | | | | | | | ergy | |
| | Generation | - | Х | Х | Х | - | Х | Х |
| Energy | Distribution | - | Х | Х | - | - | Х | - |
| | Demand | - | Х | Х | - | - | Х | - |
| Industry | Manufacturing | - | Х | Х | Х | Х | Х | Х |
| muustiy | Chemical | - | Х | Х | Х | Х | Х | Х |
| Construct | tion | - | - | Х | - | - | - | Х |
| Transport | t | - | Х | Х | - | - | Х | Х |
| Mining ar | nd mineral produc- | _ | _ | х | х | х | х | _ |
| tion | | | | ~ | ~ | ~ | ~ | |
| Metal Pro | oduction | - | Х | Х | Х | - | Х | - |
| | Fuels | - | - | - | Х | Х | - | - |
| Fugitive | Halocarbon and | | | | | | | |
| emis- | sulphur hexafluo- | _ | | _ | x | х | _ | _ |
| sions | ride production | - | - | - | ^ | ^ | - | - |
| | and consumption | | | | | | | |
| Waste management | | - | Х | - | Х | Х | Х | - |
| Land use | Forestry | Х | - | - | Х | - | - | - |
| Land use | Agricultural | Х | - | Х | Х | Х | - | - |

Table 1. Sectoral areas and CCMP activities covered by this version of the protocol.

4.3 Use of the protocol and certification programme documents

Cercarbono's voluntary carbon certification programme is aligned to the international requirements of the voluntary carbon market, while respecting and adopting requirements, regulations or decisions established in national contexts, with the final use or destination of the carbon credits determining the framework for action.



This protocol as well as the technical and informative documents that are part of the Cercarbono voluntary carbon certification programme have been elaborated in English and Spanish. CCMPs can submit their documentation in either language; however, CCMPs are encouraged to submit the PDD in English to facilitate the trading of carbon credits in the international market. If not, it is mandatory to submit a summary of the PDD in English, using the template provided by Cercarbono for this purpose.

It is mandatory to provide, as a minimum, the information requested in the Cercarbono templates (PDD, monitoring report, validation or verification report, validation, or verification statement, among others), but it is not mandatory to use them.



5 Methodological issues

This section describes how methodologies for the quantification of GHG removals or GHG emission reductions and their deviations are developed and accepted. For this purpose, fees have been established for anyone interested in the development, evaluation or review of such methodologies and their deviations. These fees may be requested from info@cercarbono.com.

5.1 Approved methodologies

Cercarbono has developed its own methodologies in various sectors for CCMP implementation. Apart from its methodologies, Cercarbono allows the use of CDM methodologies that are in line with its policy framework and principles. The list of approved methodologies is available at <u>www.cercarbono.com</u>, section: Documentation.

5.2 Approval of new methodologies

If a particular CCMP activity requires substantially different methodological approaches than those existing in Cercarbono's approved methodologies, the programme may develop a new methodology or an independent third party may propose an existing methodology under another standard or programme or propose a new methodology, following the procedures described for that purpose in the *Procedures of Cercarbono's Certification Programme* document, available at <u>www.cercarbono.com</u>, section: Documentation.

If the methodology is approved, it will be included in the list of approved CCMP methodologies and will be available for use by any party interested in developing CCMPs that are adapted to that methodology.

5.3 Review of approved methodologies

If specific aspects of an approved methodology are not applicable to a CCMP, but the project activity is broadly like that to which the approved methodology is applicable, the project proponent may submit to Cercarbono a proposal for revision of the approved methodology, following the procedures described in the *Procedures of Cercarbono's Certification Programme* document, available at <u>www.cercarbono.com</u>, section: Documentation.

If the revision is approved, it will become the latest version of the methodology and the previous version will become obsolete.

5.4 Request for methodological deviations

For cases where an approved methodology is applicable to a project activity, but minor changes in its application are required due to project-specific circumstances not foreseen in the methodology, a deviation from an approved methodology can be requested to the VVB, who decides, based on the programme rationale, whether its "proceeds" or "does not proceed". In the case of "proceed", the detailed assessment and validation of the deviation is done by the VVB considering the methodological adjustments of the case.



If such a deviation was not requested beforehand and the VVB determines in the verification that the CCMP has deviated from the provisions of the methodology or the monitoring plan, it shall request the CCMP to describe the deviation and alternative means of compliance by means of an updated monitoring report and assess whether the deviation is likely to lead to a reduction in the accuracy of the calculation of emission reductions. If the VVB considers that the deviation leads to such reduction, it shall request the CCMP to apply conservative assumptions or discount factors to the calculations to ensure that emission reductions are not overestimated due to the deviation.

If the deviation potentially spans more than one verification period, a deviation request should be applied for the entire period covered by the deviation, indicating the date until when the deviation will be applied. Depending on the magnitude of the proposed deviation, the VVB may evaluate and approve or reject such a request or report the case to Cercarbono for a detailed assessment of the deviation.

Methodological deviations should not be used to make up for intentional mistakes, deficiencies, or improvisations in the planned implementation of CCMPs.

5.5 Request for methodological clarification

If an approved methodology is unclear or ambiguous in its methodological procedures, a written request for clarification can be submitted and must also be answered in writing by the technical team of Cercarbono.



6 CCMPs requirements

This section describes the different requirements and technical characteristics for CCMPs wishing to be part of Cercarbono's international voluntary carbon certification programme to be accepted, based on the *ISO 14064-2:2019* Standard.

Compliance with each of these requirements is reviewed by Cercarbono, making sure that they comply with the validation and verification processes (independent or joint⁸) by the authorised VVBs (see *Sections 7* and *8*), thus ensuring the traceability of each CCMP. CCMP should identify, consider, and use relevant and available criteria or procedures for each stage of the project cycle described in *Section 8*.

6.1 Components of the CCMP

The CCMP must prepare a PDD in which the following elements are presented:

- CCMP title and objective(s).
- Information on the holder and other CCMP participants, where applicable, detailing their roles and responsibilities, including contact and stakeholder information.
- Sectoral scope of the programme or project and type of CCMP.
- Description of how the CCMP will achieve GHG removals or GHG emission reductions, including the specific types of GHGs it addresses.
- Justification why the proposed CCMP is considered eligible⁹ and additional.
- Location and boundaries of the CCMP, including organisational, geographical, and physical location information, enabling its unique identification and delimitation. This information should be reported in geo-referenced form (shp or kml), in multi-level graphics (map with location in country/national subdivision/municipality and CCMP) and in narrative form (legal description of the boundaries of the CCMP areas) in a way that facilitates the review of its location and possible overlaps with other CCMPs.
- Detailed description and support of the ownership or right of use of the area, facility, or process. The right of use can be demonstrated, inter alia, by means of lease or long-term mandate contracts or peaceful possession, among others, which are free from legal defects.
- Characteristics and conditions prior to the start of the CCMP of the area, facility, or process.
- CCMP technologies, products, and services and the expected level of activity.
- Description and justification of the methodology selected and applied for the quantification of GHG removal or GHG emission reduction, as appropriate to the type of CCMP.
- Identification of the CCMP GHG emission sources and carbon pools in the baseline and project scenarios, estimated or calculated in tCO₂e.

⁸ This type of audit occurs when a first validation and verification event is performed or when modifications to the PDD need to be validated in verification events other than the first one.

⁹ From the point of view of participation in the Cercarbono programme.

- GHG emissions or removals in the baseline scenario, estimated or calculated in tCO₂e.
- Total, GHG removal or total GHG emission reduction that can occur in the project scenario, estimated, or calculated in tCO₂e.
- Net GHG removal or net GHG emission reduction that may occur in the project scenario, estimated, or calculated in tCO₂e.
- Monitoring plan. The monitoring plan is designed following the approved methodology that was selected for the development of the CCMP.
- Leakage, if applicable and if significant, calculated in tCO₂e.
- Identification of risks that could affect GHG removal or GHG emission reductions, as well as measures to manage these risks.
- Authorisations and documents required by current legislation (including environmental legislation and their respective environmental impact assessments in line with the No Net Harm principle) governing the development and operation of the CCMP, depending on the type of programme or project.
- Relevant results of stakeholder consultations and mechanisms for ongoing communication, if applicable. Include definition of when and how affected or involved persons should be consulted.
- Report on the contribution of the CCMPP to the achievement of the SDGs.
- Timeline or actual dates and justification for the following:
 - Duration or lifetime of the CCMP (in years): indicating the start date (day.month.year) of the activities and the end date of the programme or project (day.month.year).
 - The accreditation period of the CCMP.
 - The CCMP monitoring period, its frequency and reporting, including relevant CCMP activities at each step of the project cycle, as appropriate.
 - The frequency of verification events, including the periods in which they are intended or performed.

Cercarbono has **Project Description Document** templates, designed according to the sector and mitigation activity on which the CCMP is focused, available at <u>www.cercarbono.com</u>, section: Documentation.

6.2 CCMP start date

Climate change mitigation activities that can demonstrate additionality through the application of Cercarbono's Tool to Demonstrate Additionality of Climate Change Mitigation Initiatives and that have started their operation as of 01 January 2016 may be registered in Cercarbono for credit generation, regardless of the provisions of the selected methodology(ies), as long as they complete their registry in the programme by 31 July 2023, unless the regulatory framework under which the credits are used provides for a shorter retroactivity period. This condition does not apply in the case of initiatives that have been duly registered in other certification programmes and migrate to Cercarbono, in which case the initiative may have been under implementation for longer periods of time, provided that no more than five years have passed since the time of its last verification. More information


on this can be found in *Section 10*. The start of operation is understood as the moment when the activity starts to generate climate change mitigation results.

From 01 August 2023, Cercarbono will allow a retroactivity of five years from the time of initial validation for both the start of the mitigation activity and the generation of credits.

6.3 Methodology description

A CCMP must select one methodology (if it is a grouped project or includes activities not covered by a single methodology, but complementary to its activity, it may select more than one) to demonstrate its mitigation results, which must be adopted according to the type of CCMP to which it corresponds and to the regulation under which it is framed.

The protocol allows the use of methodologies and their components, as well as complementary methods, modules, or tools (always implementing their latest version) developed in the framework of *ISO 14064-2:2019*. Methodologies include those:

- Approved by the United Nations Framework Convention on Climate Change (UNFCCC) including under the CDM.
- Recognised in national contexts according to the type of CCMP, which are aligned with their current legal framework and if their use is free or authorised by the authors. For acceptance, a Cercarbono team evaluates the soundness of the methodology and its alignment with the principles and procedures of its certification programme.
- Additional ones developed by stakeholders¹⁰ (developers, holders, or independent companies) under public consultation processes supported by Cercarbono (see *Section 6.10.2*).
- Generated by Cercarbono, publicly consulted, and reviewed by a third party (see *Section 6.10.2*).

Cercarbono website lists the regulations, procedures, tools, and methodologies accepted under this protocol. Where CDM-approved methodologies are used, the use or non-use of complementary modules or tools must be justified.

Any methodology, method, module, or tool that is not on the list but meets the above characteristics can be submitted to the Cercarbono certification programme for consideration by sending a request to <u>info@cercarbono.com</u>.

Methodologies or tools from the CDM can be used without permission but must be properly referenced in the documents (name, version, year, etc.), and the current version must be implemented.

Methodologies or tools from standards or certification programmes other than CDM can be used if the CCMP considers their copyrights or license (when applicable). To avoid conflicts with other certification schemes, it is encouraged to use Cercarbono's own methodologies

¹⁰ For this purpose, the guidelines set out in the document *Procedures of Cercarbono's Certification Programme*, available at <u>www.cercarbono.com</u>, section: Documentation, should be followed.

or tools developed by Cercarbono, which should also be duly referenced in the CCMP documents.

Methodologies or any other new tools from stakeholders involved in the carbon market context can be made publicly available on the Cercarbono website, subject to prior authorisation and support from the certification scheme (see *Section 6.10.2*).

CCMPs must establish and justify the applicability conditions of the selected methodology or methodological tools used to:

- Establish eligibility, in the case of a CCMP in the land use sector.
- Determine baseline and project scenarios.
- Estimate GHG emissions or removals in the baseline scenario.
- Quantify net GHG emissions and removals or net GHG emission reductions in the project scenario and leakage, if applicable.
- Identify risks of non-permanence, where appropriate.
- CCMP monitoring.

Methodologies usually integrate the following points, however, the most important components that must be fulfilled under the framework of this protocol are detailed here:

6.3.1 Additionality

The additionality criteria established by the Cercarbono certification programme are detailed in *Cercarbono's Tool to Demonstrate Additionality of Climate Change Mitigation Initiatives*, available at <u>www.cercarbono.com</u>, section: Documentation.

This criterion will be reviewed by Cercarbono following certification events throughout the CCMP's accreditation period, as detailed in *Procedures of Cercarbono's Certification Programme*.

The methodologies used by the CCMPs must be aligned with the additionality criteria set out here.

6.3.2 Eligibility

For land use CCMPs the eligibility requirements are defined according to the selected methodology that has been accepted or developed by Cercarbono.

This section does not apply for CCMP in sectors other than land use.

6.3.3 Non-permanence

Given that risks of reversal of GHG removal or reduction¹¹ (avoidance) of GHG emissions may occur in the land use sector, the CCMP shall use the *Cercarbono's Tool to Estimate*

¹¹ Non-permanence does not apply to land use CCMPs where their programme or project activity is focused on the reduction (destruction) of GHG emissions.



Carbon Buffer in Initiatives to Mitigate Climate Change in the Land Use Sector, available at <u>www.cercarbono.com</u>, section: Documentation.

This section does not apply for CCMP in sectors other than land use.

The **Procedures of Cercarbono's Certification Programme** document details the management of the programme's buffer and the mechanisms for review, control, monitoring, and response to possible reversals that may occur in this type of projects.

6.3.4 Establishment of the baseline scenario

The CCMP must determine the baseline scenario according to the selected methodology, considering all alternatives, including the proposed CCMP as one of the possible scenarios. If the CCMP is equal to the baseline scenario, the CCMP is not valid because it is not additional.

The CCMP must apply criteria and procedures to identify and justify the baseline scenario, considering the following:

- Description of the CCMP, including all identified GHG emission sources and carbon pools.
- Types, activities, and technologies of existing and alternative programmes or projects that provide an equivalent type and level of activity of products or services for the CCMP.
- Data availability, reliability, and limitations.
- Other relevant information on present or future conditions, such as regulations or laws under which it is governed, technical, economic, socio-cultural, environmental, geo-graphic, site-specific, and temporal assumptions or projections.

The CCMP should demonstrate functional equivalence in the type and level of activity of the products or services provided between the baseline and project scenarios and should explain, as appropriate, any significant differences between the two.

The justification of the baseline scenario should consider its future behaviour (GHG emission sources and carbon pools) to comply with the principle of conservatism.

The CCMP must select and justify assumptions, values and procedures that ensure that GHG removals or GHG emission reductions are not underestimated or overestimated, respectively, in the baseline scenario.

6.3.5 Establishment of the project scenario

The CCMP must provide a description of its activity and the means used to achieve GHG removals or GHG emission reductions consistent with the selected methodology.

A CCMP developed in the land use sector should include:

- A description of forestry activities (where applicable) including forest planning, species type and justification for use, production of plant material, establishment and maintenance of plantations and harvesting.

- A description of agricultural activities (where applicable) including type of woody species implemented and justification for their use, establishment and maintenance of crops and harvesting.
- Information (where applicable) on any conservation, management, or planting activities to be undertaken in the CCMP area, including a description of how various organisations, communities and other entities are involved.
- Information (where applicable) on innovative processes or technologies to be implemented in the CCMP area, including a description of how they generate GHG removals other than from carbon pools or GHG emission reductions from the implementation of modern technologies.

For CCMPs other than in the land use sector, this should include:

- A description of the main manufacturing or production technologies, systems and equipment involved, including information on the age and average lifetime of the equipment according to manufacturer's specifications and industry standards, as well as existing and expected capacities, load factors and efficiencies.
- The types and levels of services (typically in terms of mass or energy flows) provided by the systems and equipment being modified or installed and their relationship, if any, to other manufacturing or production equipment and systems outside the CCMP limit. Describe how this would have been done in the baseline scenario.
- If applicable, a list of the facilities, systems, and equipment in operation under the existing scenario prior to implementation of the CCMP.

The CCMP must describe the selection or establishment of criteria, procedures, or methodologies for quantifying GHG emissions and removals or GHG emission reductions during the implementation and operation of the CCMP. It should also detail the criteria and procedures for quantifying them and demonstrate that they are additional to what would occur compared to the established baseline scenario.

The possible baseline and project scenarios should cover the same period.

6.3.6 Identification of GHG emission sources

The following are the GHG emission sources (*Table 2*) that can be considered in a CCMP in the baseline and project scenarios, including leakage, according to their activity type.

| Sector/Activity of the CCMP | Baseline scenario | | | Project scenario | | | Leakage | | |
|------------------------------------|-------------------|-----------------|------------------|------------------|-----------------|------------------|-----------------|-----------------|------------------|
| | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O |
| Energy | | | | | | | | | |
| Energy efficiency (EE) | Yes | Dp | No | Yes | Dp | Dp | Dp | Dp | No |
| Fuel or feedstock switch (FS) | Yes | Dp | No | Yes | Dp | Dp | Dp | Dp | No |
| GHG emission avoidance (GEA) | Yes | No | No | Dp | No | No | No | No | No |
| Displacement of a more-GHG- | Yes | Dp | No | Dp | Dp | No | Dp | No | No |
| intensive output (DispG - RE, LCE) | | | | | | | | | |

Table 2. GHG emission sources by CCMP type.

| Sector/Activity of the CCMP | Baseline scenario | | | Project scenario | | | Leakage | | |
|------------------------------------|-------------------|-----------------|------------------|------------------|-----------------|------------------|-----------------|-----------------|------------------|
| | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O |
| Industry | | | | | | | | | |
| Energy efficiency (EE) | Yes | No | No | Yes | No | No | Dp | No | No |
| Fuel or feedstock switch (FS) | Yes | No | No | Yes | Dp | Dp | Dp | No | No |
| GHG emission avoidance (GEA) | Yes | Dp | Dp | Dp | Dp | Dp | Dp | No | No |
| GHG destruction (GDest) | Yes | Dp | No | Yes | No | No | Dp | No | No |
| Displacement of a more-GHG- | Yes | No | No | Yes | No | No | Dp | No | No |
| intensive output (DispG – RE, LCE) | | | | | | | | | |
| Construction | | | | | | | | | |
| Fuel or feedstock switch (FS) | Yes | No | No | Yes | No | No | Dp | No | No |
| Displacement of a more-GHG- | Yes | No | No | Yes | No | No | Dp | No | No |
| intensive output (DispG - LCE) | | | | | | | | | |
| Transport | | | | | | | | | |
| Energy efficiency (EE) | Yes | No | No | Yes | No | No | Dp | No | No |
| Fuel or feedstock switch (FS) | Yes | No | No | Yes | No | No | Dp | No | No |
| Displacement of a more-GHG- | Yes | No | No | Yes | No | No | Dp | No | No |
| intensive output (DispG - RE, LCE) | | | | | | | · | | |
| Mining and mineral production | | | | | | | | | |
| Fuel or feedstock switch (FS) | Yes | No | No | Yes | No | No | No | No | No |
| GHG destruction (GDest) | Yes | No | No | Yes | No | No | No | No | No |
| Displacement of a more-GHG- | Yes | Dp | No | Yes | Dp | No | No | No | No |
| intensive output (DispG - RE) | | | | | | | | | |
| Metal production | | | ÷. | | | 2 | | | |
| Energy efficiency (EE) | Yes | No | No | Dp | No | No | No | No | No |
| Fuel or feedstock switch (FS) | Yes | No | No | Dp | No | No | No | No | No |
| GHG emission avoidance (GEA) | Yes | No | No | Dp | No | No | No | No | No |
| Displacement of a more-GHG- | Yes | No | No | Yes | No | No | No | No | No |
| intensive output (DispG - RE) | | | | | | | | | |
| Fugitive emissions | | | | | | | | | |
| GHG emission avoidance (GEA) | Dp | Dp | No | Dp | Dp | No | Dp | No | No |
| GHG destruction (GDest) | Yes | Yes | No | Dp | Dp | No | No | No | No |
| Waste management | | | | | | | | | |
| Energy efficiency (EE) | Yes | Yes | No | Yes | Dp | Dp | Dp | No | No |
| GHG emission avoidance (GEA) | Yes | Yes | No | Yes | Yes | Dp | Dp | No | No |
| GHG destruction (GDest) | Yes | Yes | Dp | Yes | Yes | Dp | Dp | Dp | Dp |
| Displacement of a more-GHG- | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | No |
| intensive output (DispG - RE) | | | | | | | | | |
| Land use | | | | | | | | | |
| GHG removal (GRem) | No | Dp | Dp | Dp | Dp | Dp | Dp | Dp | Dp |
| Fuel or feedstock switch (FS) | Yes | Dp | No | Yes | Dp | No | No | No | No |
| GHG emission avoidance (GEA) | Yes | Dp | Dp | Yes | Dp | Dp | No | No | No |
| GHG destruction (GDest) | Yes | Yes | No | Yes | Dp | No | Dp | No | No |

Note: Dp: depends on the type of CCMP and the methodology applied; in these cases, it is necessary to justify its inclusion or exclusion.

The type of GHG emission source varies according to the CCMP's own characteristics. These sources are defined and justified in detail in an approved GHG quantification methodology selected for the development of a CCMP.

Table 2 highlights the most common and important GHGs generated in each sector. However, other types of GHGs that are relevant in each sector should be considered within the CCMP and the selected methodology, which overrides the emission sources presented in **Table 2**.

The following is a general description of the GHG emission sources that could be considered in each of the sectors according to the CCMP activity type listed in *Table 2* as a guideline.

6.3.6.1 Energy sector

• For EE CCMPs:

In the baseline scenario, CO_2 emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal energy) or in cogeneration, where applicable, as well as those generated in the production of chilled water or for plant operation, should be considered. In addition, where applicable, CH_4 emissions from uncontrolled burning or decomposition of surplus biomass residues.

In the project scenario, CO₂ emissions due to the use of fossil fuels to generate electricity or heat (steam or non-steam thermal energy) must be considered. In CCMPs with cogeneration, CO₂ emissions from the use of fossil fuels in parts of the process, from on-site power generation (electricity and heat), from the production of chilled water and from their installations. For CCMPs including biomass, CH₄ emissions from biomass burning for energy generation, CO₂, CH₄ and N₂O emissions due to energy crops for feedstock production and CO₂ emissions from transport or processing of biomass on-site and off-site.

In some CCMPs of this type, it is expected that no emissions from leakage will be generated; however, consideration should be given to the different activities that generate them, such as CO_2 and CH_4 emissions due to extraction, processing, liquefaction, transport, regasification, and distribution of fossil fuels in natural gas CCMPs. CO_2 emissions associated with the exhaust of recovered heat whose diversion to power units may increase emissions elsewhere, as well as CO_2 and CH_4 emissions due to the diversion of biomass residues for other applications or due to the displacement of upstream activities to the CCMP should also be considered.

• For FS CCMPs:

In the baseline scenario, CO_2 emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal energy) or in cogeneration should be considered, where applicable. Also, CH_4 emissions from uncontrolled burning or decomposition of surplus biomass residues, where applicable.

In the project scenario, CO_2 emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal power) must be considered. In CCMPs with cogeneration, CO_2 emissions due to the use of fossil fuels for process elements, on-site power generation (electricity and heat) and by their installations. For CCMPs that include biomass, CH4 emissions from burning biomass for energy generation and CO_2 , CH_4 and N_2O emissions



due to energy crops for feedstock production, as well as CO_2 emissions from transport or processing of biomass on-site and off-site.

Where applicable, the different activities that generate emissions from leakage should be considered.

• For GEA CCMPs:

In the baseline scenario, CO_2 emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal energy) or in cogeneration, where applicable, should be considered.

In the project scenario, GHG emissions are expected to be avoided or not generated; therefore, the different activities that generate GHG emissions should be considered.

In CCMPs of this type, no emissions are generated by leakage.

• For DispG (RE - LCE) CCMPs:

In the baseline scenario, CO_2 emissions due to the use of fossil fuels or due to the generation of electricity or heat (steam or non-steam thermal energy) or in cogeneration should be considered, where applicable. CH_4 emissions from burning or decomposition of organic matter should also be considered, where applicable.

In the project scenario, it is expected that no or displaced GHG emissions will be generated; therefore, the different activities that generate GHG emissions should be considered.

In this type of CCMP, no significant sources of leakage are expected; however, the different activities that could generate leakage should be considered.

6.3.6.2 Industry sector

• For EE CCMPs:

In the baseline scenario, CO_2 emissions due to fossil fuel consumption and energy consumption for the preparation of raw materials, alternative fuels and for the operation of equipment must be considered.

In the project scenario, CO₂ emissions due to electricity consumption (grid and self-generated), raw material preparation, alternative fuels and equipment operation are to be considered.

Depending on the type of CCMP, different emission sources for leakage are considered or not.

• For FS CCMPs:

In the baseline scenario, CO₂ emissions from the use of fossil fuels, from the consumption of electricity, steam, national grid, or captive source and from the preparation of alternative

feedstock and fuels (e.g., drying of materials or fuels with external dryers) should be considered. Also, CO_2 emissions, where applicable, in thermal energy processes and cogeneration plants.

In the project scenario, CO₂ emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal energy) must be considered. For cogeneration CCMPs, CO₂ emissions due to the use of fossil fuels in parts of the process, those due to onsite power generation (electricity and heat) and those generated by their installations. For geothermal CCMPs, fugitive CO₂ and CH₄ emissions from non-condensable gases contained in geothermal steam and CO₂ emissions from the use of fossil fuels must be considered. For hydro CCMPs with established reservoirs, CH₄ emissions from solid or liquid waste disposal must be considered. For solar CCMPs, CO₂ emissions from the use of fossil fuels in ancillary operations and for solar production processes. For CCMPs that include biomass, CH₄ emissions from biomass burning for energy generation, CO₂, CH₄ and N₂O emissions due to energy crops for feedstock production, CO₂ emissions from transport or processing of biomass on-site and off-site and CH₄ emissions from wastewater in biomass treatment.

In some CCMPs of this type it is expected that no emissions from leakage will be generated; however, the different activities that generate them should be considered, such as CO₂ emissions from transport and collection of biomasses, from diversion of biomass residues from other use applications, from change of activities prior to the CCMP, and from fuel extraction, processing, liquefaction, transport, regasification, and distribution of fossil fuels.

• For GEA CCMPs:

In the baseline scenario, CO₂ emissions from fossil fuel use for heat generation and CH₄ emissions from uncontrolled burning or decomposition of biomass residues should be considered.

In the project scenario, where applicable, CO_2 emissions from fossil fuel use, on-site electricity generation and biomass transport, CH_4 emissions from biomass treatment wastewater and CH_4 and N_2O emissions from energy crops for feedstock production should be considered.

CO₂ emissions from leakage due to diversion of biomass residues and change of pre-CCMP activities should also be considered.

• For GDest CCMPs:

In the baseline scenario, CO_2 emissions from the use of fossil fuels to generate heat or power as well as fluorinated GHGs (CF₄, C₂F₆, CHF₃, CH₃F, CH₂F₂, C₃F₈, c-C₄F₈ and SF₆) that are released to the atmosphere after being used in industrial production processes are to be considered. Emissions of CH₄ are considered for the use of biomass.

In the project scenario, only CO_2 emissions from fossil fuel use should be considered, where applicable, as fluorinated GHGs are recovered and destroyed in a catalytic oxidation unit within the destruction process. In some cases, CH_4 is recovered and combusted.



In some CCMPs of this type it is expected that no emissions from leakage will be generated; however, the different activities that generate leakage should be considered.

• For DispG (RE - LCE) CCMPs:

In the baseline scenario, CO_2 emissions due to the use of fossil fuels for electricity or heat generation (steam or non-steam thermal energy) or in cogeneration, where applicable, should be considered.

In the project scenario, CO₂ emissions due to the use of fossil fuels must be considered.

Significant sources of leakage are not expected in this type of CCMP; however, the different activities that generate leakage should be considered. For CCMPs that include biomass, CO₂ emissions due to transport must be considered.

6.3.6.3 Construction sector

• For FS CCMPs:

In the baseline scenario, CO₂ emissions from fossil fuel or feedstock use within the traditional building or wall material (brick and cement) construction processes are to be considered.

In the project scenario, GHG emissions from the use of building materials and wall material (gypsum concrete) are expected to be reduced.

For some CCMPs of this type, it is expected that no emissions from leakage will be generated; however, the different activities that generate leakage should be considered.

• For DispG (LCE) CCMPs:

In the baseline scenario, CO₂ emissions from the use of fossil fuels within the traditional construction processes or material (brick and cement) walls should be considered.

In the project scenario, GHG emissions from the use of building materials and wall material (gypsum concrete) are expected to be displaced.

In some CCMPs of this type, it is expected that no emissions from leakage will be generated; however, the different activities that generate leakage should be considered.

6.3.6.4 Transport sector

• For EE CCMPs:

In the baseline scenario, CO₂ emissions by mobile sources from different modes of road (bus, minibus tour, train, motorbike, taxi) air (light aircraft, aeroplane) and sea (boat, ship, among others) transport should be considered.

In the project scenario, CO₂ emissions from fuel use and the installation of more efficient equipment that generates less energy consumption must be considered.

In this type of CCMP, no significant sources of leakage are expected; however, the different activities that generate them must be considered.

• For FS CCMPs:

In the baseline scenario, CO₂ emissions by mobile sources from different modes of road (bus, minibus tourism, train, motorbike, taxi) air (light aircraft, aeroplane) and sea (boat, ship, among others) transport should be considered.

In the project scenario, CO_2 emissions from the use of fuels or low-emission raw materials or electricity, on land, air, or sea transit journeys (feeder and trunk routes, as appropriate), should be considered.

Significant sources of leakage are not expected in this type of CCMP; however, the different activities that generate them should be considered.

• For DispG (RE - LCE) CCMPs:

In the baseline scenario, CO₂ emissions by mobile sources from different modes of road transport (bus, minibus tourism, train, motorbike, taxi) air (light aircraft, aeroplane) and sea (boat, ship, among others) should be considered.

In the project scenario, CO₂ emissions due to fuel use are not to be considered or are reduced, as the transport modes are changed to bicycles or electric tricycles that partially displace the existing transport system operating under mixed traffic conditions. However, CO₂ emissions from the use of low-emission fuels must be considered for land, air, and maritime transit journeys (feeder and trunk routes, as appropriate).

Significant sources of leakage are not expected in this type of CCMP; however, the different activities that generate them should be considered.

6.3.6.5 Mining and mineral production sector

• For FS CCMPs:

In the baseline scenario, CO_2 emissions from the use of fossil fuels to generate energy should be considered as well as carbonates that are released to the atmosphere after being used in mineral production processes.

In the project scenario, only CO_2 emissions from fossil fuel use, where applicable, or from carbonate-containing feedstocks should be considered.

In this type of CCMP it is expected that no emissions from leakage will be generated.

• For GDest CCMPs:

In the baseline scenario, CO₂ emissions are generated and CH₄ emissions that are released to the atmosphere by operating mines and geological structures must be considered.



In the project scenario, CO_2 emissions can be generated and used for power or heat generation.

In this type of CCMP it is expected that no leakage emissions are generated.

• For DispG (ER) CCMPs:

In the baseline scenario, CO_2 or CH_4 emissions are generated by burning or decomposition of biomass in materials production.

In the project scenario, CO₂ or CH₄ emissions are generated in the production of materials by lower carbon fuels and biomass burning, respectively.

No significant sources of leakage are expected in this type of CCMP.

6.3.6.6 Metal production sector

• For EE CCMPs:

In the baseline scenario, CO₂ emissions are produced by fossil fuel and material use in metal production.

In the project scenario, GHG emissions are reduced, and more efficient equipment is used.

No significant sources of leakage are expected in this type of CCMP.

• For FS CCMPs:

In the baseline scenario, CO_2 emissions are produced by use of fossil fuels within mineral or steel production.

In the project scenario, GHG emissions are reduced by reduced use of polluting material and by switching from fossil fuels to charcoal (or other less carbon-intensive fuel options) as a renewable energy source or by switching to cleaner feedstocks.

No significant sources of leakage are expected in this type of CCMP.

• For GEA CCMPs:

In the baseline scenario, CO₂, PFC and SF₆ emissions occur within metal production.

In the project scenario, CO_2 , PFC and SF_6 emissions are avoided due to the use of gas, lower energy consumption and improved metal production processes.

No significant sources of leakage are expected in this type of CCMP.

• For DispG (RE) CCMPs:

In the baseline scenario, CO_2 emissions are produced using fossil fuels for metal production (especially iron and steel).



In the project scenario, in metal production, CO₂ emissions are reduced by implementing processes or activities that displace the use of fossil fuels.

No significant sources of leakage are expected in this type of CCMP.

6.3.6.7 Fugitive emissions sector

• For GEA CCMPs:

In the baseline scenario, CO₂ and CH₄.emissions generated in the fuel transport and distribution systems can be considered. For GHG emission sources in the physical leakage reduction, GHG emissions from physical leakage of systems, equipment and components should be considered.

In the project scenario, CO₂ and CH₄ emissions can be considered.

Significant sources of leakage are not expected in this type of CCMP; however, the different activities that generate them, especially those derived from physical leakage, must be considered.

• For GDest CCMPs:

In the baseline scenario, CO_2 and CH_4 emissions from production processes are to be considered. In the project scenario, CO_2 emissions are expected to be reduced (destroyed). In this type of CCMP, no emissions from leakage are expected to be generated.

6.3.6.8 Waste management sector

• For EE CCMPs:

In the baseline scenario, CO_2 emissions from heat generation and waste decomposition on site should be considered. Also, CH_4 emissions from anaerobic lagoons, sludge pits and electricity generation.

In the project scenario, CO_2 emissions from fossil fuel use and electricity use should be considered, as well as CO_2 , CH_4 and N_2O emissions from waste treatment processes and CH_4 emissions from wastewater treatment.

CH₄ emissions associated with composting and co-composting, anaerobic digestion, and the use of Refuse Derived Fuel (RDF) and stabilised biomass (BE) should be considered as leakage.

• For GEA CCMPs:

In the baseline scenario, CO_2 emissions due to energy generation (electricity or thermal) and due to sludge transport, as well as CH_4 emissions due to waste decomposition in the landfill and due to wastewater and sludge treatment should be considered.



In the project scenario, CO_2 emissions from electricity consumption, fossil fuel use, and transport, as well as CH_4 emissions from wastewater and sludge treatment and waste decomposition in landfills and, where applicable, CH_4 and N_2O emissions from landfill aeration are to be considered.

Significant sources of leakage are not expected in this type of CCMP; however, consideration should be given to the different activities that may generate leakage.

• For GDest CCMPs:

In the baseline scenario, CO_2 emissions from electricity consumption or generation and from heat generation, CH_4 emissions from waste decomposition and from manure treatment processes, as well as CO_2 and CH_4 emissions from natural gas use and CH_4 and N_2O emissions from waste treatment processes must be considered.

In the project scenario, CO_2 emissions from the use of fossil fuels to generate electricity or heat or used for transport and electricity consumption, CH_4 emissions from flaring, CO_2 and CH_4 emissions from landfill gas distribution and N_2O and CH_4 emissions from waste and manure treatment processes, sludge composting and manure storage tanks must be considered.

No significant sources of leakage are expected in this type of CCMP; however, the different activities that generate CH_4 emissions from the application of treated manure to the soil, as well as those related to anaerobic digestion in a digester, in addition to CO_2 , CH_4 and N_2O emissions from the application of treated waste to the soil and from the transport of treated sludge or effluent, must be considered.

• For DispG (RE) CCMPs:

In the baseline scenario, CO_2 emissions from heat generation and combustion, and CH_4 and N_2O emissions from waste decomposition on site must be considered. Hazardous waste is incinerated without generating useful energy.

In the project scenario, CO_2 emissions from fossil fuel use and electricity use must be considered, as well as CO_2 , CH_4 and N_2O emissions generated in waste treatment processes and CH_4 emissions from wastewater treatment. Although GHG emissions are expected to be reduced by the implementation of alternative processes in waste treatment, such as composting, gasification, anaerobic digestion with biogas collection and flaring or its use, mechanical/thermal treatment process to produce RDF and BE and its utilisation and incineration of fresh waste for energy generation.

CH₄ emissions associated with composting and co-composting, anaerobic digestion and the use of RDF and SB are to be considered as leakage.

6.3.6.9 Land use sector

• For GRem CCMP:

In the baseline scenario, CH_4 and N_2O emissions associated with site preparation and fertiliser use should be considered where applicable.

In the project scenario, burning for site preparation is not accepted (only in the woody crops segment if allowed by law); in this type of emissions, CO_2 is not considered as a source, but is accounted for as a change in carbon stock. GHG emissions from fertiliser use should be included unless they are insignificant.

Significant emissions from leakage are not expected in this type of CCMP; however, emissions that generate CH₄ emissions from displacement of agricultural or livestock activities should be considered.

• For FS CCMPs:

In the baseline scenario, CO_2 emissions from fossil fuel use and CH_4 emissions from disposal of faeces, biomass or waste that decompose anaerobically and are emitted to the atmosphere must be considered.

In the project scenario, CO_2 and CH_4 emissions are reduced by changing feedstock, fuel, and the use of biogas.

No significant sources of leakage are expected in this type of CCMP.

• For GEA CCMPs:

In the baseline scenario, CO_2 emissions from fuel use and, where applicable, N_2O emissions from fertiliser use and CH_4 due to anaerobic decomposition of organic matter must be considered.

In the project scenario, CO₂ and CH₄ emissions are reduced by changing practices or management, fuel and less fertiliser or use of nitrogen-fixing bacteria.

Significant sources of leakage are not expected in this type of CCMPs; however, consideration should be given to the different activities that may generate leakage or CCMPs that include leakage, as in the case of REDD+.

• For GDest CCMPs:

In the baseline scenario, CO_2 emissions from fossil fuel use and CH_4 emissions from disposal of faeces, biomass or waste that decompose anaerobically and are emitted to the atmosphere must be considered.

In the project scenario, CO_2 emissions from fossil fuel use and CH_4 emissions from waste or faeces management systems that are captured, destroyed, or used as an energy source must be considered.

Significant sources of leakage are not expected in this type of CCMP; however, the different activities that may generate them must be considered.

6.3.7 Identification of carbon pools

For CCMP in the land use sector, the carbon pools to be considered in the baseline and project scenarios are above-ground biomass, below-ground biomass, dead wood, litter, and soil organic carbon. When estimating carbon stocks in the carbon pools, above-ground biomass and below-ground biomass should be considered as a minimum. The CCMP may or may not consider carbon in dead wood, litter, and soil organic carbon. The inclusion of carbon pools varies according to the specific characteristics of the CCMP and is defined and justified in detail in approved and selected methodologies that include the estimation or calculation of carbon stock changes.

For CCMPs other than the land use sector, this section does not apply.

6.3.8 Selection of emission sources and carbon pools for monitoring or estimating GHG emissions and removals

The CCMP shall select and apply the criteria and procedures for estimating or monitoring the selected GHG emission sources and carbon pools, using appropriate and reliable data, providing justification for not selecting any GHG emission source or carbon pool identified as optional for monitoring, according to the criteria of the selected methodology. Monitoring methods and procedures should be consistent with the baseline and monitoring methodology(ies) used in the elaboration of the PDD.

The CCMP may use direct measurement or estimation methods to identify and select GHG emission sources and carbon pools for subsequent quantification. In any case, the criteria¹² used in their selection must be consistent with the principles set out in this protocol.

The exclusion of GHG emission sources in the quantification can be justified if comparisons between baseline and project scenarios show no changes. Meanwhile, carbon pools may be excluded in the quantification if it is demonstrated that the carbon pool is not a net source of GHG emissions or removals; therefore, the CCMP must identify the relevant GHG emission sources and pools according to which it considers it can control or which are related to or affected by the CCMP. That is, it is solely responsible for changes in GHG emissions and removals from the sources (including leakage) and carbon pools that the CCMP affects.

¹² Criteria may consider a balance between practicality and cost-effectiveness with CCMP principles. It may consider the choice of good practice on how to respond to some of the decision criteria (e.g., when considering whether a GHG emission source or carbon pool is related by flows to or from the baseline or project scenario). Ultimately, the decision to estimate, measure or monitor a GHG emission source or carbon pool may be based on the costs of the monitoring effort versus the significance of the impact on the CCMP's GHG removals or GHG emission reductions.



6.3.9 Quantification of GHG emissions and removals in the baseline scenario

The CCMP shall establish the criteria, procedures, and methodologies for quantifying GHG emissions and removals in the baseline scenario, quantifying GHG emission sources and carbon pools (if applicable) separately, converting the amount of each type of GHG to t CO_2e .

The baseline scenario is estimated for the total duration of the CCMP and should be based on the principles outlined in *Section 3.1*.

6.3.10 Quantification of GHG emissions and removals and GHG emission reductions in the project scenario

The CCMP shall set out the criteria, procedures, and methodologies for quantifying GHG emissions and removals as well as GHG emission reductions or leakage that may occur in the project scenario, quantifying GHG emission sources, carbon pools and leakage (if applicable) separately, converting the amount of each type of GHG to t CO_2e .

The project scenario is estimated for the entire duration of the CCMP and should be based on the principles outlined in *Section 3.1*.

In the baseline and project scenarios, if applicable, depending on the selected methodology, the CCMP must select or develop GHG emission or removal factors that:

- Are derived from a recognised source.
- Are appropriate for GHG emission sources (including leakage, if applicable), and carbon pools (if applicable).
- Are appropriate for the timing of quantification.
- Generate accurate and reproducible uncertainty quantification results.
- Consistent with the intended use of the PDD.

6.3.11 Estimation of net GHG emissions and removals and projected net GHG emission reductions

In CCMPs that consider GHG removal activity, net GHG removals are quantified as the difference between the net removals (net of emissions) of the project scenario and the net removals (also net of emissions) of the baseline scenario.

In CCMPs that consider GHG emission reduction activity, net GHG emission reductions are quantified as the difference between the net reductions (discounting emissions) of the baseline scenario and the net reductions (also discounting emissions) of the project scenario.

In both cases, these calculations must be performed annually for each GHG emission source, (including leakage if applicable) and carbon pool (if applicable) in the baseline and project scenarios, converting the amount of each type of GHG to t CO₂e.

The CCMP shall select and apply criteria and procedures from *Cercarbono's Tool to Estimate Carbon Buffer in Initiatives to Mitigate Climate Change in the Land Use Sector*, available at <u>www.cercarbono.com</u>, section: Documentation; developed to support an eventual reversal of the CCMP's GHG removal or GHG emission reduction (avoidance) activity according to the selected methodology.

6.3.12 Methodological revisions and deviations

CCMP may request a deviation from an approved methodology if:

- The deviation does not adversely affect the conservative principle of the methodology.
- The deviation does not represent a violation of the regulatory framework applicable to the CCMP activity.

See Section 5.4.

6.4 CCMP monitoring

Once the CCMP has identified GHG emission sources and carbon pools, it must identify the data or parameters related to these sources and pools that are estimated or quantified based on actual measurements to calculate the baseline and project scenarios. Data collected at the formulation stage help to quantify the GHG emissions and removals of the baseline scenario and data collected after CCMP implementation help to quantify the GHG emission reductions of the CCMP.

In that regard, the CCMP should establish a monitoring plan that includes procedures for measuring or estimating, recording, compiling and analysing data and information important for quantifying GHG emission sources and carbon pools to establish their GHG emissions and removals and GHG emission reductions relevant to the project scenario, including, in CCMPs related to land use, a GHG information system using appropriate technologies. The monitoring plan shall include the following, as appropriate:

- Purpose of monitoring.
- List of parameters measured and monitored.
- Types of data and information to be reported, including units and time scale of measurement.
- Data source.
- Monitoring methodologies (estimation, modelling, or measurement), calculation approaches and uncertainty. In case of measurement, establish or include calibration and maintenance protocols for measurement equipment, as appropriate.
- Frequency of monitoring of different variables and components, considering the needs of stakeholders.
- Definition of roles and responsibilities, including procedures for authorising, approving and documenting changes to recorded data.

- Controls including internal assessment of input, transformation and output data, and procedures for corrective actions.
- GHG information management systems, including location and retention of stored data and data management including a procedure for transferring data between different forms of systems or documentation.
- Monitoring report structure.

The nature of the information available for the CCMP determines whether GHG emissions and removals and GHG emission reductions are estimated or quantified based on actual measurements. Normally, prior to the implementation of a CCMP, GHG emissions and removals and GHG emission reductions are estimated (ex-ante), whereas, during CCMP implementation, they can be monitored and measured directly providing actual data for quantification (ex-post). Monitoring and measurement can therefore be carried out at 100 % or based on a sampling scheme depending on the nature of the data sources.

Where measurement and monitoring equipment is used, the CCMP holder must ensure and have the evidence to demonstrate that it is used and maintained calibrated or verified, as appropriate, in line with its manufacturer's or user's manual. GHG monitoring criteria and procedures are applied in accordance with the monitoring plan.

When the CCMP, after monitoring the CCMP activity (prior to or after a verification event), identifies significant changes in the results of its activity, a reassessment of the project scenario must be performed.

Cercarbono has *Monitoring Report* templates, designed according to the sector and mitigation activity on which the CCMP focuses, available at <u>www.cercarbono.com</u>, section: Documentation, which can serve as a basis for considering the most essential elements of this stage.

6.5 Grouped projects

Grouped projects are those implemented under one or more methodologies (but not using parts or calculation or monitoring methods from several methodologies for the same programme or project activity) from the same sector, focused on GHG removals or GHG emission reductions in a specific area or facility and period, which are structured to allow for the addition of one or more instances of the mitigation activity or its scaling up after the initial validation. The grouping and eligibility criteria must be explicitly defined in advance in the PDD to allow for the addition of new participants and implementation instances that are not known at the time project implementation begins. The implementation of a grouped project allows not having to perform a separate registration, validation, and verification process for each new implementation instance, facilitating the future expansion of the project and the reduction of its transaction costs.

Some examples of clustering criteria are presented below:

- Implementation by the same participants of the initial project (e.g., expansion of the same enterprise).

- Admission of new partners to an existing associative institution (e.g., a cooperative, which is the holder or developer of the project).
- Expansion of an incentive or support programme with rules defined from the outset (e.g., an international cooperation project).

The rules for the inclusion of new participants or implementation instances (eligibility criteria) must be established from the initial design of the project and cannot be modified afterwards. Specifically, the following criteria must be considered:

- The geographical scope in which implementation instances can be added must be defined from the validation stage of the project and cannot be modified afterwards. Under no circumstances may activities implemented in more than one country be grouped together.
- The number of implementation instances that can be added to a grouped project is unlimited.
- Instances that adopt technologies or processes different from those established during the project design cannot be included.
- The inclusion of new instances of implementation does not extend the lifetime of the project, nor does it affect the accreditation period.

The inclusion of new implementation instances must be validated during project verifications. The start of activities of each implementation instance can be retroactive to the date of the previous verification of the project, starting from the second verification. The implementation instances must meet all eligibility and other requirements set out in this protocol and in the methodology selected for the initial implementation of the project.

The VVB in charge of the verification must assess the compliance of each of the implementation instances with the selected methodology and the relevant rules established in the Cercarbono's certification programme.

An additionality analysis needs to be carried out for the implementation instances to be added to the project, considering the potential baseline scenarios that correspond to the situation at the time of addition of the implementation instances.

The baseline and project scenarios need to be updated to include the effect of both on the project by adding the information of the new implementation instances; it is not necessary to recalculate for the implementation instances that were already in operation.

The monitoring system can only be changed if the legal regulatory framework of the country in which it operates changes or if such a change is justified.

6.5.1 Special considerations for CCMP in the land use sector

In the case of REDD+ projects, if the country where the project would be implemented has defined sub-national reference levels, project implementation can only occur at one of these sub-national levels.

In the case of REDD+ projects, all instances of implementation must include the same activities and pools as initially envisaged in the project. See the Cercarbono REDD+ methodology for more details.

In the case of REDD+ projects developed in community-owned areas, including indigenous territories, remote audits are not accepted, because of the need to back up in the field what is specified in the PDD, especially regarding ownership of the areas, legal aspects related to community representation and compliance with safeguards; however, mixed audits can be justified.

Instances of implementation with species, technologies or species combinations that have not been explicitly defined during project validation can be added.

For grouped CCMPs in the land use sector, if exclusion of areas is considered, this shall occur after two years from the last verification and in this case, the CCMP shall deduct from the total mitigation achieved at the next verification an amount equal to the credits issued corresponding to the excluded areas, as a guarantee of permanence of these credits. For more details see Section 7 of *Procedures of Cercarbono's Certification Programme*.

6.6 Programmes of activities

To facilitate and streamline the registration and validation process for project activities that can be implemented by multiple actors in a coordinated but independent manner, Cercarbono allows a **Coordinating Entity** (CEn) to manage them independently through a **Programme of Activities for Climate Change Mitigation** (**PoA**) in sectors other than land use.

PoAs allow for the inclusion of an unlimited number of new **Climate Change Mitigation Programme Activities (PAs)** throughout their accreditation period, subject to the eligibility requirements set by the selected methodology(ies).

To this end, the PoA CEn shall submit a Project Description Document for the PoA (PDD-PoA), defining the general parameters of the PoA and the rules for the inclusion of new PAs, considering that:

- The geographic scope in which PAs can be aggregated must be defined at the validation stage of the PoA and cannot be modified afterwards. In no case may the PAs be added in more than one country.
- The start of activities of each PA after those registered at the beginning of the PoA can be retroactive to the date of the previous verification of the PoA, starting from the second verification.
- PAs may use any methodology approved by Cercarbono except those belonging to the land use sector.
- PAs must meet all eligibility and other requirements set out in this protocol and in the methodology selected for the initial implementation of the project.
- The inclusion of new PAs must be validated during project verifications.

- Each PA establishes its own accreditation period and lifespan, according to the rules established in this protocol for CCMPs.
- The verifications of all PAs must be simultaneous.

The VVB in charge of the verification must assess the compliance of each of the PAs with the selected methodology and the relevant rules set out in the Cercarbono's certification programme.

An additionality analysis needs to be performed for the PAs that are intended to be added to the PoA, considering the potential baseline scenarios that correspond to the situation at the time of addition of the PAs.

6.7 Accreditation period

The duration or useful life of the CCMP is established by the holder or developer, who must provide support for this duration, which includes, but is not limited to, action or management plans (of processes, machinery, equipment, human resources, financial resources, among others) and the useful life cycle of areas, machinery, and equipment, among others. During the validation and verification processes, the VVB must assess and support the legitimacy of the duration or lifetime of the CCMP, which is reviewed by Cercarbono during the certification stage.

To demonstrate climate change mitigation results, CCMPs can set a lifetime of 10 to a maximum of 100 years, except in the case of CCMPs in the land use sector, where the minimum lifetime must be 30 years. The established CCMP lifetime cannot be renewed. The start of the implementation of the CCMP activity determines the start date of the CCMP lifetime and thus of the crediting period of the CCMP.

The holder or developer chooses the start date of the crediting period (day.month.year). For CCMP in the land use sector, the crediting period is 20 years, counting from the time it generates the first GHG removals or GHG emission reductions. For CCMP in other sectors, the crediting period is 10 years or equal to the duration or lifetime of the CCMP, if this is less than 10 years, counted from the time it generates the first GHG emission reductions.

6.8 Renewal of the accreditation period

After the initial crediting period, if the CCMP has not yet reached its lifetime limit, the crediting period can be renewed by submitting the *Application for Renewal of Accreditation Period* form available at <u>www.cercarbono.com</u>, section: Documentation. For CCMP in the land use sector, it can be renewed as many times as desired, for periods of 10 years or for a shorter period, until the end of its lifetime. For CCMP in other sectors, it can be renewed only twice for periods of 10 years or for a shorter period if it does not exceed the duration or useful life of the CCMP. The renewal of the accreditation period must be done through a new validation statement, in which it is analysed whether the CCMP continues to be additional and continues to meet the requirements of this protocol.

Compliance with the additionality criterion is reviewed under verification and certification events throughout the CCMP's accreditation period. If changes in the implementation of the CCMP that affect this criterion are detected by the CCMP or the VVB, the PDD must be updated, re-evaluating the baseline and project scenarios to demonstrate the additionality of the CCMP, supported by a new validation event within the established accreditation period.

To renew the accreditation period, the CCMP must have had, as a minimum, verifications every five years during the previous accreditation period.

For CCMPs that have not performed verifications for the last five or more years, they must provide a justification for the non-performance and comply with *Section 8.4.18*.

6.9 Contribution to the Sustainable Development Goals

In the framework of the United Nations Sustainable Development Goals, the CCMP is required to promote and demonstrate activities aimed at improving the environment and the quality of life of local populations, through the adoption of good practices, including the protection of traditional knowledge and improving the use of natural resources. Compliance with all environmental and social laws in the context in which the CCMP is developed is mandatory. In no case is it accepted that CCMPs deteriorate the quality of life of local or surrounding populations.

Therefore, the CCMP must report its contribution to the achievement of the SDGs generated by its activity by completing the *Cercarbono's Tool to Report Contributions from Climate Change Mitigation Initiatives to the Sustainable Development Goals*, available at <u>www.cercarbono.com</u>, section: Documentation. The application of the tool is reviewed by the VVB at validation or verification events. Actual contributions to the SDGs by the CCMP can only be reported and reviewed at verification events.

REDD+ activities must also support results around the safeguards framework established for the CCMP activity type, such as environmental, social and governance measures or safeguards to avoid negative impacts and promote benefits.

CCMPs that require an environmental impact assessment must do so following the guidelines set by the competent environmental authority in the country where they are developed. In any case, the CCMP must comply with the environmental legislation applicable in its context. If these guidelines do not exist, one of the following methods can be used:

- Expert judgement.
- Quantitative physical and mathematical models.
- Cumulative impact assessment.
- Interaction matrices and diagrams.
- Rapid Impact Assessment Matrix.
- Battelle environmental assessment system.

CCMPs that report their expected contributions to the SDGs (in their validation) have an identification on the registry platform as to which SDGs they contribute to. CCMPs that report verified contributions have a stamp on the carbon credit issuance certificate indicating this.

6.10 Effective participation

This section presents the different environments in which Cercarbono facilitates the interaction between the different actors involved in the carbon market for the formulation, development, and transparent implementation of the CCMPs, in a way that guarantees their full and effective participation in accordance with the procedures under which they operate.

Some of these environments are public consultations, which as a planning mechanism allows the effective participation of these actors. In this sense, Cercarbono has established three types of consultations that must be considered by the different stakeholders and that are implemented according to the CCMP activity and its requirements.

In addition to the consultations, Cercarbono has at <u>www.cercarbono.com</u> spaces for frequently asked questions (section: About us) and contact us, in which the different actors can also participate. These spaces for effective stakeholder participation are detailed below.

6.10.1 Public consultation of CCMPs

When the CCMP is developed in an area where a local population is established or when the CCMP activity may have an environmental, social, or economic impact on local populations or society in general, a public consultation by the CCMP with interested parties is required.

The objective of this consultation is to meaningfully engage stakeholders to discuss the potential environmental, social, and economic impacts (both positive and potential risks) that these may have during the design, planning, implementation, and operation stages of the CCMP and to establish a feedback mechanism in consultation with stakeholders.

The CCMP holder must report on all mechanisms used for the dissemination of full and relevant consultation information.

If such consultation is necessary (such as in REDD+ projects), it must be carried out during the formulation or validation stages and Cercarbono must be informed in advance, so that it can disseminate it through its media and solicit public participation through the mechanism detailed in *Section 6.10.3*. Comments received on the Cercarbono website for a period of 30 solar days from the date of consultation reported by the CCMP are made available to the CCMP, which must take them into account to update its PDD.

For consultation, the CCMP should prepare and make available to stakeholders a CCMP narrative document, which should:

- Identify stakeholders, which may include a map of actors or organisations, an institutional map of governance structures or institutions and leaders associated with decisionmaking in the territory, related to programme or project activities, identifying consensual decisions (and their follow-up) with local governance structures.
- Use a format and develop a content consistent with the stakeholders, which should include as a minimum:
 - The name of the CCMP holder.
 - A brief description of the CCMP, including name, size, location, duration, and type of activities.
 - A summary of the PDD, including GHG emissions and removals or GHG emission reductions generated in the project scenario and those applicable for the baseline scenario, expressed in tCO₂e.
 - Describe deviations from the selected methodology, if applicable, and justification why such deviations are made.
 - A list of all relevant GHG emission sources and carbon pools (including criteria for their selection and quantification).
 - A description of the baseline scenario.
 - A general description of the criteria and procedures used for the calculation of GHG emissions and removals or GHG emission reductions from the CCMP and those applicable for the baseline scenario, expressed in t CO₂e.
 - The date of the report and the period it covers.
 - Evidence of the designation of the authorised legal representative on behalf of the CCMP holder, if different from the CCMP holder.
 - The certification scheme to which the CCMP subscribes.
- Establish a plan or schedule of meetings for CCMP decision-making.
- Establish a mechanism for petitions, claims, complaints and requests and their traceability.
- Establish a protocol for handling conflicts when they arise.
- Generate an agreement document that is signed by stakeholders for the development of the CCMP.

This document should be presented and discussed in a meeting between the CCMP and the stakeholders identified in or around the CCMP area. This meeting may result in common agreements or define how stakeholders can contribute. The follow-up to such a document should be reviewed at verification events.

6.10.2 Public consultation of documents, tools and methodologies developed by Cercarbono and other interested stakeholders

Cercarbono and other stakeholders operating in the context of the carbon market can submit methodologies, methods, modules, or tools based on *ISO 14064-2:2019* for public consultation. For this purpose, Cercarbono has established in <u>www.cercarbono.com</u> in the section: Consultations a space where public consultation of any of the mentioned documents is available for a minimum period of 30 solar days.

Once the consultation periods are closed, the responses given by Cercarbono and the other stakeholders to each of the comments received are permanently published in the same section.

The approval of new or already developed methodologies is detailed in the document **Pro**cedures of Cercarbono's Certification Programme, available at <u>www.cercarbono.com</u>, section: Documentation.

6.10.3 Comments on projects

To receive petitions, claims, complaints, or requests (anonymous or from an identified source) about CCMPs registered in Cercarbono, a permanent space has been set up in <u>www.cercarbono.com</u>, section: Consultations.

The comments received are analysed by the certification team, which oversees the due process, and duly filed, together with the response generated (if applicable) in the EcoRegistry platform as confidential documentation.

6.10.4 Frequently asked questions and contact us

Cercarbono has established on its website two spaces that are key for effective communication between stakeholders and the voluntary carbon certification programme.

- 1. **Frequently asked questions**: in this space there are questions and answers relevant to the formulation, development, and implementation of the CCMPs, as well as for the contextualisation of stakeholders around the carbon market. Questions and answers are constantly updated.
- 2. **Contact us:** in this space the different actors of the carbon market can submit their doubts, questions, or specific comments, not related to specific CCMPs, through the means of communication referenced there.

6.11 Legal and documentary management

CCMPs must retain all documentation and records generated to demonstrate that the CCMP activity has been implemented as designed. Any deviation of the implementation from the design must be solidly justified. Therefore, the CCMP must have documentation that demonstrates its compliance with the requirements of this document. This documentation must be consistent with the validation and verification needs of the Cercarbono certification programme, considering the guidelines of *ISO 14064-2:2019*, which calls for:

- Establish and maintain a comprehensive reporting system.
- Conducting internal audits and periodic technical reviews.
- Adequate training for project team members.
- Perform periodic verifications to detect technical errors.
- Conduct uncertainty assessments.

The holder of the CCMP must have documentation demonstrating the CCMP's compliance with this protocol. This documentation must be consistent with the validation, verification,

and certification processes. The EcoRegistry platform supports all information from the entire project cycle generated by those responsible for each stage of the project.

6.11.1 Management of legal requirements

The CCMP shall list, describe, and justify compliance with the laws, statutes, and regulatory frameworks under which it is governed (local, regional, and national), which apply to the CCMP activity, including applicable environmental requirements and the registration of the CCMP's concrete actions in the national registry system, where applicable.

Additionally, the CCMP holder must sign a declaration that its CCMP has not been registered for carbon credits under any standard or certification scheme, nor for GHG removals or GHG emission reductions required by a specific legal or regulatory framework and that, if registered by Cercarbono, shall not seek partial or full registration of the CCMP under any other standard or programme, or its use for the fulfilment of any climate change mitigation commitment required by a particular legal or regulatory framework, unless it withdraws the CCMP from Cercarbono in compliance with the requirements defined for that purpose. For this purpose, Cercarbono may request additional information, clarifications, or corrections on the CCMP already validated.

6.11.2 Data quality management

The CCMP shall establish and implement data and information quality and management procedures, including uncertainty assessment, relevant to the baseline and project scenarios, as stipulated in the selected methodology. The CCMP should minimise, as far as possible, uncertainties related to the quantification of GHG removals or GHG emission reductions.



7 Authorised validation and verification bodies

Validation and Verification Bodies (VVBs) authorised by Cercarbono must ensure that they are accredited by an International Accreditation Forum (IAF) signatory member accreditation body, which has in its service offering the GHG Emission Validation or Verification Body accreditation programme under the requirements of *ISO 14065* and *ISO/IEC 17029:2019* (see *Section 12.2*). VVBs that are accredited under the CDM as a Designated Operational Entity (DOE) are also authorised.

In national contexts, VVBs authorised by Cercarbono must be accredited with the competent national authority (such as the National Accreditation Body -ONAC- in the case of Colombia).

VVBs are required to issue a validation report and validation statement supporting the baseline and project scenario, and a verification report and verification statement indicating that the GHG removals or GHG emission reductions achieved by the CCMP were generated in accordance with the selected methodology and criteria defined in this protocol.

The performance of the VVBs is regularly assessed in each certification process by the Technical Directorate of Cercarbono. The list of VVBs authorised by Cercarbono is available at <u>www.cercarbono.com</u>.

Cercarbono must review any conflict of interest that arises with respect to a VVB or assigned personnel. If a conflict exists, it must assign a committee to study the case and based on the review and analysis of the conflict, the VVB will or will not be allowed to operate under Cercarbono's voluntary carbon certification programme. For this purpose, Cercarbono has a **Declaration of Conflict of Interest Made by the VVB** form, available at <u>www.cercarbono.com</u>, section: Documentation. This form is mandatory prior to the validation and verification processes.

Complementary elements to this section are provided in the *Procedures of Cercarbono's Certification Programme* document, available at <u>www.cercarbono.com</u>, section: Documentation.



8 Stages of the CCMP project cycle

Cercarbono has established the following stages for carrying out the voluntary carbon certification process: formulation, public consultation, validation, verification, and certification¹³. These stages are schematically presented in *Figure 3* and developed in the following sections.

8.1 Formulation

To participate in Cercarbono's voluntary carbon certification programme it is necessary to open an account, either on the EcoRegistry platform, or also by logging in through <u>www.cer-</u><u>carbono.com</u> and, in the section: Projects, redirecting to the EcoRegistry platform.

This platform hosts all the information that is part of the pre-registration, formulation, validation, verification, and certification processes for the registration of the CCMP and the issuance, monitoring, transfer, and retirement of the Carboncer.

At this stage the CCMP requests its registration in Cercarbono (and therefore in the EcoRegistry platform), through the email: <u>info@cercarbono.com</u>.

In the case of the developer, the developer must have a representation document or a special power of attorney from the CCMP that accredits him as such. Cercarbono has two forms of powers of representation: **Power of Attorney whit Withdrawals** and **Power of Attorney Without Withdrawals**, available at <u>www.cercarbono.com</u>, section: Documentation.

A Cercarbono technical reviewer verifies that the documentation provided is sufficient for compliance with the requirements, including an initial review of the absence of non-compliant overlaps, the required authorisations and powers of attorney, proof of ownership or tenure of the area where the CCMP will be implemented¹⁴, among others, as detailed in the *Procedures of Cercarbono's Certification Programme*, available at <u>www.cercarbono.com</u>, section: Documentation.

CCMP registration can be done at the formulation stage (new or migrated CCMPs) or at the validation and verification stages (migrated CCMPs).

During this stage, the CCMP appears on the EcoRegistry platform in the **Under formulation** status. Once this stage is approved, until the validation stage starts, the CCMP appears on the platform in the **Formulated** status.

¹³ **Implementation**, i.e., the process by which the CCMP holder, developer or operator executes the CCMP activities set out in the PDD, whereby GHG removal or GHG emission reductions are carried out and **monitoring**, i.e., the process of carrying out measurements and calculations of GHG removal or GHG emission reductions, following the monitoring plan that forms part of the PDD, are not detailed in this section as they are internal processes of the CCMPs.

¹⁴ Specified by geodetic coordinates or polygons to delimit the geographic area(s) comprising the CCMP, in shp (ESRI Shapefile) or kml (Keyhole Markup Language) format.





Figure 3. Cercarbono's certification status, stages, processes, and responsible parties.

1. Only if the CCMP does not perform joint validation and verification.

- 2. Project under implementation that is not at any other stage.
- 3. Project reaching the end of its lifespan.
- 4. Project holder or developer decides not to continue and requests its cancellation.
- 5. Project that the holder withdraws from Cercarbono (e.g., for migration).
- 6. Project inactive due to sanction.



7. Project inactive for so long that it cannot be reactivated.

See the **Procedures of Cercarbono's Certification Programme** document, available at <u>www.cercarbono.com</u>, Section: Documentation for more information.

8.2 Public consultation

Once the formulation is approved, the public consultation of the CCMP is opened on the Cercarbono website, which links to the CCMP record on the registry platform and remains open for 30 solar days. Comments received in the consultation are processed by Cercarbono, addressed by the CCMP, and become part of the CCMP record on the registry platform.

See the **Procedures of Cercarbono's Certification Programme** document, available at <u>www.cercarbono.com</u>, Section: Documentation for more information.

8.3 Validation

At this stage the CCMP requests the registration of its validation, based on the assessment of its design and its baseline scenario by a VVB. Following the assessment, a validation report is produced. If the CCMP design meets all the requirements of the validation process of this protocol, the selected methodology and the current standards or laws under which it is governed, a validation statement is issued; otherwise, corrective actions are requested for adjustment of the CCMP and subsequent review by the VVB.

At this stage, the technical manager or the assigned expert reviews the validation documents and compliance with the relevant requirements. If missing elements or elements that need to be corrected or expanded are found, requests for changes to the platform can be made and must be addressed by the VVB or the CCMP developer.

During this stage, the CCMP appears on the EcoRegistry platform in the **Under validation** status. Once this stage is approved, until the verification stage starts, the CCMP appears on the platform in the **Validated** status.

Note: It is possible to perform simultaneously the validation and verification processes by a VVB, whose compliance is integrated in a single report. In these cases, if there are no corrective actions, a joint validation and verification statement is generated, which can be used both in the CCMP registration and emission certification by Cercarbono and then in the registration and issuance of carbon credits in EcoRegistry.

The most important elements of the CCMP validation process based on *ISO 14066:2011*, *ISO 14064-3:2019*, *ISO/IEC 17029:2019* and *ISO 14065:2020*, under which the VVB issues opinions in the validation report and a validation statement, are detailed below.

8.3.1 Actions prior to validation and verification processes

Prior to initiating the validation and verification processes, the authorised VVB should select a team or individual with the necessary skills and competences to carry out these processes,

who should have sufficient understanding of the CCMP's GHG-related activity and relevant information from the sector in which the CCMP operates to plan and carry out the validation and verification, in order to identify the types of potential material errors, their likelihood of occurrence and to select the evidence gathering procedures (from analytical tests or estimates, assessments, calculations, sampling, consultations or others that are considered relevant for their evaluation and conclusions). The validation or verification person or team should have sufficient technical expertise to assess relevant activities and technologies, as well as GHG quantification, monitoring, and reporting, including relevant technical and sectoral issues. Validators and verifiers must demonstrate compliance with ethical requirements adhering to the principles outlined in *Sections 3.3* y *3.4*.

The validation or verification team should have experience in auditing data and information to assess the statement contained in the PDD and the monitoring report, including the ability to assess the information system and determine whether the client has identified, collected, analysed and reported all relevant information, and has taken corrective action to address any misstatements or non-conformities; to design an evidence collection plan; to analyse the risks associated with the use of data and data systems; to identify flaws in the data and data systems; and to assess the impact of the various data flows on the materiality of the validation or verification claim.

The validation or verification team should have the ability to communicate effectively about relevant issues in the validation or verification. The validation or verification team leader should have sufficient knowledge and experience of the competencies detailed in the validation or verification processes and the ability to manage the validation or verification team to meet the objectives of the validation or verification.

Also, prior to the validation and verification process, the VVB should define with the client:

- The type and level of engagement of each process or, if applicable, of joint validation and verification processes (performed at the same time), as well as the level of reasonable assurance of the statement(s) issued, thus establishing the form and timing of evidence gathering.
- The validation and verification objectives establishing the accuracy of the statement(s) and the conformity of the statement(s) with the requirements of the validation and verification processes of the protocol.
- The materiality threshold of the process to be performed (validation or verification). This threshold should be set according to the level of mitigation outcomes generated by the CCMP:
 - 5 % for CCMPs generating less than 25 thousand tCO₂e on annual average.
 - 3 % for CCMP between 25 and 100 thousand tCO₂e on annual average.
 - 1 % for CCMP over 100 thousand tCO₂e on annual average.
- Whether they correspond to validation and verification processes performed for the first time or to updates. Normally a validation process covers the entire accreditation period of a CCMP. Post-first-time validation processes are performed to update the programme

or project activities covered, either by the addition of new instances (areas, processes, machinery, or facilities) in the baseline or project scenario, such as in grouped projects, or by changes due to external factors (such as environmental catastrophes, market, policies, etc.). Verifications after the first time are carried out as many times as established in the monitoring plan, according to the CCMP accreditation period or when the CCMP holder considers it necessary. In both processes the documentation of the previous validation and verification process is considered, as applicable.

- The evaluation criteria considering the CCMP requirements. The validator and verifier evaluate them considering:
 - The method for determining the scope and limits of the commitment.
 - The GHGs, GHG emission sources and carbon pools to be accounted for.
 - Estimation or quantification methods.
 - The requirements for disclosures.
- The scope of the validation and verification processes including as a minimum the spatial limits (of facilities, physical infrastructure, activities, technologies, and processes), temporary limits (period), types of GHG emission sources, carbon pools and GHG leakage.
- The scope of validation and verification statements including: any material side effects; validation of the baseline scenario and verification of the baseline and project scenario. The material discrepancy thresholds required by stakeholders, which may be quantitative (including reporting errors, incomplete inventories, misclassified GHG emissions or misapplication of calculations) or qualitative (control issues that diminish the confidence of the validator and verifier in the reported data, poorly managed documented information, difficulty in locating requested information, or non-compliance with regulations indirectly related to GHG emissions or removals).
- The action to define ownership of the CCMP, with supporting evidence as appropriate.
- Conduct a conflict of interest check or review by the VVB.
- Submit the signed declaration demonstrating that there is no conflict of interest on the part of the VVB and the CCMP, dated eight solar days prior to a validation or verification event. For this purpose, Cercarbono has a VVB Declaration of Conflict of Interest, template, available at <u>www.cercarbono.com</u>, section: Documentation.
- Review the contribution to the proposed SDGs and the legal authorisation of the CCMP, where applicable.

8.3.2 Validation plan

The validator should develop a validation plan that addresses the prior actions in *Section* **8.3.1**.

The validator must assess the accuracy and completeness of the PDD. The validator should communicate the validation plan and report field visits to the CCMP holder.

If the evidence collected indicates a material error or identifies any non-conformities in the criteria, it may be necessary for the validator to modify the validation plan and the evidence collection plan as necessary.

8.3.3 Evidence collection and validation implementation plan

The validator should design a plan of activities for the collection of sufficient and appropriate evidence for each CCMP activity to support its conclusion in the validation report and statement. Except in cases where the validator chooses to examine all evidence.

The validator should use a risk-based process to identify the evidence that is collected for each GHG-related activity. The validator should use any validation activities or techniques to design the evidence collection plan, including field visits.

The validation plan and evidence collection plan should be approved by the team leader, especially when changes are generated in:

- The scope or timing of validation activities.
- Evidence collection procedures.
- The locations and sources of information for evidence collection.
- The identification during the validation process of new risks that could lead to material errors or non-conformities.

The auditor must perform the validation in accordance with the approved validation plan and evidence collection plan related to the CCMP activities related to:

8.3.3.1 Acknowledgement

The validator should determine whether stakeholders, if any, recognise the CCMP activity and whether it is appropriate for them. It should assess whether there are geographical or temporal restrictions specified by the stakeholders and whether these comply with the CCMP activity. It must also assess whether the CCMP activity is real, measurable, verifiable, and consistent through field visit(s), review of evidence collected, and evaluation of calculations used.

8.3.3.2 Property rights

The validator must assess whether the CCMP holder is entitled to claim GHG removals or GHG emission reductions expressed in the validation statement.

It should also review the ownership or property rights of the area or land covered by the CCMP, demonstrating the right to use it for the duration of the CCMP.

8.3.3.3 CCMP limits

The validator must determine whether the limits set by the CCMP holder are appropriate. To do this, the validator must assess the scope of the validation process, ensuring that it



includes all spatial and temporal limits, as well as all GHG emission sources and carbon pools.

The validator must identify all CCMP limits (including their owners) as well as their exact location, which the CCMP must present in shp (ESRI Shapefile) or kml (Keyhole Markup Language) format.

The validator must ensure that the spatial¹⁵ and temporary¹⁶ limits of the CCMP do not overlap in a way that is incompatible¹⁷ with other similar initiative(s) under Cercarbono or other standards or certification programmes, by analysing the evidence that the areas or facilities of the CCMP are rightfully and exclusively owned by the holder or that the developer has the proper authorisation. Additionally, the validator must check that such areas or facilities are not in national or foreign registry systems, that no concurrent benefits have been obtained from them contrary to the law, and that no multiple accounting is carried out to obtain additional benefits.

In case the validator finds spatial or temporal overlaps, he/she must communicate them directly to the client. This situation is only resolved if the client provides evidence of the spatial and temporary limits, including agreements, mandates, etc., which are duly formalised and presented.

8.3.3.4 Selection of the baseline scenario

The validator must assess whether the baseline scenario is the most appropriate, plausible, and complete scenario. To do so, the CCMP should:

- Establish whether the baseline scenario determined is recognised by stakeholders, where appropriate.
- Assess whether the baseline scenario is established using a credible, documented, and repeatable process.
- Assess whether the baseline scenario is appropriate for the proposed CCMP activity, in the period to which it refers.
- Evaluate the selection of the baseline scenario, including how the principle of conservatism, uncertainty, common practice and the operating environment affect its selection.
- Evaluate the designed operating conditions and activity levels associated with the methodology for quantifying GHG removals or GHG emission reductions used in the CCMP, to determine how accurate, complete, and conservative estimates will be produced.
- Implement the *Cercarbono's Tool to Demonstrate Additionality of Climate Change Mitigation Initiatives*, available at <u>www.cercarbono.com</u>, section: Documentation.

¹⁵ Specified by geodetic coordinates or polygons to delimit the geographical area(s) comprising the CCMP. ¹⁶ i.e., CCMP duration.

¹⁷ Incompatible overlap with respect to area, activities implemented and crediting period variables. The same variables considered in a REDD+ CCMP are used in this situation.

In a CCMP, the baseline scenario must be updated for renewing the crediting period, when re-validation is required or when new instances are added. In grouped projects, validation of the CCMP is not required for the addition of new instances, these are validated during verification events.

8.3.3.5 Quantification and monitoring methodologies

The validator should assess whether the selected quantification methodologies (see *Section* **5.1**) and associated measurements and monitoring are appropriate by evaluating whether they are accurate, reliable, and conservative, and whether they have been applied appropriately. In addition, it should review that ranges and operational conditions, or assumptions have been met for disclosure and material error purposes.

Quantification, measurement, and monitoring methodologies include calculations, estimations, modelling, mass balances and their associated direct and indirect measurements, among others.

The validator must also review the estimated values considered in the quantification of GHG removals or GHG emission reductions so that they meet future criteria and projections. This should consider the methodology used, the applicability of the assumptions and the quality of the data used in the estimation. The validator can make comparisons with own estimates to evaluate submitted estimates.

The validator should check whether the CCMP mentions and correctly uses the selected methodology(ies) or other technical tool(s), which is active, its latest version being implemented, or the use of a previous version being supported, considering its copyright or permissions of use (where applicable).

If any non-conformity is raised, the validator should request evidence to prove the effectiveness and the way of realisation of the parameters used in the quantification, measurement, monitoring methodology and in the estimated or calculated values.

8.3.3.6 Leakage

Depending on the selected methodology and where appropriate, the validator should assess that the CCMP activity has adequately addressed the management of any potential leakage.

8.3.3.7 Information and data control system

The validator should assess the GHG information management system and the procedures of the activity covered by the CCMP to determine whether it can rely on them during validation. To do so, the validator should:

- Identify all measured and monitored data and assess whether they correspond to the calculations, including measured and monitored data for the CCMP activity.

- Identify and confirm the acceptability of all additional information used in the results of GHG emission calculations, including, inter alia, GHG emission or removal factors, conversions, and global warming potentials.
- Assess whether there is planned, sufficient and appropriate record keeping linking the measurements to the report.
- Identify key points in the data management process that are at high risk of misreporting and assess data controls at key risk points.
- Identify responsibilities for data and the GHG information management system and assess whether segregation of duties has occurred and whether levels of responsibility are appropriate.
- Assess whether data collection and monitoring and operating frequencies are appropriate.
- Assess whether data backup and recovery systems are sufficiently reliable.
- Assess whether the content of the PDD and to whom it is distributed is appropriate.
- Assess whether the data control and information management system are transparent and complies with customer requirements.

The documentation to be assessed by the validator is first entered by general account users or developers on the EcoRegistry platform to ensure its availability.

8.3.4 CCMP calculations

The validator should confirm the calculations used in the CCMP by checking:

- The correct application of calculations (e.g., GHG emission or removal factors, default values, etc.).
- The correct application of the conversion of units of measurement and global warming potentials (using the updated information in the IPCC reports of these warming potentials).
- That the calculations have been carried out in accordance with the selected methodology and the evaluated criteria.

To confirm the GHG removals or GHG emission reductions proposed by the CCMP activity, the validator shall assess and compare the baseline and proposed project scenario, including the consistency of assumptions and limits over the crediting period and the lifetime of the CCMP.

8.3.5 Future estimates

If appropriate, the validator should assess the future estimates associated with the CCMP so that it can evaluate the proposed approach and assumptions inherent in the projection, the applicability of the scope of the projection to the proposed CCMP activity, and the sources of data and information used in the projection, including their appropriateness, completeness, accuracy, and reliability.

8.3.6 Uncertainty
The uncertainty of the measured results reflects the lack or accuracy of knowledge of the measurement value.

The CCMP shall quantify the deviation of the input parameters or data used and the results obtained, and thus identify, control, and avoid possible errors in the measurement processes that lead to uncertainty.

ISO/IEC Guide 98-3 establishes rules for evaluating and expressing the measurement uncertainty that can be considered. According to this guide, the sources of uncertainty that influence a measurement¹⁸ are:

- Incomplete definition of the measure.
- Imperfect realisation of the measurement definition.
- Non-representative sampling, the measured sample does not represent the defined measurement.
- Inadequate knowledge of the effects of environmental conditions on the measurement or imperfect measurement of environmental conditions.
- Personal bias in reading analogue instruments.
- Finite instrument resolution or discrimination threshold.
- Inaccurate values of measurement standards and reference materials.
- Inaccurate values of constants and other parameters (e.g., GHG emission or removal factors and activity data) obtained from external sources and used in data reduction algorithms.
- Approximations and assumptions built into measurement methods and procedures.
- Variations in repeat measurement observations under apparently identical conditions.

For the modification of values related to the quantification of GHG results, to reduce uncertainties, the rounding operation should be used correctly, minimising cumulative rounding errors, preferably using values indicated by observation and measurement, calculated to as many decimal places as possible; at least four decimal places are suggested, although the trend of all data should be observed to define the appropriate level. In line with the principle of conservatism, GHG emissions, GHG removals or GHG emission reductions generated in the baseline scenario should be rounded down, while GHG emissions, GHG removals, GHG emission reductions or leakage generated in the project scenario should be rounded up.

In the PDD and monitoring report, GHG emissions, GHG removals, GHG emission reductions and leakage (where applicable) should be reported in whole numbers, only some monitoring parameters, such as emission factors, calorific powers, among others, may be reported in decimals.

The validator should assess whether the uncertainty associated with the CCMP affects the disclosure or the validator's ability to reach a conclusion. For this, the validator should:

¹⁸ Sources that are not necessarily independent; some may be grouped together.



- Identify uncertainties that are larger than expected.
- Assess the effect of identified uncertainties on the CCMP.
- Determine the appropriate course of action for a given uncertainty.

In addition, the validator should identify assumptions with high potential for change and assess whether these changes generate a material error or discrepancy for the CCMP.

8.3.7 Evaluation of the CCMP

The validator should use the evidence gathered to assess the CCMP against the validation criteria outlined here. He/she should also assess, individually and as a whole, whether uncorrected errors are material to the CCMP, as well as the conformity with the requirements and, finally, re-evaluate the recognition of the CCMP.

8.3.8 Validation opinion

The validator must provide a validation opinion based on the evidence gathered during the validation process. The opinion to be provided by the validator can be of three types:

- **Positive (unmodified) opinion**: where it ensures that there is sufficient and appropriate evidence to support the estimates of GHG emissions and removals or GHG emission reductions in accordance with the requirements of the validation process.
- Modified opinion: where it is ensured that identified errors in estimating GHG emissions and removals or GHG emission reductions have been corrected in accordance with the validation process.
 - Where there is a deviation from the requirements of the criteria or deficiencies in the assumptions used to develop future estimates, the validator must decide what type of modification to the validation opinion is appropriate. In addition to materiality, the validator should consider: the extent to which the matter affects the usefulness of the validation statement; the extent to which the effects of the matter on the validation statement can be determined; whether the validation statement is, or could be understood to be, misleading even when read in conjunction with the validator's opinion.
 - A modified validation opinion together with the validation statement normally serves to adequately inform interested parties of any deficiencies or potential deficiencies in the statement.
- Negative opinion: where it is concluded that there is insufficient or inappropriate evidence to support a positive or modified opinion, or where criteria are not adequately applied to support estimates of GHG emissions and removals or GHG emission reductions and are not consistent with the validation process or where the effectiveness of controls cannot be determined.

The validation statement can be issued only when the validator has generated a positive or modified opinion.

8.3.9 Validation report

The validator must submit a validation report including as a minimum:

- An appropriate title.
- An addressee.
- The ownership and location of the CCMP.
- A disclaimer stating that the client is responsible for the preparation and submission of the CCMP PDD in accordance with the requirements of the validation process.
- The scope of the validation.
- The duration or lifetime of the CCMP and its justification.
- The accreditation period and its justification.
- A statement that the validator is responsible for expressing an opinion on the CCMP based on the validation.
- A description of the validation evidence gathering procedures used to assess the PDD.
- The description of the selected methodology(ies).
- The description of the baseline scenario.
- The projected GHG emissions and removals or GHG emission reductions in the project scenario during the project crediting period.
- The date and location of the field visit.
- A summary of the validation statement.
- The date of the report.
- The validation opinion.
- The name of the validator or validation team.
- The location and signature of the validator or validation representative.

Cercarbono has **Validation Report** and **Joint Validation and Verification Report** templates, depending on the sector and mitigation activity on which the CCMP is focused, available at <u>www.cercarbono.com</u>, section: Documentation.

8.3.10 Validation statement

The validation statement is the document issued by the VVB, which refers to the validation report and contains a unilateral representation that it has validated the compliance of the CCMP with the requirements of the validation process and issued a positive or modified opinion.

The validator must deposit the documentation for this stage with EcoRegistry. This should include the validation report, the audit or findings report, the validation statement and any other information considered important.

According to ISO/IEC 17029:2019, the validation statement shall include the following information:

- The name and logo of the VVB.

- The client's name and identification.
- The name of the CCMP, including the related activity (GHG removal or GHG emission reduction).
- A disclaimer stating that declared results are the responsibility of the client.
- Location or total area of the CCMP, where applicable.
- The sector in which the CCMP is implemented.
- An overview of the implementation in the validation process of the *ISO 14064* Standard and details of the version used.
- Relate that the VVB meets the accreditation criteria as set out in *ISO 14065* and detail the version used.
- An outline of the criteria under which the validation was assessed (methodology, tools, protocol, etc.).
- Identification of the criteria used by the VVB.
- A list of the documents audited.
- The level of assurance of the validation.
- The duration or lifetime of the CCMP (from day.month.year to day.month.year).
- The accreditation or renewal period granted (from day.month.year to day.month.year).
- The annual disaggregation of total GHG emissions and removals or total estimated GHG emission reductions during the CCMP crediting period.
- The annual disaggregation of the estimated or projected net GHG emissions and removals or net GHG emission reductions in the baseline and project scenarios during the crediting period and over the duration or lifetime of the CCMP, including, where applicable, the amounts allocated for the carbon buffer.
- The date of issuance of the declaration (day.month.year).
- The location and signature of the auditor or audit leader.

Cercarbono has *Validation Statement* and *Joint Validation and Verification Statement* templates, depending on the sector and mitigation activity on which the CCMP is focused, available at <u>www.cercarbono.com</u>, section: Documentation.

8.3.11 Adequate dissemination of the CCMP

The validator should assess how the validation statement has been adequately disclosed and should ensure that material disclosures occur. In doing so, the validator should assess whether the disclosure:

- It is accurate and complete.
- It is an accurate reflection of GHG activity.
- Contains unintended biases.
- Addresses the requirements and needs of stakeholders.

8.4 Verification

At this stage the CCMP requests the registration of its verification, based on the assessment of the monitoring of its implementation by a VVB. Following the assessment, a verification



report is produced. If the CCMP implementation complies with all the requirements of the verification process of this protocol, the selected methodology and the current standards or laws under which it is governed, a verification statement is issued; otherwise, corrective actions are requested for adjustment of the CCMP and subsequent review by the VVB.

During this stage, the CCMP appears on the EcoRegistry platform in the **Under Verification** status. This stage is approved by Cercarbono during the Certification stage.

Once the CCMP and the VVB upload the required information to the platform and Cercarbono starts the document review, the CCMP appears on the platform in the **Under certification** status.

Below are the most important elements covered by the verification process of a CCMP based on *ISO 14066:2011, ISO 14064-3:2019, ISO/IEC 17029:2019* and *ISO 14065:2020,* under which the VVB issues opinions in the verification report and the verification statement.

8.4.1 Verification plan

The verifier should develop a verification plan that addresses the prior actions in *Section* **8.3.1**, as well as evaluate or analyse:

- As established in the PDD.
- The validity of the baseline scenario.
- The sources of GHG emissions.
- Changes in GHG emissions, GHG emission reductions and carbon stocks in the carbon pools over a given period in the project scenario.
- Implementation of quantification methods and reporting of any changes.
- The sources of GHG information.
- The data reporting and monitoring system.
- Oversight of the CCMP reporting data management and supporting processes.
- The availability of evidence for the information supporting the PDD.
- The results of previous verifications, where applicable.
- The results of sensitivity or uncertainty analysis.
- The type of GHG.
- The monitoring plan, which sets out the number and frequency of verification events and their justification for earlier or later than planned.
- The monitoring methodology applied (i.e., direct measurement of GHG emissions or calculation of GHG emissions with indirect measurement of activities and calculation data).
- The monitoring report.
- The results of the validation report.
- Other relevant information, if applicable.

The range of time between verification events established by the CCMP can be between six months to five years, according to the accreditation period or economic capacity of the CCMP, information which is detailed in *Section 8.4.18*.

8.4.2 Risk assessment

The verifier should perform a risk assessment of the PDD to identify a misstatement or noncompliance with the criteria. The risk assessment should consider the results of the assessment of the material discrepancy and should consider:

- The probability of error in the PDD.
- The effect of GHG emission sources on the PDD.
- The probability of omitting a potentially significant GHG emission source.
- Presence of significant or unusual leakage not considered.
- The nature of the specific CCMP operations.
- The degree of complexity in determining the organisational or CCMP limit.
- Any changes from previous periods.
- The likelihood of non-compliance with applicable laws and regulations that may have a direct effect on the content of the PDD.
- Any significant economic or regulatory changes that may affect GHG emissions and their reporting.
- The selection, quality, and sources of GHG data.
- The level of detail of available documentation.
- The nature and complexity of quantification methods.
- The subjectivity in the quantification of GHG emissions.
- Any significant estimates and the data on which they are based.
- The characteristics of the reporting and data control system.
- Any controls used to monitor and report GHG data.
- The experience, skills, and training of personnel¹⁹.

Sources of information for risk assessment can be obtained by conducting site or area visits, or by performing high-level analysis procedures to determine other areas of risk which may include:

- Assessment of changes in GHG emissions.
- Assessment of changes in GHG emissions and removals or GHG emission reductions over time.
- Assessment of expected GHG emissions and removals or GHG emission reductions compared to those reported.

In the case of REDD+ projects, it should include the assessment of risks related to social and environmental safeguards for REDD+ projects.

¹⁹ In compliance with Standards *ISO/IEC 17029:2019* e *ISO 14065:2020*.

8.4.3 Types of risk

The following inherent, control and detection risks should be identified and assessed for the verification statement:

- For GHG emissions or GHG emission reductions: occurrence, completeness, accuracy, range of calculation dates and ranking.
- For GHG removals: existence, rights and obligations, completeness, range of calculation dates, accuracy, and allocation.

8.4.4 Evidence collection and verification execution plan

The verifier shall design a plan of activities for the collection of sufficient and appropriate evidence from each CCMP activity to determine whether the PDD conforms to the requirements of the verification process, which supports its conclusion in the verification report and verification statement, except in cases where the verifier chooses to examine all evidence.

The verifier should use a risk-based process to identify the evidence that is collected for each GHG-related activity and design and perform analysis procedures and tests for each type of GHG emission and removal or GHG emission reduction.

The verifier shall perform the verification in accordance with the verification plan and the evidence collection plan.

If the CCMP has made any changes to the PDD, because of requests for clarifications, misstatements and non-conformities, the verifier shall assess these changes.

The verification plan and evidence collection plan must be approved by the team leader, especially when changes are made to:

- The scope or timing of verification activities.
- Evidence collection procedures.
- The locations and sources of information for evidence collection.
- The identification during the verification process of new risks that could lead to inaccuracies or non-conformities.

The verifier must perform the verification in accordance with the proposed and approved verification plan against which he/she can collect evidence related to the CCMP activities carried out.

8.4.5 Data recording

The verifier shall collect and assess the existence of records of GHG removal data or GHG emission reductions set out in the monitoring report.



8.4.6 Aggregate GHG data and information

The verifier should collect evidence of the data aggregation process, including the agreement of the CCMP with the records made during the preparation of the PDD and related in the monitoring report.

8.4.7 Implementation of verification activities and techniques

8.4.7.1 Analytical tests

If conducting analytical testing, the verifier should consider the ability of the test to reduce or mitigate the identified risk, the reliability of the data to be analysed, and the likelihood that the test will identify misrepresentations.

If analytical testing identifies fluctuations or relationships that are inconsistent with other relevant information or that differ significantly from expectations, the verifier should investigate those differences by obtaining additional evidence and performing other evidence-gathering activities.

8.4.7.2 Control tests

The verifier, in collecting evidence, should test the operational effectiveness of the controls, if:

- Deviations are detected and assess whether the deviations affect the ability to rely on those controls and whether additional testing of the controls is necessary.
- Additional testing of controls is necessary and whether other types of evidence collection should be applied.
- Data characteristics permit the use of control testing, the verifier should collect evidence to establish the operating effectiveness of those controls.

8.4.7.3 Estimation tests

The verifier should assess whether the estimates or calculations presented in the monitoring report are appropriate and comply with the applicable criteria and methods, including whether they have been applied consistently in previous periods or have been modified in current periods.

If required, the verifier should assess the appropriateness of the estimation methodology used, the applicability of the assumptions in the estimate and the quality of the data used in the estimate.

The verifier should gather evidence of the operational effectiveness of the controls governing the development of the estimate.

The verifier may develop its own estimate, calculation, or range to evaluate the estimate or calculation established.

8.4.8 Sampling

If sampling is used, the verifier should consider the purpose of evidence collection and the characteristics of the population from which the sample is drawn, aiming for a statistically significant sample.

8.4.9 Visits to the CCMP site/area/facilities

8.4.9.1 Site, area or facility selection

Field audits or site/area/facility visits should be planned to gather the necessary information to reduce verification risks. These audits are carried out to evaluate, measure and corroborate on-site all aspects referenced in the CCMP, its supporting documentation, its GHG removal or GHG emission reduction calculations and other required information. They are normally carried out on-site to verify that they were carried out under the parameters required by the VVB and on the date assigned by the VVB²⁰.

In some cases, these field audits can be conducted remotely by VVBs, as detailed in the *Procedures of Cercarbono's Certification Programme* document, available at <u>www.cercarbono.com</u>, section: Documentation.

In the case of REDD+ projects developed in community-owned areas, including indigenous territories, field audits are mandatory.

For field audits, the verifier must identify the need to visit sites, areas, or facilities, including the number and location of these, considering:

- The results of the risk assessment and the efficiency of evidence gathering.
- The number and size of sites, areas or facilities associated with the CCMP.
- The diversity of activities at each site, area or installation that contribute to the verification statement.
- The nature and magnitude of GHG emissions at different sites, areas or facilities and their contribution to the verification statement.
- The complexity of quantifying the sources of GHG emissions generated at each relevant site, area, or installation.
- The degree of confidence in the management of the GHG data and reporting system.
- Any risks identified in the risk assessment that indicate the need to visit specific sites.
- The results of previous verifications or validations, if any.

8.4.9.2 Circumstances requiring a visit to the site, area or facility

The verifier must conduct a site, area or facility visit in any of the following circumstances:

²⁰ In joint validation and verification processes, the field audit can be carried out in parallel, making sure that it covers the requirements of both processes.

- An initial verification.
- A subsequent verification, for which the verifier has no direct knowledge of the activities and results of the previous verification.
- A verification where there has been a change of ownership of a site, area, or installation and where GHG emissions and removals and GHG emission reductions from the site, area or installation are used for the verification statement.
- Where misstatements are identified during verification, indicating the need to visit a site, area, or installation.
- There are unexplained changes in GHG emissions, GHG removals or GHG emission reductions since the verification statement.
- The addition of a site, area or installation required for the verification statement.
- Changes in the scope or limit of reporting.
- Significant changes in data management involving the specific site, area, or facility.

The verifier may determine that the above circumstances do not require a site, area or facility visit based on the results of the risk assessment and evidence collection plan and considering the results of any previous verification of the same site, area, or facility. If a verifier determines that a site, area, or facility visit is not necessary, the verifier should justify and document the decision.

8.4.9.3 Activities to be carried out during site, area or facility visits

The verifier should collect evidence at the site, area, or premises to assess, as determined by the risk assessment, on:

- Scope and limits of the site, area, or facility.
- Operations and activities relevant to GHG emission sources and carbon pools.
- Information and data control systems.
- Physical infrastructure.
- Equipment, such as measuring devices and instruments, to establish traceability of applicable calibration and monitoring information.
- Equipment types, assumptions and supporting calculations (e.g., verify that the manufacturer's information used as the basis for GHG emissions calculations matches the installed equipment).
- Processes and material flows that affect GHG emissions.
- Compliance with operational and data collection procedures.
- Sampling equipment and sampling methodologies.
- Monitoring practices against requirements established by the responsible party or specified in the requirements.
- Calculations and assumptions made to determine GHG data, emissions and, as appropriate, GHG removals or GHG emission reductions.
- Quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.



8.4.10 Evaluation of changes from previous periods

The verifier must determine whether changes from previous periods (or previous verification events) have been adequately disclosed by the client.

8.4.11 Ownership assessment

The verifier must assess whether the CCMP holder is entitled to claim GHG removals or GHG emission reductions expressed in the verification statement.

The verifier must also check the ownership or property rights of the area or land covered by the CCMP, demonstrating the right to use it during the monitored period.

8.4.12 Sistema de información y control de datos

The evaluation of the information and data control system depends on the results of the risk assessment.

Evidence gathering activities to evaluate the design and effectiveness of the information and data control system must consider:

- The selection and management of GHG data and information.
- The processes for collecting, processing and consolidating GHG data and information.
- The systems and processes that ensure the validity and accuracy of GHG data and information.
- The design and maintenance of the GHG information system.
- The systems, processes and personnel supporting the GHG information system, including data quality assurance activities.
- The results of maintenance and calibration of machinery, equipment, and instruments.
- The results of previous verifications.

The documentation assessed by the VVB is stored directly by the VVB in the registration platform to ensure its availability, fairness, and transparency.

8.4.13 Assessment of the status of the CCMP

The verifier should assess any changes in risks and material discrepancy thresholds that may have occurred during the verification. The verifier should assess whether the high-level analysis procedures applied remain representative and appropriate.

The verifier should determine whether the evidence collected is sufficient and appropriate to generate a conclusion. If the verifier considers it to be insufficient, the verifier may undertake additional activities to collect evidence. The verifier should also check for material errors or discrepancies.

8.4.14 Assessment of conformity with requirements

The verifier shall assess any non-conformity with the requirements of the verification process. In assessing conformity, the verifier shall consider the following:

- The scope of the CCMP implementation, including area(s), the installation of technology and measuring equipment.
- The operation of the CCMP.
- The monitoring plan and methodology, including requirements on criteria.
- Changes to the monitoring plan, installed equipment or baseline scenario.
- Conservative judgements that have a material effect on the verification statement.
- Validation results.
- Results of previous verification events.
- Evaluation of changes from previous periods.

The verifier must determine whether changes from prior periods that make the periods incomparable have been appropriately disclosed.

8.4.15 Verification opinion

The verifier must provide a verification opinion based on the evidence gathered during the verification process. The opinion that the verifier is required to provide can be of three types:

- Positive (unmodified) opinion: which ensures that there is sufficient and appropriate evidence to support the quantification of GHG removals or GHG emission reductions, that these meet the verification requirements, that the effectiveness of the controls has been assessed and that the verifier has confidence in them.
- **Modified opinion**: which ensures that identified errors have been corrected to support GHG removals or GHG emission reductions and are in line with the requirements of the verification process.
 - Where there is a deviation from the criteria requirements or a limitation in scope, the verifier must decide what type of modification to the verification opinion is appropriate. In addition to materiality, the verifier should consider: the extent to which the issue affects the usefulness of the verification statement; the extent to which the effects of the issue on the verification statement can be determined; whether the verification statement is, or could be understood to be, misleading even when read in conjunction with the verifier's opinion.
 - An amended verification opinion together with the verification statement normally serves to adequately inform interested parties of any deficiencies or potential deficiencies in the statement.

 Negative opinion: which concludes that there is insufficient or inappropriate evidence to support a positive or modified opinion, or where the criteria to support the quantification of GHG removals or GHG emission reductions are not adequately applied and are not consistent with the verification process.

The verification statement can be issued only when the verifier has generated a positive or modified opinion.

8.4.16 Verification report

The verifier must submit a verification report including as a minimum:

- An appropriate title.
- An addressee.
- A disclaimer stating that the client is responsible for the preparation and submission of the PDD of the CCMP in accordance with the requirements.
- The lifetime of the CCMP.
- The period of accreditation of the CCMP or its renewal when applicable (from day.month.year to day.month.year).
- The scope and period of the verification.
- The description of the selected methodology(ies).
- A list of the criteria under which the verification was assessed (methodology, tools, protocol, etc.).
- A statement that the verifier is responsible for expressing an opinion on the CCMP based on the verification.
- A description of the verification evidence gathering procedures used to assess the CCMP.
- GHG emissions and removals from the baseline scenario during the verification period.
- The annual GHG removals or GHG emission reductions that were calculated in the CCMP during the verification period and, where applicable, the amount allocated to the carbon buffer.
- The verification opinion.
- An outline of the criteria and requirements considered during the verification.
- A summary of the verification statement.
- The date of the verification report.
- The date and location of the field visit.
- The name of the verifier or verification team.
- The place and signature of the verifier or verification representative.

Cercarbono has *Verification Report* and *Joint Validation and Verification Report* templates, depending on the sector and mitigation activity on which the CCMP is focused, available at <u>www.cercarbono.com</u>, section: Documentation.

8.4.17 Verification statement

The verification statement is the document issued by the VVB, which refers to the verification report and contains a unilateral statement that it has verified the compliance of the CCMP with the requirements of the verification process and issued a positive or modified opinion. In this statement, the VVB shall have verified the annual disaggregation of GHG removals or GHG emission reductions achieved by the CCMP. Such disaggregation may have been done on a linear basis using the principle of conservatism or by modelling annual growth rates of the species used, especially for CCMPs in the land use sector.

The verifier must deposit the documentation for this step in EcoRegistry, which should include the verification report, the audit or findings report, the verification statement and any other information deemed important.

According to *ISO/IEC 17029:2019*, the verification statement should include the following information:

- VVB name and logo.
- Client name and identification.
- Name of the CCMP.
- Related activity (GHG removal or GHG emission reduction).
- Sector in which the CCMP is carried out.
- A statement that the PDD is the responsibility of the client.
- Location and total area of the CCMP, where applicable.
- An overview of the facility or total area audited.
- An outline of the implementation in the verification process of *ISO 14064* and details of the version used.
- A statement that the VVB meets the accreditation criteria as set out in *ISO 14065* and details of the version used.
- An outline of the criteria agreed between the client and the VVB under which the verification was assessed.
- An outline of the criteria used by the VVB to verify the information.
- Where future predictions are included, an indication that the actual outcome may differ from the estimate because the assumptions on which the estimate is based may change.
- A list of the documents audited.
- The level of assurance of the verification.
- The total duration or lifetime of the CCMP (from day.month.year to day.month.year).
- The accreditation period of the CCMP or its renewal, where applicable (from day.month.year to day.month.year).
- The total GHG removals or total GHG emission reductions estimated in the CCMP crediting period.

- The annual disaggregation of the net GHG removals or net GHG emission reductions quantified in the baseline and project scenarios for the audited verification period, including, where applicable, the amounts allocated for the carbon buffer. Rounded values may be provided.
- A statement on the destination of the carbon credits.
- The signature of the auditor or audit leader.

Cercarbono has *Verification Statement* and *Joint Validation and Verification Statement* templates, depending on the sector and mitigation activity on which the CCMP is focused, available at <u>www.cercarbono.com</u>, section: Documentation.

8.4.18 Timing of verification events

CCMPs may conduct verifications (depending on the type of programme or project, mitigation results achieved and developer preferences) at least every six months and at most every five years.

If a CCMP has not performed verifications for four years and nine months, or if its accreditation period is about to expire, it receives an alert from our programme indicating the need for verification.

If for some reason the CCMP considers that it will not perform such a verification within the missing period, it will have a grace period of one year, provided it notifies the Cercarbono programme of the expected delay with justification, up to two months after five years from the last verification or, in the case of the first verification, from the start of the CCMP.

If the notification and justification for the delay is not received and the CCMP subsequently wishes to carry out a verification with a delay of between one and two years, it must make a formal notification to our programme, again justifying the delay and providing evidence of the uninterrupted development of the monitoring plan.

The CCMP that has not notified the Cercarbono programme of expected delays in verifications or justified such delays, or in any case do not carry out verifications until two years after the maximum allowed period between verifications, must carry out a revalidation justifying the absence of verifications and lose the individual buffer accumulated in the previous verifications. If no verification events were carried out in the accreditation period granted, the accreditation period cannot be renewed; in this case, the CCMP can apply as a new programme or project considering the changes that have been generated around the baseline scenario and other important elements implemented by the CCMP; in addition, it must comply with all the requirements set out in the validation and verification processes.



8.5 Joint validation and verification

8.5.1 VVB requests

The VVB must report requests for clarifications, misstatements, or non-conformities to the CCMP as soon as possible and report intentional errors or non-compliance with governing laws or regulations.

If the CCMP holder fails to respond adequately within a maximum period of six months, the VVB issues a negative validation or verification opinion supporting its withdrawal from the process. Similarly, if the VVB determines that there is insufficient information to support the validation or verification statement, it must request the missing information. If such information is not provided, the process cannot continue.

8.5.2 List of VVB information

The VVB must keep the following records:

- Terms of engagement.
- Validation and verification plan.
- Evidence collection plan.
- Evidence collection.
- Requests for clarifications, corrections or non-conformities arising from the validation and verification, and conclusions reached.
- Communication with the client on important requests.
- Supporting records or documentation collected during audits and field visits.
- Conclusions reached and opinions of the validator and verifier.

Documentation of CCMP validation and verifications remains available on the EcoRegistry platform for a minimum period of ten years.

8.5.3 Collection of evidence

VVBs in charge of validation and verification processes should use one or more of the following collection activities and techniques:

- Remark.
- Consultation.
- Analytical tests.
- Confirmation.
- Recalculation.
- Examination.
- Tracebacks.
- Control tests.
- Sampling.
- Estimation.



- Cross-checking.
- Reconciliation.

If the VVB determines that there is insufficient information to support the validation or verification statement, it should request additional information from the client. If sufficient information cannot be obtained, the validator or verifier shall not proceed further.

8.5.4 Facts discovered after validation or verification

The VVB should obtain appropriate and sufficient evidence and identify relevant information up to the date of the validation and verification opinion. If facts or latest information that could materially affect the validation and verification opinion are discovered after this date, the VVB should take appropriate action, including communicating the matter as soon as possible to the CCMP. The VVB may also communicate to other interested parties the fact that the confidence of the original opinion may now be compromised given the discovered facts or latest information.

If there is a material adjustment that needs to be made to the GHG statement, the validator or verifier should communicate the need for the adjustment to the responsible party.

If, in the judgement of the validator or verifier, the responsible party does not respond appropriately within a reasonable period, the validator or verifier must inform the client, if different from the responsible party. If, in the opinion of the validator or verifier, the client does not respond appropriately within a reasonable time, the validator or verifier should (a) issue a modified validation or verification opinion or (b) withdraw the validation or verification.

The validator or verifier must communicate non-material misstatements to the responsible party.

If the facts are discovered after carbon credits have been issued, Cercarbono will seek to compensate for the integrity of those credits in future verifications of the same CCMP or, if this is not possible, by relying on the Cercarbono pooled carbon buffer.

8.6 Certification

Once the CCMP and the VVB upload the required information to the platform and Cercarbono starts the document review, the certification stage starts immediately and the technical director or the assigned expert reviews the verification documents (or validation and verification documents if it is a joint process) and the compliance with the corresponding requirements. If missing elements or elements that need to be corrected or expanded are found, requests for changes to the platform can be made and must be addressed by the VVB or the CCMP developer.

Once compliance with the requirements has been reviewed, a certification report is generated. EcoRegistry then generates the registration and issuance of the carbon credits obtained from the verification.

During this stage, the CCMP appears on the EcoRegistry platform in the **In certification** status.

Once the credits are issued, the CCMP becomes **Active**, where it remains until a new verification process is initiated or until it is de-registered due to **cancellation**, **withdrawal**, or **abandonment**, in which case the CCMP remains permanently in the **Cancelled**, **Withdrawn** or **Abandoned** status, respectively.

The duration of the Cercarbono voluntary carbon certification process varies according to the progress of the validation and verification processes. If both stages are completed, the process takes a maximum of fifteen working days.

If a CCMP is validated, the time in the registration process depends on the users in charge of the progress of the CCMP in each stage, if EcoRegistry does not request missing or additional information or documentation from the holder, the developer or the VVB; otherwise, they must incorporate the requested information or documentation, which immediately resumes the process.

If a CCMP is verified, the Carboncer emission certification and registration process has a maximum duration of ten working days, if no (missing or additional) information or documentation is requested by the certifier. If so, the process duration is paused until the CCMP incorporates the requested information or documentation, whereupon the excess duration of the process resumes immediately.

The costs associated with the Cercarbono voluntary carbon certification process depend on the specific conditions of the CCMP and the service requested. This information can be requested by contacting directly <u>info@cercarbono.com</u>.

8.7 Facts discovered after certification

As part of the ongoing review process, Cercarbono's voluntary carbon certification programme monitors certified CCMPs, which can generate, if necessary, notifications on postcertification findings, which are transmitted directly to the VVB and in some cases to the programme or project holders to find justifications or request formal changes to the CCMPs.



9 Registry platform

Cercarbono uses EcoRegistry²¹ as its CCMP registry platform. EcoRegistry is a platform based on blockchain technology that ensures transparency in carbon market accounting and security and traceability in the management of information related to mitigation initiatives.

For more information on the features and use of the platform, see the *EcoRegistry's Registry Platform User's Manual*, available at <u>www.ecoregistry.io/</u>.

Regarding the Cercarbono certification process, EcoRegistry's exclusive role is to provide the Cercarbono registration platform service. EcoRegistry has no influence on the decisions and results of the certification process.

This platform is responsible for storing and managing the user accounts, the information provided by the users, the communications between users, storing the results of the different stages of the certification cycle and the information related to the carbon credits and buffers issued.

²¹ www.ecoregistry.io/.



10 Migration of CCMP from other standards or certification programmes

The holder or developer of a CCMP seeking to generate and certify carbon credits under the Cercarbono programme has two options to achieve this:

- Propose and develop a CCMP from its formulation with Cercarbono.
- Migrate an existing CCMP from other standards or certification schemes to Cercarbono's voluntary carbon certification scheme (See *Figure 4*).

In the first option, the CCMP should follow the steps described in *Section 6*. For the second option, the CCMP, in addition to the section, should consider the decision tree presented in *Figure 4*.

The requirements and procedures for the migration of CCMP are detailed in the document *Procedures of Cercarbono's Certification Programme*, available at <u>www.cercarbono.com</u>, section: Documentation.



Figure 4. Migration of CCMPs from other standards or certification schemes to Cercarbono.





11 Cercarbono's official reports

11.1 Reporting aligned to international commitments

Cercarbono will generate reports on credits issued by the certification programme that facilitate and support the reporting of Nationally Determined Contributions (NDCs) and corresponding adjustments of Internationally Transferred Mitigation Outcomes (ITMOs) under the cooperative approach for use towards an NDC, in accordance with Article 6.

In that sense, Cercarbono is developing a tool aligned with the allocation of serials for each tCO₂e removed or reduced by certified CCMPs, under which these reports will be generated to provide information on the carbon credits emitted by:

- Country.
- Sector.
- Type of mitigation activity.
- Year of generation.
- Pools, where applicable.
- REDD+ activity, where applicable.

For REDD+ projects, the serials are disaggregated by REDD+ activities and pools, which will allow linking these with the activities and pools considered in the FRELs established by each country, thus providing clarity on the effective use of ITMO in the NDCs.

The reports will also provide information on the commercialisation of credits issued by Cercarbono; this information is stored in the programme's registry to prevent double counting and promote transparency.

Each country will be able to request this report from Cercarbono to assist in the preparation of the Biennial Transparency Report (BTR), which countries must start submitting by 31 December 2024 and every two years thereafter. The RBT is expected to track the progress made by each country in complying with the NDCs.

Although the global voluntary carbon market is unclear about the corresponding adjustments to be made by each country (where the project is developed and the country that purchases the credits), Cercarbono seeks to establish a way to manage the information on the credits issued and demonstrate that it is possible to be environmentally upright in the voluntary carbon markets through this tool.

The tool will allow the generation of an annual report of the units issued, by country, according to their status of declaration of the intention not to double-count by their host country.

It also plans to establish procedures to review, for each relevant host country, periodically at the time of submitting its Biennial Transparency Report, the consistency between what



is reported by the country in terms of corresponding adjustments and the units issued by Cercarbono for that country.

Cercarbono will define mechanisms to compensate, replace or otherwise reconcile mitigation subject to double-claiming by a host government.

11.2 Annual report

Cercarbono generates an annual report on its performance during the year prior to the date it is issued. It provides summary information to clients and CCMP stakeholders on the types of mitigation activities included by sector, the status of the registry, geographical distribution, certification events carried out, carbon credits (issued, retired and available) and the carbon buffer. It also includes financial information on the standard and updates or new developments in its documentary output. This report is available at <u>www.cercarbono.com</u>, section: Documentation.

12 Validity and transitional regimes

12.1 Methodologies

As Cercarbono's certification programme allows the use of methodologies available from other standards or certification programmes (if they are free to use or have the necessary authorisation), a transition regime between the methodology initially used and the current methodology must be considered, depending on the level of progress of the CCMP throughout the project cycle defined by Cercarbono:

- If the CCMP is **Under formulation** or **Under validation** for a period of no more than nine months, the methodology in force when its formulation started can be used; after this period, the most recent version must be used.
- If the CCMP is **Under verification** or **Under certification**, it can use the methodology in force when it started its verification.
- CCMPs that migrate from other standards or programmes and use non-CDM methodologies must use the most recent version of the Cercarbono methodology, regardless of the stage of entry.
- CCMPs registered in Cercarbono that still have an accreditation period but were validated under a methodology external to Cercarbono that is no longer in force, may use a methodology approved by Cercarbono that covers the scope of the proposed project activities or, if required, request methodological deviations, considering what is established in *Section 5.4* and in the document *Cercarbono's Certification Programme Procedures*, available at www.cercarbono.com, section: Documentation.
- In the case of CCMPs renewing their accreditation period whose applied methodology is no longer in force, they shall adjust their design and documentation to the current version.

12.2 ISO Standards

According to *IAF Resolution 2019-19* on transition arrangements for *ISO 14065:2020*, the transition regime for its implementation should be three years from its publication date (December 2020). In this regard the VVBs should:

- Be ready to carry out a transitional assessment against the new version of *ISO* 14065:2020 within twelve months from the date of publication.
- Any accreditation under the new version of *ISO 14065* requires accreditation to *ISO/IEC 17029:2019*.
- Where national or local regulations require their validation and verification processes to be accredited to *ISO 14065:2013* and have not been amended to refer to the new version, the use of the previous ISO may be extended only for the three years of transition granted (December 2023).



Therefore, Cercarbono's international voluntary carbon certification programme establishes the following transition regime for the implementation of the new versions of *ISO/IEC 17029:2019* and *ISO:14065:2020*:

- Accredited VVBs must submit support of their transition programme to the new version of the standard, including the requirements defined in *ISO/IEC 17029:2019*.
- VVBs that do not demonstrate compliance with *ISO/IEC 17029:2019* and *ISO 14065:2020* after December 2023 cannot operate under Cercarbono, unless national or local regulations support the use of *ISO 14065:2013* and have not been amended to refer to its new version.



13 References

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14 Document history

| Version | Date | Comments or changes |
|---------|------------|---|
| 1.0 | 23.09.2019 | Initial version of the protocol in public consultation from |
| | | 23.09.2019 to 07.10.2019. |
| 1.1 | 30.10.2019 | Version with adjustments and changes generated after |
| | | the public consultation. |
| 2.0 | 10.03.2020 | Version for public consultation integrating new defini- |
| | | tions and programme/project activities from the energy, |
| | | industry, transport, fugitive emissions and forestry sec- |
| | | tors. Version 2.0. Public consultation held from |
| | | 10.03.2020 to 30.03.2020. |
| 2.1 | 13.04.2020 | Version with adjustments and changes generated after |
| | | the second public consultation. |
| 3.0 | 03.08.2021 | Version for public consultation from 03.08.2021 to |
| | | 03.09.2021. |
| 3.1 | 02.11.2021 | Version with adjustments and changes generated after |
| | | the public consultation. |
| 4.0 | 22.06.2022 | Version for public consultation from 22.06.2022 to |
| | | 21.07.2022. New ISO Standards, sectoral scopes, scope of |
| | | activities considered in the protocol and numerous minor |
| | | changes are updated and added. |
| 4.1 | 29.07.2022 | Version with adjustments and changes generated after |
| | | the second public consultation. |

