

No one should be left behind

# Cercarbono's Biodiversity Certification Programme Protocol







## Cercarbono's Biodiversity Certification Programme Protocol

Biodiversity: no one should be left behind.



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## Acronyms and abbreviations

| BCP<br>CBCP<br>CBCP-IEP | Biodiversity Crediting Project<br>Cercarbono Biodiversity Certification Programme<br>Cercarbono Biodiversity Certification Programme Independent Ex-<br>perts Panel |
|-------------------------|---|
| EbA                     | Ecosystem-based Adaptation  |
| EICAT                   | Environmental Impact Classification for Alien Taxa  |
| ICCA                    | Indigenous Peoples' and Community Conservation Areas  |
| IEP                     | Independent Experts Panel   |
| IPBES                   | Intergovernmental Science-Policy Platform on Biodiversity and   |
|                         | Ecosystem Services  |
| IUCN                    | International Union for Conservation of Nature  |
| iVBC                    | Innovation Voluntary Biodiversity Credit  |
| NbS                     | Nature-based Solutions  |
| NBSAP                   | National Biodiversity Strategy and Action Plan  |
| OECM                    | Other Effective Area-Based Conservation Measures  |
| PADDD                   | Preventing protected area downgrading, downsizing, and deregula-<br>tion  |
| PMP                     | Project Management Plan   |
| ROAM                    | Restoration Opportunities Assessment Methodology  |
| VBC                     | Voluntary Biodiversity Credit. The biodiversity certification unit of Cercarbono  |





## **Terms and definitions**

Terms and definitions guiding the understanding of these procedures have been deposited in the document *Terms and Definitions of the Cercarbono Biodiversity Certification Programme*, available at <u>www.cercarbono.com</u>.



## Foreword

Cercarbono has developed this document as a general guideline governing its Voluntary Biodiversity Certification Programme. This document has been endorsed by the Cercarbono Board of Directors and its Chief Executive Officer.

Our programme aims to catalyse a collective commitment from all stakeholders to sustainable biodiversity conservation practices. We believe that collaboratively acknowledging and incentivising positive actions, at scales small and large, can create scalable and lasting impacts for global biodiversity priorities.

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A draft of this document (Version 1.0) 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 (1.1) incorporates the relevant changes suggested by the participants in the public consultation and 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 complement and strengthen this document.





## **1** Programme objective

Cercarbono Biodiversity Certification Programme (CBCP) aims to enable credible quantification, verification, and certification of positive biodiversity outcomes from biodiversity conservation activities<sup>1</sup>. By providing a robust set of criteria and requirements for certifying biodiversity net gains, the programme aims to unlock new sources of finance for pressing on-ground actions worldwide. Methodologically sound biodiversity crediting that is transparently certified can appropriately channel investment from public climate funds, corporations, and financial institutions to projects delivering lasting ecosystem service benefits and contributing to global biodiversity goals.

This protocol specifies the accreditation requirements for issuing Voluntary Biodiversity Credits (VBCs) under CBCP to Biodiversity Crediting Projects (BCPs).

## **2** Conceptual framework

Both the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and the Convention on Biological Diversity (CBD) have emphasized the urgency for actions to conserve biodiversity. They have drawn attention to the critical state of global biodiversity, highlighting the urgent and coordinated efforts required to combat not only the ongoing loss of species and ecosystems but also the interdependent synergies with climate change and land degradation.

While carbon markets and the emerging biodiversity markets have addressed the need for robust and credible mechanisms to ensure that credits accurately represent the environmental benefits they claim to deliver, building a robust voluntary carbon market capable of meeting this desire has taken decades and significant efforts of regulatory and methodological developments. The biodiversity market is even more complex than the carbon market, given the lack of a standard unit (such as the ton CO<sub>2</sub>e of the carbon markets) and the profound complexity and diversity of genetics, species, and ecosystems.

Critical issues in the biodiversity market, such as the conservation of pollinators, wild crop varieties, genetics of domestic animal species, reintroduction of endangered species, and conservation of aquatic flora and fauna, must not be overlooked. Establishing a standard unit of measurement and upholding the same level of rigor demanded in carbon markets is essential to address potential negative impacts arising from poor biodiversity management.

This protocol establishes a certification framework for biodiversity credits with a focus on expeditiously implementing biodiversity projects. Its main goal is to offer precise guidelines on procedures, methodologies, and metrics for incorporating a diverse range of activities related to biodiversity conservation. The protocol maintains a flexible

<sup>&</sup>lt;sup>1</sup> According to the definitions outlined in the Convention on Biological Diversity, conservation refers to the conservation of ecosystems and natural habitats, the maintenance and restoration of viable species populations within their native environments, and, for domesticated and cultivated species, within the environments where their distinct characteristics have developed. It also involves the sustainable management of biological diversity. Additionally, conservation extends to the protection of components of biological diversity outside their natural habitats through ex situ conservation measures.





approach that avoids being overly prescriptive or regulatory, aiming to bolster the implementation of biodiversity initiatives and enhance the health and resilience of ecosystems.

Also, it outlines a comprehensive framework for action that encompasses various types of interventions, such as climate change adaptation, and biodiversity conservation (e.g., preservation, maintenance, restoration, sustainable management, etc.). It addresses biodiversity at three levels – genetic, species, and ecosystems – and includes four ecosystem categories: terrestrial, freshwater, wetland, and marine. Additionally, it considers social and heritage contexts, including indigenous peoples and local communities, World Heritage sites, and local heritage. The framework also emphasizes the importance of aligning BCPs with the Sustainable Development Goals (SDGs) and the Targets set out in the Kunming-Montreal Global Biodiversity Framework.

Developing a crediting system that allows for a fair comparison of diverse biodiversityrelated initiatives poses a significant challenge. It is crucial to ensure that all activities, including those that are not easily quantifiable using traditional metrics, such as ex-situ conservation of genetic resources, are not overlooked in the program. This inclusivity is essential to effectively address the ongoing biodiversity crisis.

This protocol encompasses a diverse array of activities related to biodiversity conservation. However, when the specific credit generation metric is not defined, projects could proactively propose methodologies for approval to address this gap within the programme.

## **3** Scope and eligible activities

The CBCP is a globally applicable voluntary certification program for biodiversity credits, designed for both area-based and non-area-based activities, suitable for implementation by individuals, community-based organizations, Non-Governmental Organizations (NGOs), government bodies, and private firms.

To effectively plan and implement a biodiversity project, it is essential to identify the core activity from the list of CBCP-eligible activities provided in *Table 1*. Additionally, the project may include additional eligible activities that align with CBCP certification guidelines. For specific definitions, please refer to the accompanying *Terms and definitions* document.

While many eligible activities are area-based, it is important to recognize that activities such as genetic conservation, species conservation, and water quality improvement may not fall under this category. Acknowledging the importance of the landscape scale in restoration efforts is crucial for creating functional landscapes that promote biodiversity.

The classification of activities is vital as the size and scope of the geographical area play a significant role in determining the quantification of biodiversity credits. Despite the challenges in establishing a consistent and comparable credit unit for both area-based and non-area-based activities, it is imperative not to disregard them given the urgent need for biodiversity conservation.





#### **Table 1**. Eligible conservation activities under the CBCP.

| ID          | Eligible activity                 | Servation activities under the CBCP.  | Т | Μ | F | W          | U                  | AB | NAB |
|-------------|-----------------------------------|---|---|---|---|------------|--------------------|----|-----|
| EA01        | Acquisition and                   | - Establishment and designation of previously unpro-  |   |   |   |            |                    |    |     |
|             | formalisation of                  | tected natural areas as formal protected areas, includ-   |   |   |   |            |                    |    |     |
|             | other effective                   | ing OECMs and Indigenous or Community-Owned Ar-   |   |   |   |            |                    |    |     |
|             | area-based conser-                | eas (ICCAs).  | x | X |   | Х          |                    | Х  |     |
|             | vation measures                   | *To be considered formally established protected areas,   |   |   |   |            |                    |    |     |
|             | (OECM) status*                    | they must be listed in the National Register of Protected   |   |   |   |            |                    |    |     |
|             |                                   | Areas and the Protected Planet database.  |   |   |   |            |                    |    |     |
| EA02        | Agrobiodiversity                  | - Biodiversity conservation activities within their own   |   |   |   |            |                    |    |     |
|             | enhancement                       | operations or supply chains. This category can in-  |   |   |   |            |                    |    |     |
|             |                                   | clude:  | X |   |   |            |                    | Х  | X   |
|             |                                   | Conservation of pollinators.  |   |   |   |            |                    |    |     |
|             |                                   | Regenerative agriculture.   |   |   |   |            |                    |    |     |
| EA03        | Collection and con-               | - Gathering and conserving priority wild plant species  |   |   |   |            |                    |    |     |
|             | servation of crop                 | closely related to cultivated crops.  | X |   |   |            |                    |    | X   |
|             | wild relatives                    |   |   |   |   |            |                    |    |     |
| EA04        | Connectivity en-                  | - The establishment and restoration of ecological corri-  |   |   |   |            |                    |    |     |
|             | hancement                         | dors and pathways are essential for facilitating the  |   |   |   |            |                    |    |     |
|             |                                   | movement and exchange of species, genetic material,   |   |   |   |            |                    |    |     |
|             |                                   | and freshwater among fragmented natural habitats.   | X |   | x | Х          |                    | х  |     |
|             |                                   | This involves the creation of wildlife crossings and the  | Λ |   |   | Λ          |                    | Λ  |     |
|             |                                   | preservation or rehabilitation of connectivity along  |   |   |   |            |                    |    |     |
|             |                                   | waterways to promote the connectivity within mixed landscapes and support free-flowing river systems. |   |   |   |            |                    |    |     |
|             |                                   |   |   |   |   |            |                    |    |     |
| EA05        | Conservation of                   | - Actions to prevent the loss of genetic diversity of pri-  | x |   |   |            |                    |    | X   |
|             | livestock genetics                | ority domesticated animal species and breeds.   | Λ |   |   |            |                    |    |     |
| EA06        |                                   | - Ecosystem-based Adaptation (EbA) initiatives de-  |   |   |   |            |                    |    |     |
|             | tion to climate                   | signed in the framework of the International Union for  |   |   |   |            |                    |    |     |
|             | change                            | Conservation of Nature (IUCN) EbA Standard. The ini-  | X | X | X | Х          | Х                  | Х  |     |
|             |                                   | tiative must be based on an ecosystem vulnerability assessment.                                       |   |   |   |            |                    |    |     |
| EA07        | Ecosystem conser-                 | - Sustainable management and protection of ecosys-  |   |   |   |            |                    |    |     |
| LAUT        | vation                            | tems.   |   |   |   |            |                    |    |     |
|             |                                   | - Enhanced management of wildlife.  |   |   |   |            |                    |    |     |
|             |                                   | - Collective Action to Biodiversity Conservation, accord-   |   |   |   |            |                    |    |     |
|             |                                   | ing to the CDB (UNEP/CBD/COP/12/INF/7,  | X | X | X | Х          |                    | Х  | X   |
|             |                                   | 26.09.2014) conceptual framework.   |   |   |   |            |                    |    |     |
|             |                                   | - Protection and maintenance of natural ecosystems in   |   |   |   |            |                    |    |     |
|             |                                   | their current state, minimising human-induced   |   |   |   |            |                    |    |     |
| <b>DAAC</b> | Para ata a                        | changes <sup>2</sup> .  |   |   |   |            |                    |    |     |
| EA08        |                                   | - Recovery of ecosystems with or without connectivity   |   |   |   |            |                    |    |     |
|             | ery and restoration               | features.<br>- Habitat rehabilitation.  |   |   |   | <b>1</b> 7 |                    |    |     |
|             |                                   | - Reforestation with native species.  | X | X | X | Х          |                    | Х  |     |
|             |                                   | <ul> <li>Promotion of natural regeneration.</li> </ul>  |   |   |   |            |                    |    |     |
| E100        | Ex city anagies corr              |   |   |   |   |            |                    |    |     |
| EA09        | Ex-situ species con-<br>servation | <ul> <li>Captive breeding programmes.</li> <li>Seed banks.</li> </ul>                                 | x | X | x | Х          | x                  |    | X   |
|             | 5C1 VALIUII                       | <ul> <li>Other methods to safeguard species' genetic diversity.</li> </ul>                            |   |   |   | Λ          | Λ                  |    | Λ   |
| EA10        | Human-Wildlife                    | <ul> <li>Active work to mitigate human-wildlife conflict or en-</li> </ul>                            |   |   |   |            | $\left  - \right $ |    |     |
|             | conflict mitigation               | hance human-wildlife coexistence.   | X | X | X | Х          | Х                  | Х  |     |
|             | connet mugation                   | nunce numun whume coexistence.  |   |   |   |            |                    |    | L   |

<sup>&</sup>lt;sup>2</sup> If ancestral communities are inhabiting the ecosystem, the project cannot alter the livelihoods of their inhabitants nor increase extraction of resources or products from the project area.





| ID              | Eligible activity   | Scope   | Т | Μ | F | W | U | AB | NAB |
|-----------------|---|---|---|---|---|---|---|----|-----|
| EA11            | Inclusion of pro-<br>tected areas in the<br>IUCN Green List<br>Standard   | - Achievement of the 'Green List' status under the IUCN<br>Green List Standard. Inclusion in the Green List indi-<br>cates that a protected area is effectively managed and<br>contributes to biodiversity conservation.  | x | x | x | X |   | x  |     |
| EA12            | Reducing legal<br>downgrading and<br>derecognition, and<br>other threats to the<br>conservation of of-<br>ficial Protected Ar-<br>eas | <ul> <li>Preventing protected area legal downgrading and derecognition from officially designated protected areas.</li> <li>Address other threats that endanger the conservation and integrity of official protected areas.</li> </ul>  | x | x |   | X | X | x  |     |
| EA13            | Regenerative aqua-<br>culture   | <ul> <li>Improving water quality, habitat disruption and increasing biodiversity.</li> <li>Incorporation of sustainable farming practices that reduce environmental impacts (responsible feed sourcing, efficient water use, and waste management).</li> </ul>  |   | x | x | x |   | X  | X   |
| EA14            | Species adaptation<br>to climate change   | <ul> <li>Species translocation.</li> <li>Assisted reproduction.</li> <li>Planting resilient varieties.</li> <li>Promoting genetic diversity.</li> <li>Applies to natural ecosystems, not to cropland. The initiative must be based on a species vulnerability assessment.</li> </ul>  | X | X | x | X | X | X  | x   |
| EA15            | Species in situ con-<br>servation <sup>3</sup>  | <ul> <li>Conservation of species in their natural habitats<br/>through their protection and management in their<br/>natural habitat.</li> <li>Ensuring the survival and continuation of individual<br/>threatened or endangered species, according to the<br/>IUCN Red List of Threatened Species: Extinct in the<br/>Wild (EW), Critically Endangered (CR), Endangered<br/>(EN), Vulnerable (VU), and Near Threatened (NT).</li> </ul>                                       | X | X | x | X |   | X  |     |
| EA16            | Species restoration   | <ul> <li>Reintroducing Extinct in the Wild (EW), Critically En-<br/>dangered (CR), Endangered (EN), Vulnerable (VU),<br/>and Near Threatened (NT)* species into their former<br/>habitat, while also considering the inclusion of key<br/>habitat-forming species.</li> </ul>   | x | x | x | X |   | X  |     |
| EA17            | Urban biodiversity  | <ul> <li>*According to the IUCN Red List of Threatened Species.</li> <li>Enhancing urban biodiversity by implementing measures such as increasing biodiversity in urban spaces.</li> <li>Improving biodiversity management practices.</li> <li>Enhancing connectivity within urban environments.</li> <li>This includes considering indicators of biodiversity change in cities and addressing potential negative impacts (disservices) of species in urban areas.</li> </ul> | X |   | x | X | x | X  | X   |
| T: Tei<br>M: Ma | rrestrial<br>arine  | U: Urban<br>AB: Area-based  |   |   |   |   |   |    |     |
| F: Fre          | etland  | NAB: Non-area-based   |   |   |   |   |   |    |     |

W: Wetland

<sup>&</sup>lt;sup>3</sup> In the case of in-situ species preservation projects, if ancestral communities are inhabiting the ecosystem, the project cannot alter the livelihoods of their inhabitants nor increase the extraction of resources or products from the project area.





To address this challenge, the CBCP allows for innovative solutions to be proposed during the Innovation Phase (refer to *Section 4*) to generate biodiversity credits for both area-based and non-area-based activities.

The current iteration of the CBCP provides a method for calculating biodiversity credits specifically for area-based activities. However, it also encourages non-area-based projects to develop a coherent and comparable method for credit calculation. Detailed information on this process can be found in *Sections 8* and *16.4* of the programme guide-lines.

## 3.1 Detailed conditions for specific activities

## **3.1.1** Adaptation to climate change

Projects aimed at the adaptation of ecosystems to climate change must meet the following requirements:

• The core activity of the project should be focused on climate change adaptation, utilizing the IUCN Nature-based Solution (NbS) Standard and an EbA approach.

## **3.1.2** Agrobiodiversity

Projects aimed at enhancing agrobiodiversity must meet the following requirements:

- The initiative should focus on increasing agricultural biodiversity, including crops, livestock, pollinators, and associated ecosystems.
- Priority species listed in FAO's Domestic Animal Diversity Information System or the Crop Trust's Crop Wild Relatives Global Portal should be included in the project.

#### 3.1.3 Preservation

Projects seeking to implement preservation activities under the CBCP must meet the following requirements:

- The project must provide evidence from external sources of a real threat to the species/ecosystem.
- There should be evidence that no other initiatives are addressing the same threats in the same or broader area, such as international cooperation projects.
- If other similar initiatives exist, they must be official or jurisdictional, and there must be evidence that they do not claim biodiversity credits and are insufficient to ensure the preservation of the species/ecosystem.

## **3.1.4** Conservation of officially protected areas

Projects aimed at the conservation of officially protected areas must meet the following requirements:

- It must be demonstrated that there is a historical and continuing deficiency in the adequate protection of the protected area, putting it at risk from factors such as biodiversity loss, poaching, or legal risks.
- The project should aim to address the agents and causes of these threats.





## **3.1.5** Creation of new and formally recognized protected areas

To meet this requirement, the new protected area must:

- Be recognized by the state under its national system of protected areas or equivalent.
- Belong to any of the protected area categories established by the IUCN.
- Be duly registered in the <u>Protected Planet database</u>.
- Inclusion of existing protected areas in the <u>IUCN Green List Standard of Protected</u> <u>Areas</u>.

Protected area may be under any of the following categories:

- National Parks and Wildlife Reserves.
- State or Provincial Parks.
- Municipal or Local Parks.
- Indigenous or Community-Owned Areas (ICCAs).
- Private reserves.
- Jointly Managed Areas.
- Transboundary Protected Areas.
- OECMs.

To meet this requirement, the protected area must not be already certified under the IUCN Green List Standard.

#### **3.1.6** Ecosystem restoration

Projects aimed at ecosystem restoration must meet the following requirements:

- The degradation or transformation processes should not have occurred in the project area within the five years prior to the project's commencement.
- The project must have a recent legal or binding agreement to prevent further degradation of the restored ecosystem.
- Restoration activities should preferably use native species, with a valid justification required for the use of exotic species (invasive species are prohibited).
- The area's primary use should be non-commercial, with restrictions on clearcutting or intensive harvesting.

#### **3.1.7** Ecosystem preservation and ecosystem recovery

Projects aimed at ecosystem recovery and preservation must meet the following requirements:

- Candidate areas must have been subjected to disturbances but can regenerate over time without significant human intervention.
- The project must have a recent legal agreement or commitment to prevent further degradation of the ecosystem.





## **3.2** Non-eligible activities and excluded species

The CBCP does not include the certification of biodiversity offsetting activities. Moreover, in alignment with the Cartagena Protocol's emphasis on preventive measures and comprehensive risk assessments for Genetically Modified Organisms (GMOs) due to scientific uncertainties about their potential impacts, the CBCP strictly prohibits the incorporation of living modified organisms in biodiversity conservation initiatives.

## **4 CBCP** Innovation Phase

In the inaugural year of implementation, the first iteration of the CBCP will be introduced through an Innovation Phase. During this period, projects will serve as pilots, accruing 'Innovation Voluntary Biodiversity Credits' (iVBCs). This phase is tailored to test and enhance the programme within a practical and evolving biodiversity market landscape.

After this innovative year, a thorough programme review will be conducted. Insights gained from the pilot projects will be assimilated into the assessment process, leading to essential adjustments. Furthermore, ongoing progressions in the biodiversity market will be considered to ensure the programme's continued relevance and efficacy. Pilot projects will be provided with a transitional period to align with any modifications to the programme's regulatory framework.

The duration of the Innovation Phase of the programme may be extended based on the circumstances and advancements within iVBC markets.

## **5** Principles

Adhering to the CBCP's principles is crucial for achieving its objectives, establishing credibility, and guaranteeing that certified projects yield measurable biodiversity gains. These principles must be integrated into biodiversity methodologies, Project Management Plans (PMPs), and monitoring, reporting, and verification processes.

The following are the principles of the programme:

#### Principle 1: Be nature-oriented and generate positive effects on biodiversity targets.

The fundamental principle of CBCP emphasizes a nature-oriented approach, focusing on conserving natural systems, which is the primary goal of biodiversity initiatives. By fostering positive impacts, the project ensures that resources, including funds, time, and manpower, are directed towards effective activities. In agriculture and forestry production, CBCP does not permit the use of extensive monocultures with mechanized systems to maintain the integrity of natural habitats.

#### Principle 2: Be additional.

Additionality of biodiversity projects must be demonstrated according to *Section 6*. Projects employing a specific methodology may require applying supplementary requirements for demonstrating additionality, as specified in the methodology.





#### Principle 3: Be aligned with local, regional, national, and international biodiversity policies and priorities.

This alignment ensures coherence, legitimacy, funding, impact, accountability, scalability, policy support, and long-term outcomes. It allows for easier monitoring and evaluation against established benchmarks and can encourage further policy initiatives, creating a positive feedback loop.

#### Principle 4: Be aligned with long-term outcomes.

Biodiversity projects should be strategically designed with a focus on achieving longterm outcomes. This approach is crucial for ensuring sustainability, maintaining ecosystem health, engaging communities, implementing adaptive management practices, securing funding, establishing scientific credibility, and influencing policy. By aligning with long-term outcomes, projects can achieve enduring change rather than seeking quick wins.

#### Principle 5: Prioritize on-the-ground actions.

Projects must invest a substantial part of resources in actions on the ground and apply cost-effective and proportionate administration, monitoring, and verification to deliver investment to on-the-ground actions efficiently. Prioritizing on-the-ground actions leads to efficiency, cost savings, timely action, effective resource allocation, and effective resource allocation.

#### Principle 6: Use a community-based approach and equitable benefits distribution.

For community-inhabited territories, projects should adopt a community-based approach that fosters co-design with local stakeholders and ensures equitable benefit distribution. Adhering to this principle provides benefits such as local buy-in, cultural sensitivity, sustainability, equity, risk mitigation, adaptability, and accountability.

#### **Principle 7: Ensure transparency.**

Transparency enhances credibility, accountability, fundraising, learning, public engagement, adaptability, and regulatory compliance. It builds trust with stakeholders, holds the project accountable, attracts more funding, educates the public, and aids in project improvement.

# Principle 8: For species and ecosystem-level initiatives, have a landscape approach.

Recognising ecosystem complexity and supporting a landscape approach ensures holistic views, connectivity, scale, human impact assessment, resilience, resource allocation, and interdisciplinary approach. This approach allows for a comprehensive understanding of ecological relationships and more effective conservation efforts.

Overall, these principles are essential for the success of biodiversity projects and should be carefully integrated into project methodologies and PMPs. By adhering to these principles, projects can ensure positive impacts on biodiversity, long-term sustainability, community engagement, transparency, and alignment with local and international



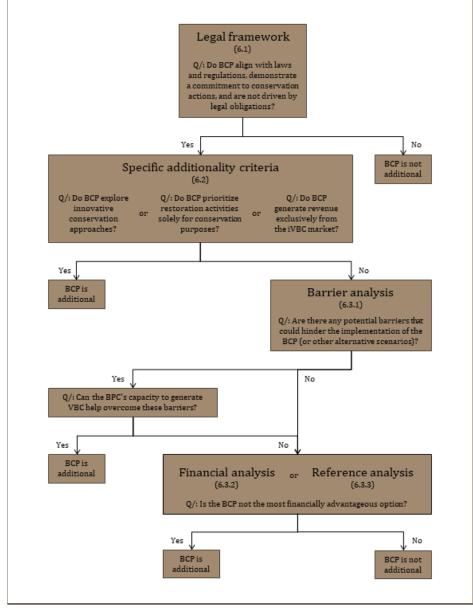


policies. Adhering to these principles will ultimately lead to more credible and effective biodiversity conservation efforts.

## 6 Additionality

To attain certification under the CBCP, projects must adhere to and demonstrate additionality as outlined in *Figure 1*.

Figure 1. General diagram of the additionality demonstration.



## 6.1 Legal framework analysis

BCPs are required to align with existing laws and regulations to showcase their dedication to conservation efforts<sup>4</sup>. It is crucial to emphasize that the CBCP strictly prohibits

<sup>&</sup>lt;sup>4</sup> This applies to all CBCP activities listed in *Table 1* that align with desirable but non-mandatory actions.



offsetting or activities motivated solely by legal obligations or mandatory regulations. Projects that do not adhere to these criteria are deemed non-additional.

## 6.2 Specific additionality criteria

To establish additionality, BCPs should innovate new conservation approaches, focus on restoration activities exclusively for conservation purposes (i.e., without commercial intent), or generate revenues solely from the VBC market. Projects that do not meet these criteria should undergo a thorough barrier analysis or an assessment of alternative scenarios to emphasize their distinctive role in biodiversity conservation.

## 6.3 Identifying barriers and alternative scenarios

In cases where the demonstration of additionality is unclear, an analysis of potential barriers to BCP implementation is essential. It is crucial to evaluate financial constraints, challenges in project execution, technological limitations, and institutional risks. By addressing these barriers and exploring alternative scenarios, projects can effectively showcase their additionality in biodiversity conservation.

## **6.3.1** Barrier analysis

It is imperative to establish a comprehensive list of realistic and credible barriers that may hinder alternative scenarios. These barriers may include risks related to investment/financing, implementation, technology, and institutional factors. BCPs that can overcome these barriers through the VBC market are regarded as additional. If barriers cannot be overcome, a comparative financial analysis or baseline analysis should be conducted to demonstrate that the initiatives do not represent the most financially advantageous option.

#### 6.3.2 Financial analysis

Conducting a comparative financial analysis using traditional financial indicators (i.e., NPV, ROI, TIR, LCOE) and investment vs. operating costs is crucial. This analysis should consider scenarios with and without potential revenues from VBCs. It is recommended to conduct sensitivity and variability analysis of financial indicators to identify the most robust financial model and demonstrate that the proposed project is not the most financially appealing choice.

## **6.3.3** Reference analysis

The reference analysis should utilize the most appropriate financial indicator for the BCP and consider market standards specific to the chosen type of biodiversity initiative. This analysis should incorporate the specific risks associated with the project to determine its additionality in the conservation sector.

By enhancing the clarity and specificity of the additionality proposal, BCP developers can better understand and demonstrate the unique contributions of their biodiversity projects. Additionally, providing detailed guidance on conducting barrier analysis, financial analysis, and financial reference analysis will assist project developers in effectively showcasing their project's additionality in biodiversity conservation.





## 7 Retroactivity, crediting period, and permanence

## 7.1 Retroactivity

The CBCP offers retroactive recognition for biodiversity conservation efforts undertaken within the five (5) years prior to the start of the project. To qualify for this acknowledgment, BCPs are required to show tangible actions that have significantly aided in the conservation of biodiversity. BCPs must furnish monitoring data and evidence that substantiates their conservation initiatives, aligning them with the specified methodology or PMP established by CBCP.

This opportunity for retroactive recognition not only acknowledges BCPs for their enduring dedication to biodiversity conservation but also serves as an incentive for continued endeavours to safeguard and enhance biodiversity in the future.

## 7.2 Crediting period and renewal

BCPs must initially adhere to a crediting period of ten (10) years. However, to facilitate the sustainable growth of the biodiversity market and integrate valuable insights, BCPs in progress must adhere to any updated programme regulations by December 31, 2025, and regularly update their programme compliance every five years or as directed by the CBCP, regardless of the project's originally granted accreditation period.

Following the initial accreditation period, if the BCP has not yet reached the end of its operational life (e.g., fulfilment of the eligible activity), the period can be extended by submitting the renewal of accreditation period form available on <u>www.cercarbono.com</u>. It can be extended multiple times, for either 10-year periods or for shorter timeframes, until its lifespan or duration ends.

The renewal of the accreditation period must be completed through a new validation process, during which the BCP's continued additionality and adherence to the requirements of the current protocol are assessed.

To renew the accreditation period, the BCP must have undergone verifications at least once every three years during the previous accreditation period. BCPs that have not been verified for three or more years must provide a justification for this lapse.

The renewed accreditation period for a specific BCP may be shorter if dictated by the CBCP, national regulations, or the market in which it operates.

## 7.3 Permanence and guarantee buffer

Biodiversity conservation efforts, which encompass various levels of ecological diversity, are inherently focused on long-term goals. However, the lasting success of these efforts is influenced by numerous variables, many of which are beyond the direct control of conservationists and restoration practitioners. These factors include economic and societal dynamics, climate change, invasive species, complex ecological interactions, evolving public policies, and the pervasive impact of globalization. Biodiversity, being dynamic by nature, is always subject to change.

It is important to highlight that within the context of the CBCP, the VBC it generates are unique and cannot be used for offsetting, unlike traditional carbon offset mechanisms.





These credits serve as a form of recognition and reward for conservation actions that have already been implemented. While these actions are intended for long-term objectives, they may still face uncertainties in the future.

The CBCP has established a 'Long-term Reserve' to promote sustained benefits. This reserve consists of 5% of the total credits issued for each project and is specific to that project. The credits accumulated in this reserve will be returned every decade<sup>5</sup>, starting from the project's commencement date, with the vintage of the credits corresponding to their year of issuance. It's important to note that this reserve does not ensure permanent protection or prevent biodiversity 'reversions'. Instead, it aims to incentivize ongoing commitment to long-term project sustainability.

In addition, another 5% of credits will be allocated to a 'Guarantee Buffer' to address any post-verification issues that may arise, such as false documentation or complaints from stakeholders. This buffer, which is non-refundable, will remain in place throughout the accreditation period to ensure compliance with program standards.

Both the 'Long-term Reserve' and the 'Guarantee Buffer' will be assigned a serial code and registered on the platform's registry for transparency and accountability.

## 8 Methodologies

Methodologies play a crucial role in streamlining project development processes by providing clear guidelines for adhering to CBCP principles, setting baselines (if applicable), standardizing indicators, and ensuring uniform systems for monitoring and reporting. Therefore, BCPs must use an approved CBCP methodology, which can be found on <u>www.cercarbono.com</u>.

## 8.1 New methodologies

If BCPs identify during the development process that the methodological approach significantly deviates from approved CBCP methodologies or requires additional credit metrics, the option to propose a new methodology is available.

In such a scenario, an independent third party may propose a new methodology, which must be submitted to Cercarbono for approval before applying for a pilot project. Cercarbono, with the support of an Independent Expert Panel (IEP) if needed, will review, and evaluate the proposed methodology. Once adjusted based on public consultation feedback and approved, it will be included in the list of approved methodologies for use by parties interested in developing BCPs. For further guidance on developing methodologies, refer to the suggested table of contents in *Annexe 2* and the resources listed in *Annexe 5*, including IUCN standards and other monitoring tools.

New methodologies should be scale-neutral and not discriminate based on project size within biodiversity markets.

<sup>&</sup>lt;sup>5</sup> i.e., the reserve accumulated in years one to nine is returned in full in year ten.



During the CBCP Innovation Phase, BCPs may be designed without an approved methodology; in those cases, the PMP should contain all elements listed in *Annexe 2*.

The complete process for approval of new methodologies will be outlined in the *Cercarbono Biodiversity Certification Programme Procedures*.

## 8.2 Request for methodological deviations

Methodological deviations are always specific to a BCP, therefore must be requested based on a registered BCP that has a complete version of a PMP. The request must clearly indicate to which sections and concepts it applies, as well as the potential impacts resulting from the authorization or denial of such a deviation on the BCP results, and how the integrity of the methodology will be maintained. This request should be made using the format established by the CBCP, which can be obtained by contacting info@cercarbono.com.

In cases where a methodology applies to a project activity, but minor deviations<sup>6</sup> in its application are necessary due to specific project circumstances, the holder may request a deviation from the IEP. The IEP will assess, based on CBCP principles and applicable validation and verification standards, whether the deviation could be considered potentially acceptable or not. If considered potentially acceptable, the IEP may conduct a detailed evaluation and validation of the deviation, including methodological adjustments, after obtaining prior communication and approval to proceed with the validation from CBCP management, using the established methodological deviation request form provided by Cercarbono.

In all other cases, the BCP holder must submit the request for a methodological deviation directly to CBCP Director for consideration, using the format established by Cercarbono. If a methodological deviation is identified that has not been requested or reported in advance by the BCP developer, and during verification the IEP determines that the PMP has deviated from the methodology or monitoring plan provisions, the IEP will suspend the validation process and promptly inform Cercarbono. Additionally, the IEP will request the BCP to complete the methodological deviation request form and, based on the nature of the deviation, may conduct an evaluation and validation, or refer the matter to CBCP management, as appropriate based on the specific circumstances outlined in the previous paragraphs.

When requesting a deviation, the intended timeframe for its application must be specified, as this is a crucial aspect in determining its suitability.

<sup>&</sup>lt;sup>6</sup> Minor deviations include: a) Using alternative measurement methods for different parameters with similar precision and accuracy as specified in the methodology; b) Utilizing data sources other than those outlined in the methodology, with comparable levels of reliability and acceptability; c) Providing justification for using scenarios that are appropriately conservative and more stringent than those specified in the methodology; d) Employing default factors, calculation techniques, or estimation methods that address project-specific situations not covered by the methodology.





## 8.3 Request for methodological clarification

If an approved methodology is unclear or ambiguous in its methodological procedures, a written request for clarification can be submitted. The CBCP Director will respond to this request in writing.

## 9 Biodiversity key indicators for CBCP activities

The measurement of key indicators in BCPs is fundamental for assessing success, ensuring accountability, and maintaining credibility. By tracking these variables, projects can accurately evaluate the impact of their efforts on biodiversity, ensuring transparency and verifiability in their conservation outcomes.

Biodiversity indicators are essential tools at various levels, from local to global, in gauging progress towards national targets and guiding adaptive management strategies. Ensuring that these indicators are scientifically valid, based on reliable data, and responsive to change is critical for creating a robust framework for monitoring and evaluating biodiversity conservation activities.

Tailoring indicators to the specific context of each project and aligning them with goals and objectives ensures that conservation efforts are effectively measured and guided towards achieving positive impacts on biodiversity. By selecting indicators that are easily understandable and relevant to user needs, projects can communicate their progress and results more effectively, fostering a culture of transparency and accountability in biodiversity conservation initiatives. Regular monitoring and evaluation practices help optimize the allocation of resources, ensuring that budget investments are utilized efficiently and effectively for biodiversity-related activities within the project's intervention area, ultimately leading to successful biodiversity conservation outcomes.

## **10** Benchmark assessment

Benchmarks play a crucial role in assessing the impact of projects on the environment. By establishing clear and comparable benchmark values, projects can effectively monitor and evaluate changes in key indicators over time. The concept of a reference benchmark involves estimating a measurable factor or variable that indicates the health status or improvement of the ecosystem or project area, such as biodiversity levels, pollution levels, or other indicators of environmental health. This benchmark represents the condition of the biodiversity key indicator of interest without any project activities or interventions taking place.

In CBCP, two main types of reference benchmarks are used, where applicable:

- A static reference benchmark is a single value or range that represents the baseline condition of the biodiversity key indicators of interest. This value may be obtained from published benchmarks, surveys of local reference sites, or assessments of the project area before interventions begin.
- A dynamic reference benchmark consists of a range of values that account for natural variations in the factor of interest over time. For example, the reference benchmark for ground cover may differ between wet and dry seasons.





Monitoring and comparing measured values to the reference benchmark is crucial in determining changes in the biodiversity key indicators of interest over time. It is important for reference benchmark values to be directly comparable to the measured values and represent the same indicators.

Additionally, CBCP considers the use of 'control designs' to assess changes in biodiversity key indicators of interest over time. This involves creating paired 'control' areas that do not undergo specific interventions and comparing them to areas that do receive interventions. The 'control' areas should closely match the intervention areas in all aspects except for the absence of management actions.

CBCP methodologies will consider and select the best approach for different activities and biodiversity key indicators.

## **11** Independent Expert Panel

To ensure a comprehensive evaluation of BCPs, the IEP appointed by the CBCP will oversee project validation and verification. The panel will consist of at least four members, including an individual responsible for field verification, intervention verification, and land rights assessment, among other duties. Additionally, the panel will include experts in various disciplines such as ecology, conservation biology, indigenous knowledge, ecosystem management, social issues, species survival, environmental law, protected areas, and climate change.

The structure and functioning of the IEP are described in the *Rules of Procedure of the Independent Experts Panel* document.

## **12** Safeguards

To ensure that BCPs do not have a net negative impact on the environment, society, and economy, they must adhere to the guidelines set forth in the *Safeguarding Principles and Procedures of Cercarbono Certification Programme* document, available at <u>www.cercarbono.com</u>.

## **12.1** Effective participation

This section outlines the various settings in which Cercarbono facilitates interaction among the diverse stakeholders involved in the VBC market for the transparent formulation, development, and implementation of BCPs. This ensures full and effective participation in accordance with operational procedures.

One such setting is public consultations, which serve as a planning mechanism for the effective involvement of stakeholders in these processes. In this regard, Cercarbono has established consultations that stakeholders must consider and engage in accordance with BCP activities and requirements.

In addition to consultations, Cercarbono provides a Frequently Asked Questions (FAQs) and contact spaces under the 'About Us' section on <u>www.cercarbono.com</u>, where stake-holders can also actively participate.





#### **12.1.1** Public consultation

When a BCP is being developed in an area with a local population or where the BCP activities may impact the environment, society, or economy, a public consultation by the BCP with relevant stakeholders is necessary.

The objective of this consultation is to guarantee that all stakeholders are adequately informed and engaged in the decision-making process. It is crucial for BCP developers to disclose the strategies they employ to disseminate crucial and pertinent information to stakeholders. By doing so, CBCP can be certain that all parties are aligned and have the necessary information to contribute meaningfully.

The public consultation by the BCP should be conducted during either its formulation or validation stage. For this purpose, the BCP is required to prepare and make available to stakeholders a detailed BCP document which should:

- Identify the stakeholders, potentially including a map showing actors or organizations, an institutional map of governance structures or institutions, and leaders involved in decision-making within the project area, detailing consensus decisions made with local governance structures.
- Utilize a format and content tailored to the stakeholders, encompassing at minimum:
  - The BCP holder's name.
  - A concise overview of the BCP, comprising its name, size, location, duration, and types of activities involved.
  - A summary of the PMP.
  - Description of any deviations from the selected methodology, with a justification for their necessity if applicable.
  - Listing of all major CBCP activities, key biodiversity indicators, along with criteria for their selection, quantification, measurement, and monitoring.
  - Explanation of the benchmark assessment.
  - A general depiction of the criteria and procedures for calculating VBC for the BCP and those relevant to the benchmark assessment.
  - The report date and coverage period.
  - Evidence of the appointment of the authorized legal representative on behalf of the BCP holder, if applicable.
  - Certification program subscribed to by the BCP.
- Establishment of a plan or timeline for decision-making meetings related to the BCP.
- Implementation of a mechanism for petitions, claims, complaints, and requests, with a traceability component.
- Development of a conflict management protocol for addressing conflicts as they arise.
- Drafting of an agreement document signed by stakeholders to guide the development of the BCP.

This document should be presented and deliberated upon in one or more in-person meetings between the BCP and identified stakeholders in the project area or its vicinity. These meetings may lead to shared agreements or the definition of mechanisms and methods through which stakeholders can contribute.





The consultation process summary, meeting minutes, and agreements must be validated by the responsible IEP during the validation process. Subsequent tracking of this document should be reviewed during verification events.

## **13 Project components**

Projects seeking certified biodiversity credits must prepare a PMP<sup>7</sup>, which should include, as a minimum, the following elements:

- Project background, objectives, scope, and limitations.
- Justification, policy framework, benefits, and impact.
- Project description: target area, project boundaries, eligible activities, compliance with CBCP core principles, additionality, biodiversity key indicators and metrics, and crediting period.
- Land and resource tenure in the project area, including an assessment of land and resource tenure regimes and the regulatory framework for accessing biodiversity credits.
- Drivers of biodiversity loss.
- Safeguards and description of the consultation process.
- Stakeholders' engagement.
- Risk assessment.
- Risk of displacement.
- Local to global alignment.
- Selected methodology (if applicable) and its applicability to the project.
- Benchmark assessment (if applicable).
- Monitoring and verification: indicators, data collection, quality, and analysis, monitoring of compliance, use of existing, independent monitoring tools, monitoring of stakeholder engagement, monitoring of management of grievances and disputes, and reporting.
- Implementation plan, including milestones, roles and responsibilities, and contingency plans. This plan shall integrate an adaptive management approach.
- Financing plan for actions and interventions.
- Benefit-sharing agreements: this involves outlining how both monetary and nonmonetary benefits will be distributed to beneficiaries, detailing the types and proportions of benefits to be shared, the mechanism through which these benefits will be allocated, and the legal context of benefit-sharing agreements.

When designing and implementing biodiversity conservation projects, BCP developers should utilize flexible measurement frameworks that allow context-specific indicators to be aggregated into globally comparable metrics (such as the <u>Multidimensional Bio-diversity Indexes</u>). These flexible measurement frameworks should facilitate scalability and comparability by providing standard methods to scale local species/ecosystems into global standardised indicators, enabling standardised reporting on contributions to national<sup>8</sup> and global biodiversity targets.

<sup>&</sup>lt;sup>7</sup> CBCP has *Project Management Plan* template, available at <u>www.cercarbono.com</u>.

<sup>&</sup>lt;sup>8</sup> See e.g., <u>Guidelines for developing national biodiversity monitoring systems</u>.





When preparing such a document, include only relevant information. A large document does not necessarily mean a good one.

## **14** Project certification cycle

The certification cycle of projects in the CBCP involves steps and stages that ensure thorough evaluation, approval, implementation, and monitoring of the biodiversity stewardship projects. An overview of the project certification cycle is presented in *Figure 2* and *Table 2*. Each step is detailed in the following sections.

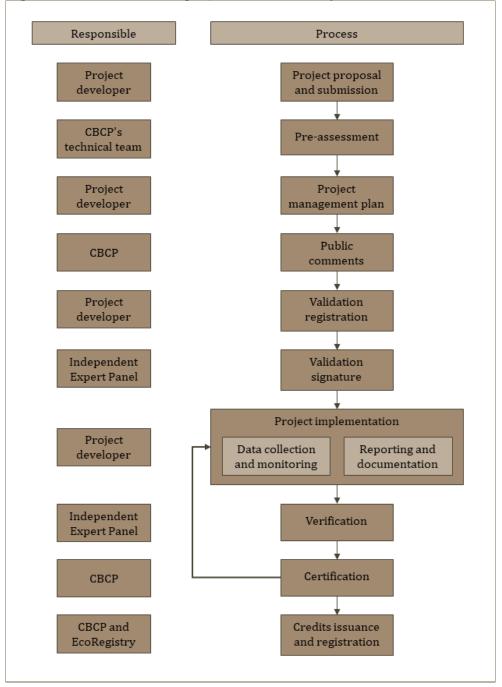


Figure 2. Overview of the project certification cycle.





| Process   | Documentation   |  |  |  |  |  |
|---|---|--|--|--|--|--|
|   | Documentation   |  |  |  |  |  |
| ccount creation   |   |  |  |  |  |  |
| Documentation check.  | <ul> <li>Certificate of existence and legal representation.</li> <li>Shareholding certificate of the company.</li> <li>Company legal representative ID.</li> <li>Bank certification.</li> <li>(Other documents may be required).</li> </ul>   |  |  |  |  |  |
| Formalization.  | • Contract with Cercarbono and account creation.  |  |  |  |  |  |
| Assessment of project proposal  |   |  |  |  |  |  |
| Documentation check.  | • Project proposal.   |  |  |  |  |  |
| Review and approval or rejec-<br>tion.  | Project proposal approval.  |  |  |  |  |  |
| Public comments   |   |  |  |  |  |  |
| Documentation check.         Publication on Cercarbono website.         Validation registration       | <ul> <li>PMP.</li> <li>Project location: <ul> <li>Multilevel map (if area-based or linear project),</li> <li>Geo-referenced map (*.shp or *.kml), and</li> <li>Narrative legal boundary document (if areabased or linear project).</li> </ul> </li> <li>Proof of ownership or tenure of the project area or facility or authorization to act in the project area.</li> <li>Power of attorney (if applicable).</li> <li>Mandate orders (if applicable).</li> <li>Governance analysis (if applicable, only projects developed on community land).</li> <li>PMP.</li> <li>Project location.</li> </ul> |  |  |  |  |  |
| The developer of the BCP up-<br>loads the required documenta-<br>tion.                                | <ul> <li>Updated PMP (if required).</li> <li>Updated project location (if required).</li> <li>Validation calculations.</li> <li>Validation support documents.</li> </ul>  |  |  |  |  |  |
| Validation signature  |   |  |  |  |  |  |
| Technical review:<br>Documentation check.<br>Legal check.<br>Double-counting check.<br>Overlap check. | <ul> <li>PMP.</li> <li>Project location.</li> <li>Calculations.</li> <li>Support documents.</li> </ul>  |  |  |  |  |  |
| Project adjustments.  | (As per requirements).  |  |  |  |  |  |
| Validation approval.  | <ul> <li>IEP Declaration of Conflict of Interest.</li> <li>Validation report.</li> <li>Validation statement.</li> </ul>   |  |  |  |  |  |
| Project implementation  | ·   |  |  |  |  |  |
|   | Monitoring report.  |  |  |  |  |  |

#### **Table 2**. Overview of the project certification process and required documentation.





| loads the tion. | loper of the BCP up-<br>required documenta- | <ul> <li>Verification calculations.</li> <li>Verification support documents.</li> </ul> |
|-----------------|---|---|
| Verification    |   |   |
| Technical       |   | <ul> <li>Monitoring report and ancillary data and documen-</li> </ul>                   |
| Documen         | tation check.                               | tation.   |
|                 |   | Calculations.   |
| Verificatio     | on approval.                                | IEP Declaration of Conflict of Interest.  |
|                 |   | <ul> <li>Verification report.</li> </ul>  |
|                 |   | • Verification statement.   |
| Certification   |   |   |
| Certificate     | e issuance.                                 | Certification report.   |
|                 |   | Biodiversity credits certificate.   |
| Registration    |   |   |
| Registrati      | ion of biodiversity cred-                   | Registry issuance.  |
| its.            | -   |   |
| Registrati      | ion of corresponding                        | Registry issuance.  |
| buffer.         |   |   |

## 14.1 Development of project proposal

The project developer drafts a short document using a *Project Proposal* template<sup>9</sup>, indicating its overall description, the project promoters and partners, justification, objectives, preliminary assessment of additionality, activities, implementation plan, expected results, activities, schedule, and metrics for biodiversity credits.

## 14.2 Submission and pre-assessment

Once drafted, the project developer must send an email to <u>info@cercarbono.com</u> with Project Proposal. The CBCP's technical team conducts pre-assessment to ensure submissions meet essential criteria and align with the programme's rules.

The Project Proposal can be accepted without modification, with requests for revision, or rejected:

- If the Project Proposal is accepted, the project can proceed to the next stage.
- If accepted with a revision request, changes must be incorporated into the PMP.
- If the proposal is rejected, it may only be resubmitted with significant modifications and not in the same terms.

## 14.3 Development of the Project Management Plan

Based on *Project Management Plan* template, the project developer drafts a complete PMP containing the required instructions and specifications. The PMP must be uploaded to the EcoRegistry platform and remain open to be reviewed by the IEP. It can also be accepted without modification, with requests for revision, or rejected.

<sup>&</sup>lt;sup>9</sup> CBCP has *Project Proposal* template, available at <u>www.cercarbono.com</u>.





## 14.4 Public comments

Once the project has developed its PMP and uploaded the required documents to the registry platform (see *Table 2*), thirty days for public comments is opened.

At the end of this period, the project shall receive a compilation of the comments received, and it shall:

- Evaluate each comment's relevance, validity, and impact on the project.
- Respond to comments by specifying which ones will be integrated and providing reasons for why others will not be included.
- Make necessary adjustments to the project based on the comments.
- Share with the IEP the updated documentation and the record of how each comment was addressed.

Both the comments and BCP responses will be stored on the EcoRegistry platform for public access.

If the IEP considers that all comments received have been duly addressed, the project may proceed to the validation stage by providing the required documentation.

#### 14.5 Validation registration

The project developer uploads the PMP and localization update (if required) and the calculations and supporting documents for validation.

#### 14.6 Validation signature

The IEP comprehensively reviews accepted projects based on their complete PMP and any proposed/existing methodology or the programme's methodological framework. Projects meeting these criteria are then approved for implementation (i.e., validated).

#### 14.7 Project implementation

The implementation of the project includes the execution of the planned activities, focusing on the work in favour of the conservation of biodiversity, aiming at the fulfilment of the established goals.

#### **14.7.1** Monitoring and data collection

Projects collect relevant data on biodiversity key indicators, ecosystem health, and project progress. Regular monitoring ensures adherence to the programme and the achievement of desired outcomes.

#### **14.7.2** Monitoring report

Projects prepare detailed reports on their progress, achievements, and challenges. Documentation includes calculation of biodiversity credits, lessons learned, best practices, and recommendations for improvement.





Projects must report on their contributions to the UN SDGs (*Annexe 4*). Reporting during the CBCP Innovation Phase is optional, but it becomes mandatory for BCPs after the conclusion of the Innovation Phase<sup>10</sup>.

## 14.8 Verification

The IEP conducts assessments of project implementation to verify alignment with program requirements based on predetermined performance criteria. Monitoring data is analysed to evaluate the project's accuracy, impact, validity, and effectiveness.

The IEP collects sufficient evidence up to the validation and verification dates, promptly informing projects of any significant new information post-issuance. Material changes compared to monitoring reports necessitate communication with the responsible party. In cases of inadequate responses, the IEP has the authority to modify or withdraw its opinion. Non-material findings should also be communicated. If issues arise after credit issuance, Cercarbono will adjust future verifications or utilize a buffer to maintain credit integrity.

Under the CBCP, joint validation and verification of BCPs may be conducted.

#### 14.9 Certification and credit issuance

The CBCP employs a two-step process in which initial reports undergo scrutiny by an independent IEP. Subsequently, the CBCP technical team reviews the process to ensure compliance with the relevant requirements. If any missing items are identified or require correction or expansion, change requests can be submitted through the platform and must be addressed by either the IEP or the project developer.

After the assessment of compliance with the requirements, a certification report is generated. Following this evaluation, EcoRegistry facilitates the registration and issuance of the VBCs.

## **15** Grouped projects, bundling and stacking

## 15.1 Grouped projects

The CBCP allows projects to gradually incorporate new participants or expand their areas (in the case of area-based activities). Similarly, for non-area-based activities, such as the Collection and Conservation of Crop Wild Relatives activity, projects can broaden their scope by, for example, adding new species.

There is no limit to the number of instances to be added, but it is required that all instances maintain consistency by including the same eligible activities. Instances must meet all relevant requirements established by the CBCP.

The inclusion of new instances can only be done during verifications. The baseline scenario must be updated to reflect the effect of adding new implementation instances.

<sup>&</sup>lt;sup>10</sup> *Biodiversity's Tool to Report Contributions to the Sustainable Development Goals* is available at <u>www.cercarbono.com</u>.





New instances must fulfil the additionality rules established in *Section 6*.

To include new instances, an updated PMP must be submitted to the IEP, which will analyse the feasibility of its inclusion.

Verification of BCPs should be done for all their instances, but partial verifications are accepted with the corresponding justification.

#### 15.2 Bundling and stacking

This protocol version does not allow bundling<sup>11</sup> of carbon and biodiversity credits. Future developments of the CBCP may allow this type of bundling if ground issues are solved.

Stacking<sup>12</sup> biodiversity-focused activities on top of Cercarbono-registered climate change mitigation projects is allowed. In such cases, the validated mitigation activities must be considered the baseline scenario of the biodiversity-focused activities. The project must demonstrate compliance with the CBCP principles.

Stacking biodiversity-focused activities on top of mitigation projects registered under other programs or certification standards is allowed.

## **16** Biodiversity credits

While carbon markets have standardized metrics, biodiversity projects often lack a common yardstick, making comparisons difficult. Although biodiversity cannot be condensed into a single figure, there is a pressing need for standardized metrics to incentivize market action and evaluate contributions. The CBCP introduces VBCs as a measure for quantifying and comparing positive impacts across various initiatives and scopes presented in *Section 3*.

Currently, the CBCP's credit calculation method focuses solely on area-based activities. For other types of projects, consult *Section 8.2* to propose a metric based on a new methodology. Proposals are subject to approval by Cercarbono, with assistance from the IEP if necessary. Accepted proposals will be integrated into future versions of this protocol.

## 16.1 Credit attributes

VBC are standardized units that capture and quantify the impact of conservation projects, irrespective of their unique focus or objectives. These credits feature verified attributes, allowing for swift, transparent assessment of their effectiveness and alignment with global sustainability goals. VBC do not represent biodiversity ownership.

VBCs attributes are stated in the credit certificates and are based on the following categories:

<sup>&</sup>lt;sup>11</sup> Bundling refers to combining multiple environmental credits, like biodiversity and carbon, into a single package, using a combined certification scheme.

<sup>&</sup>lt;sup>12</sup> Stacking involves earning separated credits for multiple environmental benefits from a single project.





#### **Table 3.** Biodiversity project attributes.

| Category         | Attribute |  |  |  |  |
|------------------|-----------|--|--|--|--|
|                  | EA01      | Acquisition and formalization of OECM status                                     |  |  |  |
|                  | EA02      | Agrobiodiversity enhancement   |  |  |  |
|                  | EA03      | Collection and conservation of crop wild relatives                               |  |  |  |
|                  | EA04      | Connectivity enhancement   |  |  |  |
|                  | EA05      | Conservation of livestock genetics   |  |  |  |
|                  | EA06      | Ecosystem adaptation to climate change   |  |  |  |
|                  | EA07      | Ecosystem preservation   |  |  |  |
|                  | EA08      | Ecosystem recovery   |  |  |  |
| Eligible activ-  | EA09      | Ecosystem restoration  |  |  |  |
| ity (type of in- | EA10      | Ex-situ species conservation   |  |  |  |
| tervention)      | EA11      | Inclusion of protected areas in IUCN 'Green List Standard'                       |  |  |  |
|                  | EA12      | Reducing PADDD and other threats to the conservation of official Protected Areas |  |  |  |
|                  | EA13      | Regenerative agriculture   |  |  |  |
|                  | EA14      | Regenerative aquaculture   |  |  |  |
|                  | EA15      | Species adaptation to climate change   |  |  |  |
|                  | EA16      | Species conservation and preservation  |  |  |  |
|                  | EA17      | Species restoration  |  |  |  |
|                  | EA18      | Urban biodiversity   |  |  |  |
|                  | Terrest   | rial   |  |  |  |
|                  | Freshw    | rater  |  |  |  |
| Type of ecosys-  | Wetlan    | d  |  |  |  |
| tem              | Marine    |  |  |  |  |
|                  | Urban     |  |  |  |  |
|                  | Mixed     |  |  |  |  |
| Biodiversity     | Genetic   | 2  |  |  |  |
| level            | Species   |  |  |  |  |
|                  | Ecosyst   | tem  |  |  |  |
| Social & Herit-  |           | ous Peoples and Local Communities  |  |  |  |
| age              |           | Heritage   |  |  |  |
|                  | Local h   | eritage  |  |  |  |
| Leadership       |           | inity-Led  |  |  |  |
|                  |           | ally-Led   |  |  |  |
| UN SDG           | (117)     | (optional during CBCP Innovation Phase)  |  |  |  |

#### **16.2** Credit serials

Biodiversity credit serials consist of unique codes based on specific relevant information related to the project and its verifications, as shown in *Table 4*.

**Table 4**. Description of the codes used to define biodiversity credit serial numbers.

| Credit serial fields | Code | Description |
|----------------------|------|-------------|
| Cercarbono ID        | CBC  | Cercarbono. |





| Credit serial fields   | Code   | Description  |  |  |
|------------------------|--------|--|--|--|
| Project number         | 999    | Three-digit project sequential number.   |  |  |
| Validator ID           | 9      |  |  |  |
|                        | 00     | perts Panel.   |  |  |
| Methodology            | 99     | 8 0, 1   |  |  |
| Verifier ID            | 9      | Same one-digit as above, identifying the Inde-<br>pendent Experts Panel.             |  |  |
| Ecosystem type         | 9      | One-digit identification of the ecosystem (from a list).                             |  |  |
| Biodiversity level     | 9      | One-digit identification of the biodiversity level (genetic, species, or ecosystem). |  |  |
| Main eligible activity | 99     |  |  |  |
|                        |        | tivity (from a list).  |  |  |
| Country(ies)           | XX(YY) | Two-digit country code.  |  |  |
| Validation number      | 9      | 9 One-digit identification of the validation sequen-                                 |  |  |
|                        |        | tial number.   |  |  |
| Verification number    | 99     | Two-digit identification of the verification se-<br>quential number.                 |  |  |
| Year                   | 9999   | Credit vintage.  |  |  |
| Guarantee buffer       | gb     | If applicable, a two-letter code assigned to buffer credits.                         |  |  |
| Long-term reserve      | ltr    | If applicable, a three-letter code assigned to the long-term reserve credits.        |  |  |
| Serial number          | 999999 |  |  |  |

#### 16.3 Guarantee buffer and long-term reserve serials

The guaranteed buffer and the long-term reserve shall also have unique serial codes. The structure of these serial codes shall be like that for biodiversity credits, with the addition of a suffix identifying whether the buffer is a guaranteed buffer (gb) or a longterm reserve buffer(ltr).

#### 16.4 Credit calculation

This protocol is the guiding framework for calculating VBCs related to area-based conservation activities. Non-area-based actions require proponents to provide specialized ways for their specific credit quantification. Refer to *Table 1* for a nuanced classification differentiating area-based and non-area-based projects within our system.

CBCP focuses primarily on two scenarios: a project area that is deemed degraded and an area that is already in a state of good conservation. These two scenarios are representative of restoration and maintenance projects in different environmental contexts, respectively. In both scenarios, credits are calculated and attributed at the end of an observation period, considering several crucial parameters.

For the degraded area scenario, the goal of the project ideally is to lead to positive changes over time in a specific biodiversity key indicator *X* (expressed as  $\Delta X$ ). *X* represents a measurable factor or variable that marks the health status or improvement of the ecosystem or project area, such as biodiversity level, pollution level, or any other





indicators of environmental health.  $\Delta X$  measures the change or improvement in this indicator over the given time (a concept we denote as  $\delta(t)$ ). This concept is fundamental when comparing changes in the indicator with benchmark values.

The number of the credits generated at the end of the monitoring period, represented as  $VBC_d$ , can be calculated using the following formula:

$$VBC_d = (\Delta X / \delta(t)) * A \qquad (Equation 1)$$

Here, *A* refers to the total area of the project, measured in hectares (ha);  $\Delta X$  is the normalized variable denoting the improvement made, which usually ranges from 0 (no change) to 1 (maximum positive change), and is obtained by comparing the observed *X* during the monitoring period against a reference benchmark.  $\delta(t)$  represents the monitoring period in years. The more rapidly and effectively the degradation is reversed (greater  $\Delta X$  over smaller  $\delta(t)$ ), the more credits are generated, incentivizing swift and potent restoration.

In the context of a well-conserved state scenario, the goal is preservation rather than restoration. With the area already demonstrating a high level of conservation, minimal  $\Delta X$  changes are expected. However, recognizing the effort and resources needed to maintain this positive state over time is key. To address this, we introduce the concept of a 'conservation factor,' denoted as c, which highlights the value of conserving a hectare of land in a good state for a year. This factor, ranging from 0 to 1, is determined by the project developer based on activities outlined in the PMP. The credits generated at the monitoring period's end, known as  $VBC_c$  are dependent on showcasing and receiving approval for the well-conserved state by the IEP. Considering the conservation factor c when calculating credits is essential for acknowledging and rewarding conservation efforts. Demonstrating and obtaining approval for the well-conserved state and c from the IEP are vital components of the assessment process.

The number of credits generated at the end of the monitoring period, symbolized as  $VBC_c$ , can then be calculated as follows:

$$VBC_c = c * A * \delta(t)$$
 (Equation 2)

Here, *A* is the project area in hectares, and  $\delta(t)$  represents the monitoring period in years. This conservation-focused model incentivizes the sustainable maintenance of areas already in a good conservation state over a longer period.

These two distinct credit generation models ensure an appropriate allocation of credits to both restoration and maintenance efforts, capturing the effort, improvement, duration, and scale of the projects by including parameters such as the total project area (A) expressed in hectares, and the duration of the monitoring period ( $\delta(t)$ ) expressed in years.

In the degraded area scenario, the role of the variable *X* and its normalized change  $\Delta X$  plays a crucial role as it represents the improvement made over the project duration. Thus, generating more credits in degraded areas would require high  $\Delta X$  values, achieved swiftly within the observation period. On the other hand, in the good conservation state scenario, the selection of *c* or the conservation factor is vital. Higher values



of *c* will result in more credits for maintaining good conservation areas, effectively balancing incentives between restoration and conservation endeavours.

Finally, to ensure the consistency and fairness of the system in different contexts, normalization, or standardization of  $\Delta X$  is imperative. This ensures that the resulting value of  $\Delta X$  has a consistent meaning across not just different locations, but also diverse project goals. Whether the objective is to enhance biodiversity, reduce pollution, or improve water quality, X must be chosen with care and precision, exemplifying the goals and context of the project, while also being something that can be accurately measured or estimated. The values assigned to  $\Delta X$  should fairly represent the extent of improvements achieved over the observation period. Larger  $\Delta X$  signals a greater improvement. Therefore, it's essential the choice of X is aligned with the intended goals and context of the project.

The performance of the biodiversity credit system relies heavily on the careful selection and accurate measurement of variable X, the determination of the appropriate conservation constant c, and the ability to restore degraded areas quickly and effectively or maintain areas already in good conservation states. Furthermore, the normalization or standardization of  $\Delta X$  allows for consistency and comparability across diverse projects, ensuring the validity and inter-project equity of the credits generated. This standard is designed to fairly appreciate conservation projects, with the aim of maximizing the ecological health and biodiversity of our environments. By diligently monitoring and calculating variables, this credit system serves to effectively incentivize sustainable practices and restoration efforts at any given project site.

## **16.4.1** Updating credit calculation factors

Building on insights gained during the CBCP 'Innovation Phase', the program will update credit calculation factors as necessary. Subsequently, regular reviews will be conducted to ensure their continued relevance and effectiveness in response to evolving methodologies and market developments.

## 16.4.2 Timing

The methodology should specify how frequently data collection is required and whether there is a need for repeat sampling within a single reporting period. Some methods may recommend repeat sampling within a reporting period, which is particularly important for CBCP project attributes that have high variability and unpredictability, such as water, fauna, and other mobile assets. In such cases, the methodology should offer guidance on the suggested timing and frequency of repeat sampling, along with any important considerations.

To maintain consistency in time-series data, methodologies should address the impact of seasonality and, if applicable, provide recommendations on the ideal season or conditions for sampling, such as spring or the end of the dry season.

Methodologies should suggest the appropriate frequency for developing VBC accounts.





## **16.5** Priority mechanism for CBCP actions

The CBCP has implemented a categorization system for VBC to prioritize actions that support biodiversity. This system assigns classifications of bronze, silver, gold, or platinum to individual credits, with platinum representing the highest level of importance within the program.

The categorization of biodiversity credits is structured according to eight specific classification schemas (refer to *Table 5*), each aligned with the eligible biodiversity activities outlined in the CBCP.

| Table 5. Biodiversity credit categorization system for prioritizing actions s | upporting |
|---|-----------|
| biodiversity.   |           |

| Criteria  | Platinum   | Gold  | Silver  | Bronze   |
|---|--|---|---|--|
| IUCN Red List of Eco-<br>systems categories                       | Project is in a Criti-<br>cally Endangered<br>(CR) ecosystem.                                  | Project is in an<br>Endangered (EN)<br>ecosystem.   | Project is in a Vul-<br>nerable (VU) eco-<br>system.  | Project is in a<br>Near Threatened<br>(NT) ecosystem.  |
| <u>Biodiversity Hotspot</u>                                       | Project is in a Pri-<br>ority target.  | Project is in a<br>Recognized<br>hotspot.   | Project is in a<br>within 5km of<br>Recognized<br>hotspot.  | Project is in a<br>within 20km of<br>Recognized<br>hotspot.                                      |
| Irreplaceable biodi-<br>versity and irrecover-<br>able carbon     | Project is in a high<br>irreplaceable bio-<br>diversity and irre-<br>coverable carbon<br>area. | Project is in a<br>high irreplaceable<br>biodiversity or ir-<br>recoverable car-<br>bon area.         | Project is in a me-<br>dium irreplacea-<br>ble biodiversity<br>and irrecoverable<br>carbon area.    | Project is in a low<br>irreplaceable bio-<br>diversity and irre-<br>coverable carbon<br>area.    |
| CBD National targets  | Project is in a de-<br>forestation region<br>2020 – 2030.                                      | Project is in a de-<br>forestation region<br>2030 – 2050.   | Project is in a<br>within 5km of de-<br>forestation re-<br>gion.                                    | Project is in a<br>within 20km of<br>deforestation re-<br>gion.                                  |
| <u>IUCN Global Ecosys-</u><br>tem Typology                        | Project is in a<br>>50% probability<br>of collapse within<br>50 years ecosys-<br>tem.          | Project is in a 50-<br>20% probability<br>of ecosystem col-<br>lapse in within 50<br>years ecosystem. | Project is in a 20-<br>10% probability<br>of ecosystem col-<br>lapse within 100<br>years ecosystem. | Project is in a<br>threatened cate-<br>gory in the near<br>future ecosystem.                     |
| <u>UNEP Forest Biodi-</u><br>versity Intactness In-<br><u>dex</u> | Project is in a<br>100% intact forest<br>ecosystem with<br>minimal human<br>disturbance.       | Project is in a<br>>75% intact for-<br>est ecosystem<br>with moderate<br>human disturb-<br>ance.      | Project is in a<br>>50% intact for-<br>est ecosystem<br>with high human<br>disturbance.             | Project is in a<br>>25% intact for-<br>est ecosystem<br>with very high<br>human disturb-<br>ance |
| Ramsar Wetland Clas-<br>sification                                | Project is in a<br>Ramsar Category I   | Project is in a<br>Ramsar Category<br>II  | Project is in a<br>Ramsar Category<br>III   | Project is in a<br>threatened wet-<br>land without<br>Ramsar category.                           |
| <u>World Heritage List</u><br><u>UNESCO</u>                       | Project is in a nat-<br>ural assets site.  | Project is in a mixed assets site.  | Project is in a cul-<br>tural assets site.  | N/A  |

Stakeholders can easily identify the level of prioritization for each credit, which helps in the efficient allocation of resources to support biodiversity conservation efforts.

While all projects in the CBCP contribute to biodiversity conservation, the categorization system highlights credits that are particularly impactful or urgently in need of



support. This approach helps identify key priorities within the program and recognizes projects that exceed expectations in protecting and enhancing biodiversity.

The categorization of biodiversity credits within the CBCP is a valuable tool for prioritizing actions and effectively allocating resources to credits with the greatest impact on biodiversity conservation. By differentiating between levels of prioritization, the program can target support towards critical credits and ensure conservation efforts are directed to where they are most needed.

It is important to note that the categorization process is recognized as ongoing. Therefore, the CBCP will utilize external resources to provide rankings and acknowledges that future versions will incorporate updated categorizations following a comprehensive public review. The application of differentiating conditions is not mandatory; if a project lacks information to demonstrate compliance with certain criteria, those factors are considered not applicable.

# **17** Migration of projects and conversion of credits

Migration of projects and conversion of credits from other biodiversity programs or standards to the CBCP are not permitted during the 'Innovation phase'. This policy will be reviewed after the 'Innovation phase' concludes.

# **18** Revisions and updates

The protocol and guidelines of CBCP will be initially reviewed after the Innovation Phase to address any immediate issues or gaps. Following this, regular revisions will be conducted at least once every three years to ensure their ongoing relevance and effectiveness. Ad hoc reviews may also be triggered by significant changes in legal regulations, scientific understanding, or technological advancements. Stakeholders, including project developers, environmental experts, and community representatives, will be invited to contribute to these reviews. Any updates to the protocol and guidelines will be communicated clearly to all parties involved and documented in subsequent versions of the CBCP.





# **19 Document history**

| Version | Date       | Comments or changes                                    |
|---------|------------|--|
| 1.0     | 01.12.2023 | Initial version of the protocol in public consultation |
|         |            | from 01.12.2023 to 15.01.2024.                         |
| 1.1     | 22.03.2024 | Revised version of the protocol following public con-  |
|         |            | sultation.   |



## Annexe 1. Suggested potential biodiversity key indicators

Here are some potential indicators for tracking and assessing BCP performance. Many of these can be applied to several CBCP principles or project components. They are suggestions and, if used, should be adapted to the specific circumstances of each project.

The selected indicators should be accompanied by their respective targets.

| Indicator   | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Adaptive governance structures                                |           |           |           |           |           |           |           |           |
| Indicator: Existence of governance structures that            |           |           |           |           |           | Х         |           |           |
| support adaptive management.                                  |           |           |           |           |           |           |           |           |
| Adaptive long-term monitoring and measure-                    |           |           |           |           |           |           |           |           |
| ment framework  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evidence of adjustments to the measure-     |           |           |           |           | X         |           |           |           |
| ment framework based on emerging best practices               |           |           |           |           |           |           |           |           |
| and scientific understanding.                                 |           |           |           |           |           |           |           |           |
| Adaptive management   |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evidence of the project's ability to adjust |           | X         |           |           | X         |           |           |           |
| activities based on objective results, changing cir-          |           |           |           |           |           |           |           |           |
| cumstances, and lessons learned.                              |           |           |           |           |           |           |           |           |
| Adverse impact prevention measures                            |           |           |           |           |           |           |           |           |
| Indicator: Existence and effectiveness of measures            |           |           |           | Х         |           |           |           |           |
| to prevent adverse social impacts.                            |           |           |           |           |           |           |           |           |
| Alignment with regional goals and national bio-               |           |           |           |           |           |           |           |           |
| diversity strategies  |           |           |           |           |           |           |           |           |
| Indicator: Integration of project goals with the ob-          |           |           | X         |           |           |           |           |           |
| jectives outlined in the national biodiversity strat-         |           |           |           |           |           |           |           |           |
| egy and action plan (NBSAP).                                  |           |           |           |           |           |           |           |           |
| Baseline comparison   |           |           |           |           |           |           |           |           |
| Indicator: Comparison of current biodiversity indi-           |           | x         |           |           |           |           |           |           |
| cators with baseline data collected before the pro-           |           | Λ         |           |           |           |           |           |           |
| ject's initiation.  |           |           |           |           |           |           |           |           |
| Benefit sharing agreements                                    |           |           |           |           |           |           |           |           |
| Indicator: Existence of formal benefit-sharing                |           |           |           |           |           | Х         | Х         |           |
| agreements (or mechanisms) with local communi-                |           |           |           |           |           |           |           |           |
| ties and stakeholders.  |           |           |           |           |           |           |           |           |
| Biodiversity benefits for communities                         |           |           |           |           |           |           |           |           |
| Indicator: Positive changes in biodiversity indica-           |           |           |           |           |           |           |           |           |
| tors that are important for local communities (e.g.,          |           |           |           |           |           | Х         |           |           |
| availability of key species, access to traditional re-        |           |           |           |           |           |           |           |           |
| sources).   |           |           |           |           |           |           |           |           |
| Biodiversity index improvement                                |           |           |           |           |           |           |           |           |
| Indicator: Positive changes in biodiversity indices           | X         |           |           | Х         |           |           |           |           |
| (e.g., Shannon-Wiener Index, Simpson's Diversity In-          |           |           |           | 1         |           |           |           |           |
| dex, Shannon-Wiener Index, etc.).                             |           |           |           |           |           |           |           |           |





| Indicator  | D1        | <b>D</b> 2 | <b>D</b> 2 | D4        | DF        | D4        | D7        | DO        |
|--|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|
|  | <b>P1</b> | P2         | <b>P3</b>  | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
| Biodiversity trajectory analysis                           |           |            |            |           |           |           |           |           |
| <b>Indicator:</b> Rate of change (either positive or nega- |           | v          |            |           |           |           |           |           |
| tive) in key biodiversity indicators when comparing        |           | X          |            |           |           |           |           |           |
| historical data (pre-project) to projected data (post-     |           |            |            |           |           |           |           |           |
| project implementation).                                   |           |            |            |           |           |           |           |           |
| Budget allocation to on-the ground actions                 |           |            |            |           |           |           |           |           |
| Indicator: Percentage of the project budget allo-          | X         |            |            |           |           |           |           |           |
| cated on-the-ground conservation actions.                  |           |            |            |           |           |           |           |           |
| Capacity building  |           |            |            |           |           |           |           |           |
| Indicator: Number of local community members               |           |            |            |           |           |           |           |           |
| trained or empowered through the project or                |           |            |            |           |           | X         |           |           |
| amount invested in local capacity building to sup-         |           |            |            |           |           |           |           |           |
| port conservation efforts.                                 |           |            |            |           |           |           |           |           |
| Community empowerment                                      |           |            |            |           |           |           |           |           |
| Indicator: Evidence of capacity building and em-           |           |            |            |           |           | X         |           |           |
| powerment of affected communities.                         |           |            |            |           |           |           |           |           |
| Community engagement and awareness                         |           |            |            |           |           |           |           |           |
| <b>Indicator:</b> Percentage of local community members    |           |            |            | v         |           | v         |           |           |
| attending biodiversity-awareness events or partici-        |           |            |            | X         |           | X         |           |           |
| pating in project-related activities.                      |           |            |            |           |           |           |           |           |
| Community engagement                                       |           |            |            |           |           |           |           |           |
| <b>Indicator:</b> Level of community engagement and de-    |           |            |            |           |           |           |           |           |
| cision-making in project planning and implementa-          |           |            |            |           |           | X         |           |           |
| tion to incorporate traditional knowledge and local        |           |            |            |           |           |           |           |           |
| perspectives.  |           |            |            |           |           |           |           |           |
| Community-based monitoring systems                         |           |            |            |           |           |           |           |           |
| Indicator: Number of active community-based                |           |            |            |           |           |           |           |           |
| monitoring systems established, combined with the          |           |            |            |           | X         | X         |           |           |
| frequency of data collection events led by local           |           |            |            |           |           |           |           |           |
| stakeholders.  |           |            |            |           |           |           |           |           |
| Community-led decision-making                              |           |            |            |           |           |           |           |           |
| Indicator: Demonstration of decision-making                |           |            |            |           |           | X         |           |           |
| power in the hands of local communities.                   |           |            |            |           |           |           |           |           |
| Comparative modelling                                      |           |            |            |           |           |           |           |           |
| <b>Indicator:</b> Existence of comprehensive comparative   |           |            |            |           |           |           |           |           |
| models that compare predicted biodiversity out-            |           | X          |            |           |           |           |           |           |
| comes with the project's actions versus those with-        |           |            |            |           |           |           |           |           |
| out.   |           |            |            |           |           |           |           |           |
| Comparison to previous similar initiatives                 |           |            |            |           |           |           |           |           |
| Indicator: Comparison of the outcomes of the cur-          |           |            |            |           |           |           |           |           |
| rent initiative with those of previous similar initia-     |           | X          |            |           |           |           |           |           |
| tives to demonstrate its effectiveness in enhancing        |           |            |            |           |           |           |           |           |
| biodiversity.  |           |            |            |           |           |           |           |           |
| Comprehensive reporting                                    |           |            |            |           |           |           |           |           |
| Indicator: Inclusion of a comprehensive set of im-         |           |            |            |           | X         |           |           |           |
| pact indicators in project reports.                        |           |            |            |           |           |           |           |           |





| Indicator   | P1 | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|---|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Conflict resolution mechanisms                              |    |           |           |           |           |           |           |           |
| Indicator: Existence and effectiveness of conflict          |    |           |           |           |           |           |           |           |
| resolution mechanisms for addressing disputes               |    |           |           | X         |           | X         |           |           |
| among stakeholders.   |    |           |           |           |           |           |           |           |
| Continuous improvement culture                              |    |           |           |           |           |           |           |           |
| Indicator: Frequency of team feedback sessions,             |    |           |           | x         |           |           |           |           |
| workshops, or brainstorming events focused on               |    |           |           | Λ         |           |           |           |           |
| generating ideas to enhance project outcomes.               |    |           |           |           |           |           |           |           |
| Control area comparison                                     |    |           |           |           |           |           |           |           |
| Indicator: Comparison of biodiversity indicators in         |    |           |           |           |           |           |           |           |
| the intervention area with a similar area that has          |    | X         |           |           |           |           |           |           |
| not undergone the project's actions, demonstrating          |    |           |           |           |           |           |           |           |
| the added value of the initiative.                          |    |           |           |           |           |           |           |           |
| Cross-border collaboration                                  |    |           |           |           |           |           |           |           |
| Indicator: Engagement in cross-border collabora-            |    |           | x         |           |           |           |           | x         |
| tions and initiatives for transboundary conserva-           |    |           |           |           |           |           |           |           |
| tion.   |    |           |           |           |           |           |           |           |
| Data collection efficiency                                  |    |           |           |           |           |           |           |           |
| Indicator: Time and resources required for data             |    |           |           |           | X         |           |           |           |
| collection.   |    |           |           |           |           |           |           |           |
| Data harmonization  |    |           |           |           |           |           |           |           |
| <b>Indicator:</b> Efforts to harmonize and reconcile data   |    |           |           |           | X         |           |           |           |
| from different sources.                                     |    |           |           |           |           |           |           |           |
| Data integration framework                                  |    |           |           |           |           |           |           |           |
| Indicator: Use of a data integration framework that         |    |           |           |           | X         |           |           |           |
| allows for aggregation and synthesis of diverse data        |    |           |           |           |           |           |           |           |
| types.  |    |           |           |           |           |           |           |           |
| Data transparency   |    |           |           |           |           |           |           |           |
| <b>Indicator:</b> Accessibility and transparency of project |    |           |           |           | X         |           | X         |           |
| data and monitoring information.                            |    |           |           |           |           |           |           |           |
| Demonstrated threat reduction                               |    |           |           |           |           |           |           |           |
| Indicator: Reduction percentage in identified               | X  |           |           | X         |           |           |           |           |
| threats (e.g., habitat destruction, pollution, overfish-    | 1. |           |           |           |           |           |           |           |
| ing) affecting target species and habitats.                 |    |           |           |           |           |           |           |           |
| Demonstration of long-term impact                           |    |           |           |           |           |           |           |           |
| <b>Indicator:</b> Change in the population of target spe-   | X  |           |           | X         |           |           |           |           |
| cies or health metrics of key habitats.                     |    |           |           |           |           |           |           |           |
| Documentation and knowledge management                      |    |           |           |           |           |           |           |           |
| Indicator: Number of documented lessons, feed-              |    |           |           | X         | X         |           |           |           |
| back sessions held, and implemented adaptations.            |    |           |           |           |           |           |           |           |
| Ecosystem functionality                                     |    |           |           |           |           |           |           |           |
| Indicator: Change in key ecosystem functionality            | X  |           |           | x         | v         |           |           |           |
| metrics such as nutrient cycling efficiency or water        | Å  |           |           | Λ         | X         |           |           |           |
| filtration rate.  |    |           |           |           |           |           |           |           |





| Indicator   | <b>P1</b>                                       | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|---|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Ecosystem health metric                                     |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Use of ecosystem health indicators to as- | X   |           |           | X         | X         |           |           |           |
| sess positive impacts.                                      |   |           |           |           |           |           |           |           |
| Ecosystem services valuation                                |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Quantitative measurement of key ecosys-   |   |           |           |           |           |           |           |           |
| tem services metrics within the intervention area           | X   |           |           | X         | X         |           |           |           |
| (e.g., litres of water filtered, tones of carbon seques-    |   |           |           |           |           |           |           |           |
| tered, increase in pollinator species).                     |   |           |           |           |           |           |           |           |
| Education and awareness programs                            |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Inclusion of educational and awareness    |   |           |           |           |           |           |           |           |
| programs that promote the value of biodiversity and         | rams that promote the value of biodiversity and |           |           | X         |           | X         |           |           |
| conservation among local communities and the                |   |           |           |           |           |           |           |           |
| broader public.   |   |           |           |           |           |           |           |           |
| Endangered species recovery                                 |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Monitoring of the recovery status of en-  |   |           |           |           |           |           |           |           |
| dangered or threatened species, measuring their in-         | v   |           |           | v         | N         |           |           |           |
| crease in population size, expanded range, or im-           | X   |           |           | X         | X         |           |           |           |
| proved reproductive success compared to natural             |   |           |           |           |           |           |           |           |
| processes.  |   |           |           |           |           |           |           |           |
| Equitable gender engagement                                 |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Gender-balanced engagement in benefit-    |   |           |           |           |           | x         |           |           |
| sharing and decision-making processes.                      |   |           |           |           |           |           |           |           |
| Establishment of partnerships                               |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evidence of project alignment with and    |   |           |           |           |           |           |           |           |
| complements existing conservation initiatives,              |   |           | x         |           |           |           |           |           |
| showing that efforts are coordinated and synergis-          |   |           |           |           |           |           |           |           |
| tic.  |   |           |           |           |           |           |           |           |
| Exit strategy and transition plan                           |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Existence of a well-defined exit strategy |   |           |           |           |           |           |           |           |
| and transition plan that outlines how the project's         |   |           |           | X         |           |           |           |           |
| responsibilities will be gradually transferred to local     |   |           |           |           |           |           |           |           |
| stakeholders.   |   |           |           |           |           |           |           |           |
| Feedback and conflict resolution mechanisms                 |   |           |           |           |           |           |           |           |
| Indicator: Existence and effectiveness of mecha-            |   |           |           |           |           |           |           |           |
| nisms for preventing and addressing disputes and            |   |           |           | v         |           | v         |           |           |
| conflicts related to benefit distribution, and to pro-      |   |           |           | X         |           | X         |           |           |
| vide feedback on project activities and potential im-       |   |           |           |           |           |           |           |           |
| pacts.  |   |           |           |           |           |           |           |           |
| Flexibility in data collection                              |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Adaptation of data collection methods to  |   |           |           |           | X         |           |           |           |
| changing circumstances or newly identified metrics.         |   |           |           |           |           |           |           |           |
| Free, prior, and informed consent (FPIC)                    |   |           |           |           |           |           |           |           |
| <b>Indicator:</b> Demonstration of FPIC processes where     |   |           |           |           |           |           |           |           |
| applicable, especially in projects affecting indige-        |   |           |           |           |           | X         |           |           |
| nous or local communities.                                  |   |           |           |           |           |           |           |           |
|   | 1   | 1         |           |           |           |           |           | 1         |





| Indicator   | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gender-sensitive approaches                                 |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Incorporation of gender-sensitive strate- |           |           |           |           |           |           |           |           |
| gies and assessments to prevent gender-based so-            |           |           |           |           |           | X         |           |           |
| cial impacts.   |           |           |           |           |           |           |           |           |
| Genetic diversity   |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evaluation of changes in genetic diver-   |           |           |           |           |           |           |           |           |
| sity within target species or populations, indicating       | X         |           |           | X         |           |           |           |           |
| the effectiveness of activities in maintaining genetic      |           |           |           |           |           |           |           |           |
| health.   |           |           |           |           |           |           |           |           |
| Global benchmarking   |           |           |           |           |           |           |           |           |
| Indicator: Adoption of standardized reporting for-          |           |           |           |           |           |           |           |           |
| mats or metrics for comparability across projects or        |           |           | X         |           |           |           |           |           |
| engagement in global benchmarking systems for bi-           |           |           |           |           |           |           |           |           |
| odiversity conservation.                                    |           |           |           |           |           |           |           |           |
| Global conservation targets                                 |           |           |           |           |           |           |           |           |
| Indicator: Evidence of contributions to the Global          | X         |           | X         |           |           |           |           |           |
| Biodiversity Framework Targets.                             |           |           |           |           |           |           |           |           |
| Habitat connectivity enhancement:                           |           |           |           |           |           |           |           |           |
| Indicator: Improvement in degree of habitat con-            |           |           |           |           |           |           |           |           |
| nectivity for wildlife within the project and sur-          | x         |           |           | x         |           |           |           | X         |
| rounding areas to ensure the movement and migra-            | Λ         |           |           | Λ         |           |           |           | Λ         |
| tion of species, considering factors like wildlife cor-     |           |           |           |           |           |           |           |           |
| ridors, buffer zones, and natural pathways.                 |           |           |           |           |           |           |           |           |
| Habitat quality improvement                                 |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evaluation of the improvements in habi-   |           |           |           |           |           |           |           |           |
| tat quality, such as enhanced vegetation cover, im-         | X         |           |           | X         |           |           |           |           |
| proved water quality, or reduced habitat fragmenta-         |           |           |           | Λ         |           |           |           |           |
| tion, demonstrating that the initiative is expediting       |           |           |           |           |           |           |           |           |
| the recovery of ecosystems.                                 |           |           |           |           |           |           |           |           |
| Habitat restoration effectiveness                           |           |           |           |           |           |           |           |           |
| Indicator: Assessment of the effectiveness of habi-         |           |           |           |           |           |           |           |           |
| tat restoration efforts, by monitoring indicators           | X         |           |           | X         |           |           |           |           |
| such as habitat connectivity, native species coloniza-      |           |           |           |           |           |           |           |           |
| tion, and ecosystem functionality.                          |           |           |           |           |           |           |           |           |
| Harmonized data standards                                   |           |           |           |           |           |           |           |           |
| Indicator: Use of standardized data and reporting           |           |           | X         |           |           |           |           |           |
| formats that align with national and international          |           |           |           |           |           |           |           |           |
| standards.  |           |           |           |           |           |           |           |           |
| Impact of landscape changes                                 |           |           |           |           |           |           |           |           |
| Indicator: The project assesses the potential im-           |           |           |           |           |           |           |           |           |
| pacts of any proposed changes in the landscape on           |           |           |           |           |           |           |           | X         |
| the existing ecosystems, habitats, and species distri-      |           |           |           |           |           |           |           |           |
| butions.  |           |           |           |           |           |           |           |           |





| Indicator   | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Income generation   |           |           |           |           |           |           |           |           |
| Indicator: Increase in income or economic opportu-          |           |           |           |           |           |           |           |           |
| nities for local communities that contribute to con-        | X         |           |           | x         |           | v         |           |           |
| servation, such as ecotourism, sustainable harvest-         |           |           |           |           |           | Х         |           |           |
| ing, or value-added products from natural re-               |           |           |           |           |           |           |           |           |
| sources.  |           |           |           |           |           |           |           |           |
| Indicator species response                                  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evidence of monitoring the presence and   | X         |           |           | X         |           |           |           |           |
| behaviour of indicator species that are particularly        |           |           |           | Λ         |           |           |           |           |
| sensitive to environmental changes.                         |           |           |           |           |           |           |           |           |
| Integration of qualitative data                             |           |           |           |           |           |           |           |           |
| Indicator: Integration of qualitative information           | X         |           |           |           | X         |           |           |           |
| (e.g., local ecological knowledge) into quantitative        |           |           |           |           |           |           |           |           |
| metrics.  |           |           |           |           |           |           |           |           |
| Integration with local economies                            |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Evidence and results that the project has |           |           |           |           |           |           |           |           |
| explored ways to integrate conservation efforts with        |           |           |           | X         |           | Х         |           |           |
| sustainable economic activities that incentivize local      |           |           |           |           |           |           |           |           |
| communities to protect natural resources.                   |           |           |           |           |           |           |           |           |
| International agreements compliance                         |           |           |           |           |           |           |           |           |
| Indicator: Conformity with international agree-             |           |           | X         |           |           |           |           |           |
| ments and conventions related to biodiversity (e.g.,        |           |           |           |           |           |           |           |           |
| CBD, CITES).  |           |           |           |           |           |           |           |           |
| Landscape restoration and enhancement                       |           |           |           |           |           |           |           |           |
| Indicator: Number of hectares restored, enhanced,           |           |           |           |           |           |           |           | X         |
| or converted into wildlife corridors within the pro-        |           |           |           |           |           |           |           |           |
| ject area.  |           |           |           |           |           |           |           |           |
| Lesson learning workshops                                   |           |           |           |           |           |           |           |           |
| Indicator: Number of workshops or sessions to fa-           |           |           |           |           |           |           |           |           |
| cilitate stakeholder discussions, where lessons             |           |           |           | X         |           |           |           |           |
| learned, and best practices are shared and dis-             |           |           |           |           |           |           |           |           |
| cussed.   |           |           |           |           |           |           |           |           |
| Local employment and training                               |           |           |           |           |           |           |           |           |
| Indicator: Number of local community members                |           |           |           |           |           | Х         |           |           |
| employed by or trained through the project.                 | ļ         |           |           |           |           |           |           |           |
| Local governance structures                                 |           |           |           |           |           |           |           |           |
| Indicator: Integration of local governance struc-           |           |           |           |           |           | Х         |           |           |
| tures and institutions in project governance.               |           |           |           |           |           |           |           |           |
| Local livelihood enhancement                                |           |           |           |           |           |           |           |           |
| Indicator: Improved livelihoods of local communi-           |           |           |           | X         |           | Х         |           |           |
| ties because of project activities.                         |           |           |           |           |           |           |           |           |
| Local ownership and empowerment                             |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Percentage of local community members     |           |           |           | x         |           | X         |           |           |
| actively participating in decision-making processes         |           |           |           | Λ         |           | Λ         |           |           |
| related to conservation activities.                         |           |           |           |           |           |           |           |           |





| Indicator  | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Local stakeholder engagement                                 |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Inclusion of local communities, indige-    |           |           |           |           |           | v         |           |           |
| nous groups, and relevant stakeholders in project            |           |           |           |           |           | X         |           |           |
| planning and decision-making.                                |           |           |           |           |           |           |           |           |
| Long-term benefit sustainability                             |           |           |           |           |           |           |           |           |
| Indicator: Sustainability of benefits beyond the pro-        |           |           |           | X         |           |           |           |           |
| ject's duration.   |           |           |           |           |           |           |           |           |
| Long-term conservation plan                                  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Detailed plan outlining how the conser-    |           |           |           | X         |           |           |           |           |
| vation efforts and positive impacts will be sustained        |           |           |           | Λ         |           |           |           |           |
| beyond the project's initial duration.                       |           |           |           |           |           |           |           |           |
| Metric alignment with global standards                       |           |           |           |           |           |           |           |           |
| Indicator: Alignment of project metrics with glob-           |           |           |           |           |           |           |           |           |
| ally recognized biodiversity measurement standards           |           |           | x         |           |           |           |           |           |
| and tools (e.g., IUCN Red List categories).                  |           |           | Λ         |           |           |           |           |           |
| <b>Target:</b> Ensuring that project metrics conform to      |           |           |           |           |           |           |           |           |
| widely accepted standards.                                   |           |           |           |           |           |           |           |           |
| Milestone reflections  |           |           |           |           |           |           |           |           |
| Indicator: Evidence of periodical reflections on             |           |           |           | X         |           |           |           |           |
| achieved milestones to identify what worked well             |           |           |           |           |           |           |           |           |
| and what could be improved for future stages.                |           |           |           |           |           |           |           |           |
| Monitoring and reporting alignment                           |           |           |           |           |           |           |           |           |
| Indicator: Evidence of alignment with established            |           |           |           |           |           |           |           |           |
| reporting frameworks at local, national, and interna-        |           |           |           |           | X         |           |           |           |
| tional levels (as relevant), ensuring transparent and        |           |           |           |           |           |           |           |           |
| accountable progress tracking.                               |           |           |           |           |           |           |           |           |
| Monitoring and reporting frequency                           |           |           |           |           |           |           |           |           |
| Indicator: Frequency of project impact monitoring            |           |           |           |           |           |           |           |           |
| and reporting to credit buyers and stakeholders.             | X         |           |           | X         | X         |           |           |           |
| Target: Regular but not excessive and timely report-         |           |           |           |           |           |           |           |           |
| ing of impacts, typically on an annual or agreed-            |           |           |           |           |           |           |           |           |
| upon schedule.   |           |           |           |           |           |           |           |           |
| Monitoring feedback loop                                     |           |           |           |           |           |           |           |           |
| Indicator: Evidence of effective feedback mecha-             |           |           |           |           | X         |           |           |           |
| nisms for sharing monitoring results with stake-             |           |           |           |           |           |           |           |           |
| holders.   |           |           |           |           |           |           |           |           |
| Percentage of benefits to local communities                  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Percentage of project benefits directed to |           |           |           |           |           | X         | Х         |           |
| local communities and indigenous groups.                     |           |           |           |           |           |           |           |           |
| Policy and legal alignment                                   |           |           |           |           |           |           |           |           |
| Indicator: Compliance with local, regional, national,        |           |           | X         |           |           |           |           |           |
| and international relevant policies and laws.                |           |           |           |           |           |           |           |           |
| Population size  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Quantification of the size of target spe-  | v         |           |           | v         |           |           |           |           |
| cies populations to track population growth or re-           | X         |           |           | X         |           |           |           |           |
| covery.  |           |           |           |           |           |           |           |           |
|  |           |           |           |           |           |           |           |           |





| Indicator  | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Population trends  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Tracking of population trends of key spe-  | v         |           |           | v         |           |           |           |           |
| cies within the intervention area, focusing on popu-         | X         |           |           | X         |           |           |           |           |
| lation growth, stability, or recovery.                       |           |           |           |           |           |           |           |           |
| Protected area expansion                                     |           |           |           |           |           |           |           |           |
| Indicator: Evidence of expansion of protected areas          | X         |           |           | X         |           |           |           |           |
| or conservation zones.                                       |           |           |           |           |           |           |           |           |
| Public engagement  |           |           |           |           |           |           |           |           |
| Indicator: Engagement with the public and stake-             |           |           |           |           |           | Х         | Х         |           |
| holders in the reporting process.                            |           |           |           |           |           |           |           |           |
| Recognition of cultural heritage                             |           |           |           |           |           |           |           |           |
| Indicator: Measures to protect and celebrate cul-            |           |           |           |           |           | Х         |           |           |
| tural heritage sites and practices.                          |           |           |           |           |           |           |           |           |
| Regular review and evaluation                                |           |           |           |           |           |           |           |           |
| Indicator: Evidence of regular reviews and evalua-           | X         |           |           | x         | X         |           |           |           |
| tions to assess progress, identify challenges, and de-       |           |           |           | Λ         | Λ         |           |           |           |
| termine whether objectives are being met.                    |           |           |           |           |           |           |           |           |
| Resilience to climate change                                 |           |           |           |           |           |           |           |           |
| Indicator: Number of climate resilience measures             | X         |           |           |           |           |           |           |           |
| and strategies incorporated into the project.                |           |           |           |           |           |           |           |           |
| Resource mobilization strategies                             |           |           |           |           |           |           |           |           |
| Indicator: Number and types of resource mobiliza-            |           |           |           | X         |           |           |           |           |
| tion strategies implemented by the project.                  |           |           |           |           |           |           |           |           |
| Respect for cultural practices, indigenous, and              |           |           |           |           |           |           |           |           |
| local rights   |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Documentation of project activities that   |           |           |           |           |           | Х         |           |           |
| respect and protect local cultural practices and the         |           |           |           |           |           |           |           |           |
| rights of indigenous and local communities.                  |           |           |           |           |           |           |           |           |
| Restoration area coverage                                    |           |           |           |           |           |           |           |           |
| Indicator: Area of land or habitat within the inter-         | X         |           |           | X         |           |           |           |           |
| vention zone that has been restored or conserved             | Λ         |           |           | Λ         |           |           |           |           |
| because of the budget allocation.                            |           |           |           |           |           |           |           |           |
| Risk disclosure  |           |           |           |           |           |           |           |           |
| Indicator: Inclusion of risks and uncertainties asso-        |           |           |           |           |           |           | Х         |           |
| ciated with project impacts in reports.                      |           |           |           |           |           |           |           |           |
| Scale of actions   |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Extent of on-the-ground conservation ac-   | X         |           |           |           |           |           |           | X         |
| tions implemented.   |           |           |           |           |           |           |           |           |
| Scenario planning  |           |           |           |           |           |           |           |           |
| <b>Indicator:</b> Use of scenario planning to anticipate po- |           |           |           |           |           |           |           |           |
| tential changes in environmental, social, or eco-            |           |           |           | v         |           |           |           |           |
| nomic conditions, challenges, and opportunities.             |           |           |           | X         |           |           |           |           |
| <b>Target:</b> Preparedness for a range of possible future   |           |           |           |           |           |           |           |           |
| scenarios.   |           |           |           |           |           |           |           |           |





| Indicator  | <b>P1</b> | <b>P2</b> | <b>P3</b> | <b>P4</b> | <b>P5</b> | <b>P6</b> | <b>P7</b> | <b>P8</b> |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Social risk assessments                                |           |           |           |           |           |           |           |           |
| Indicator: Completion of thorough social risk as-      |           |           |           |           |           | Х         |           |           |
| sessments prior to project initiation.                 |           |           |           |           |           |           |           |           |
| Species abundance increase                             |           |           |           |           |           |           |           |           |
| Indicator: Measure changes in the abundance and        |           |           |           |           |           |           |           |           |
| diversity of target species within the intervention    | X         |           |           | X         |           |           |           |           |
| area, indicating the success of activities in support- |           |           |           |           |           |           |           |           |
| ing local biodiversity.                                |           |           |           |           |           |           |           |           |
| Species habit use                                      |           |           |           |           |           |           |           |           |
| Indicator: Observed changes in species' habitat use    | X         |           |           | X         |           |           |           |           |
| patterns, indicating successful habitat restoration.   |           |           |           |           |           |           |           |           |
| Stakeholder consultation                               |           |           |           |           |           |           |           |           |
| Indicator: Extent and quality of stakeholder consul-   |           |           |           |           |           | Х         |           |           |
| tations conducted during project planning.             |           |           |           |           |           |           |           |           |
| Stakeholder engagement in adaptation                   |           |           |           |           |           |           |           |           |
| Indicator: Engagement of stakeholders in decision-     |           |           |           |           |           | Х         |           |           |
| making related to project adaptations.                 |           |           |           |           |           |           |           |           |
| Stakeholder involvement in project design              |           |           |           |           |           |           |           |           |
| Indicator: Level of meaningful involvement of local    |           |           |           |           |           | Х         |           |           |
| stakeholders in the design phase.                      |           |           |           |           |           |           |           |           |
| Timely updates   |           |           |           |           |           |           |           |           |
| Indicator: Timely updates to buyers and stakehold-     |           |           |           |           |           |           | v         |           |
| ers in case of unexpected developments or signifi-     |           |           |           |           |           |           | X         |           |
| cant changes.  |           |           |           |           |           |           |           |           |
| Transparency and communication                         |           |           |           |           |           |           |           |           |
| Indicator: Evidence of open communication chan-        |           |           |           |           |           | Х         | X         |           |
| nels to share feedback, lessons learned, and adjust-   |           |           |           |           |           | Λ         |           |           |
| ments with stakeholders and the public.                |           |           |           |           |           |           |           |           |
| Transparency in benefit distribution                   |           |           |           |           |           |           |           |           |
| Indicator: Transparent reports on the allocation       |           |           |           |           |           | Х         | X         |           |
| and distribution of project benefits.                  |           |           |           |           |           |           |           |           |
| Use of technology                                      |           |           |           |           |           |           |           |           |
| Indicator: Integration of technology (e.g., remote     |           |           |           |           | X         |           |           |           |
| sensing, data analytics) to streamline monitoring ef-  |           |           |           |           |           |           |           |           |
| forts.   |           |           |           |           |           |           |           |           |





### Annexe 2. Suggested Table of Contents for Methodologies

Below is a generic table of contents for methodologies for certifying VBC under the CBCP. This structure and order are not mandatory, but in any case, the proposed methodology should address all the elements listed.

#### Scope

- Types of Biodiversity Targeted
- **Qualifying Activities**
- Ancillary activities
- **Geographical Scope**

#### **Principles for certification**

Alignment with CBCP Core Principles and how they govern the methodology

Be Nature-oriented

- Be additional
- Local to global alignment
- Have long-term outcomes
- Have an adaptative management approach
- Use flexible measurement frameworks (use of existing and independent monitoring systems)
- Prioritize investment to on-the-ground actions
- Community-based approach to biodiversity-related actions
- Transparent reporting of project impacts
- Have a landscape context (for in-situ species and ecosystem-level initiatives)
- Definition of compliance indicators for CBCP Core Principles

#### Use of internationally recognized public standards and tools

Application of internationally recognized public standards and tools related to the project objectives

#### Additionality assessment

Specific considerations for the additionality assessment

#### Project lifespan and crediting period

Definition and justification for the length of the crediting period

Conditions for renewal or extension

#### **Baseline assessment**

Drivers of transformation and biodiversity loss

Methodologies for determining the "business-as-usual" scenario

#### **Biodiversity goals**

Expected biodiversity gains and minimum performance threshold

#### **Risk identification and management**

Risk assessment tools and methodologies

Risk mitigation strategies and contingency plans

#### **Measurement and quantification**

Techniques for measuring biodiversity impacts

- Performance indicators
- Credit calculation

#### Monitoring and reporting

Types of data to be reported





Compliance monitoring Protocols for data collection Frequency and methods of monitoring Use of existing, independent monitoring tools

#### Verification

#### Transparency and public participation

Methods for stakeholder engagement and public disclosure Procedures for addressing grievances and disputes

#### **Methodology versions**

Review cycles for methodology Conditions under which the methodology will be revised

### Quality assurance and quality control

Safeguards to ensure the reliability and credibility of credits Penalties for non-compliance

### Ethical and social safeguards





## Annexe 3. Kunming-Montreal Global Biodiversity Framework Targets

| Goal A: Conserve and restore ecosystems1. Participatory planning and management for biodiversity-rich areas.2. Restore 30% of degraded ecosystems by 2030.3. Effectively conserve 30% of terrestrial and marine areas by 2030.4. Prevent extinction and recover threatened species.Goal B: Use lands and seas sustainably   | Con-<br>serve  |
|---|----------------|
| <ul> <li>5. Ensure sustainable, safe, and legal use of wild species.</li> <li>6. Reduce impacts of invasive alien species.</li> <li>7. Reduce pollution to safe levels, including plastic pollution.</li> <li>8. Mitigate climate change and increase resilience.</li> </ul>  | Avoid          |
| Goal C: Share benefits and services9. Promote sustainable use of wild species.10. Sustainable management of agriculture, aquaculture, and more.11. Enhance nature's contributions through nature-based solutions.12. Expand green and blue spaces in urban areas.13. Ensure fair benefit-sharing from genetic resources.  | Safe-<br>guard |
| Goal D: Mobilize necessary resources14. Integrate biodiversity into policies and regulations.15. Hold businesses accountable for biodiversity impacts.16. Facilitate sustainable consumption patterns.17. Implement biosafety measures and benefit-sharing.18. Eliminate harmful incentives and increase positive ones.19. Mobilize financial resources, targeting \$200 billion/year.20. Strengthen capacity, technology access, and cooperation.21. Ensure data accessibility, especially indigenous knowledge.22. Promote inclusive governance and access to justice.23. Promote gender equality in biodiversity conservation. | Act            |





### Annexe 4. Sustainable Development Goals

- 1. No Poverty
- 2. Zero Hunger
- 3. Good Health and Well-being
- 4. Quality Education
- 5. Gender Equality
- 6. Clean Water and Sanitation
- 7. Affordable and Clean Energy
- 8. Decent Work and Economic Growth
- 9. Industry, Innovation, and Infrastructure
- 10. Reduced Inequality
- 11. Sustainable Cities and Communities
- 12. Responsible Consumption and Production
- 13. Climate Action
- 14. Life Below Water
- 15. Life on Land
- 16. Peace, Justice, and Strong Institutions
- 17. Partnerships for the Goals





### Annexe 5. Potentially helpful tools and databases for designing and monitoring biodiversity projects

Some potentially helpful tools and databases in the context of the CBCP are outlined below. Their use is not mandatory. This list is not exhaustive. Apologies are presented for any relevant omissions.

The texts presented correspond to information available on the website referenced in the hyperlink included in the name of each tool.

| Institution         | Short description  |
|---------------------|--|
| <b>Biodiversity</b> | Biodiversity Hotspots is a 2016 downloadable shapefile map of 36   |
| <u>Hotspots</u>     | biodiversity hotspots. Biodiversity hotspots are the earth's most bio-<br>logically rich—yet threatened—terrestrial regions. To qualify as a<br>hotspot, a region must contain at least 1,500 species of endemic vas-<br>cular plants and have lost at least 70 per cent of its primary native<br>vegetation. Many hotspots exceed these criteria.   |
| Circuitscape        | Circuitscape is an open-source connectivity analysis software pack-<br>age that can predict movement patterns, gene flow, and genetic dif-<br>ferentiation among plant and animal populations in heterogeneous<br>landscapes. Its most common applications include modelling move-<br>ment and gene flow of plants and animals (including as a response to<br>climate change) and identifying areas important for connectivity<br>conservation. The algorithms that are used are borrowed from elec-<br>tronic circuit theory. Landscapes are conductive surfaces, with low<br>and high resistances assigned to landscape features that are most<br>and least permeable to movement. Effective resistances, current<br>flow, and voltages calculated across the landscapes can be related to<br>ecological processes, such as individual movement and gene flow. |
| CreditNature -      | NARIA - Natural Asset Recovery Investment Analytics is a tool that   |
| NARIA               | quantifies changes in ecosystem integrity (the processes that shape<br>an ecosystem's structure and function) at the asset level. These<br>changes are then translated into units that enable innovative finan-<br>cial instruments (such as nature impact tokens) and nature-positive<br>reporting. Its scientific rigor is undergoing third-party accreditation.   |
| Crop Relatives in   | GRIN-Global is a project that aims to provide a scalable version of the  |
| <u>GRIN-Global</u>  | Germplasm Resource Information Network (GRIN) suitable for use<br>by any interested genebank in the world. The GRIN-Global database<br>platform has been implemented at various gene banks worldwide.<br>The first version, 1.0.7, was released in December 2011 in a joint ef-<br>fort by the Global Crop Diversity Trust, Biodiversity International,<br>and the USDA Agricultural Research Service. The U.S. National Plant<br>Germplasm System version (1.9.4.2) entered production on Novem-<br>ber 30, 2015.   |





| Institution              | Short description  |
|--------------------------|--|
| <b>Crop Trust's Crop</b> | The Crop Wild Relatives Global Portal is an information platform that  |
| Wild Relatives           | centralizes information about crop wild relatives' diversity and   |
| <u>Global Portal</u>     | threats, strategies for conservation and links to related toolkits and   |
|                          | projects. The portal was created within the framework of the UNEP-   |
|                          | GEF supported project "In situ conservation of crop wild relatives   |
|                          | through enhanced information management and field application"   |
|                          | (2004-2010) and was further expanded under the EU-ACP funded   |
|                          | project "In situ conservation and use of crop wild relatives in three  |
|                          | ACP countries of the SADC region" (2014-2016). The portal is now maintained and updated by the Darwin Initiative funded project                  |
|                          | "Bridging agriculture and environment: Southern Africa crop wild   |
|                          | relative regional network" (2019-2022).  |
| <b>Domestic Animal</b>   | DAD-IS is the Domestic Animal Diversity Information System main-   |
| <b>Diversity Infor-</b>  | tained and developed by FAO. It provides access to searchable data-  |
| mation System            | bases of breed-related information and photos and links to other   |
| (DAD-IS)                 | online resources on livestock diversity. It includes tools that allow  |
|                          | visitors to analyze the diversity of livestock breeds on national, re-   |
|                          | gional and global levels including the status of breeds regarding their  |
|                          | risk of extinction. More than 15 000 national breed populations from   |
| E (LD                    | 182 countries are recorded in this information system.   |
| <b>EarthRanger</b>       | EarthRanger is a software solution that helps protected area manag-  |
|                          | ers to monitor wildlife and their natural habitats in real-time. It col-<br>lects, integrates, and displays all historical and available data on |
|                          | wildlife and habitats and combines it with reports from the field to   |
|                          | provide one unified view of collared wildlife, rangers, enforcement  |
|                          | assets, and infrastructure within a protected area. This tool helps  |
|                          | monitor and study wildlife movement across ecosystems, ranging   |
|                          | from very specific areas to continent-wide migrations. It also helps   |
|                          | protected area managers, ecologists, and wildlife biologists to make   |
|                          | more informed operational decisions for wildlife conservation.   |
| <b>Finance Resource</b>  | The Finance Resource Database for Biodiversity (FIRE) is a database  |
| Database for Bio-        | that aims at closing the financing gap for biodiversity conservation   |
| <u>diversity (FIRE)</u>  | by listing over 200 funding opportunities around the world. The re-  |
|                          | sources are both public and private. They include options with a con-  |
|                          | servation objective and those with other objectives which also can be<br>used to finance biodiversity. FIRE functions as a one-stop-shop,        |
|                          | where a project owner can find in one place a multitude of different   |
|                          | opportunities matching specific criteria (country, range of funding,   |
|                          | type of entity, etc.). Sources can be sorted using filters on the left.  |
| <b>Global Forest</b>     | Global Forest Watch (GFW) is an online platform developed by the   |
| Watch                    | World Resource Institute that provides data and tools for forest   |
|                          | monitoring. GFW enables anyone to access near real-time infor-   |
|                          | mation on where and how forests are changing worldwide. It uses  |
|                          | cutting-edge algorithms that harness the power of satellite technol-   |
|                          | ogy and cloud computing to identify where trees are growing and  |
|                          | disappearing.  |





| Institution                                | Short description   |
|--|---|
| <u>GLOBIO</u>                              | GLOBIO is a global biodiversity model created to support policymak-<br>ing. The model calculates local terrestrial biodiversity intactness, ex-<br>pressed by the mean species abundance (MSA) indicator, as a func-<br>tion of six human pressures: land use, road disturbance, fragmenta-   |
|  | tion, hunting, atmospheric nitrogen deposition and climate change.<br>The model's core consists of quantitative pressure-impact relation-<br>ships established based on extensive terrestrial biodiversity data-<br>bases.  |
| <b>Gnarly Landscape</b>                    | Gnarly Landscape Utilities is an ArcGIS toolbox designed to support   |
| <u>Utilities</u>                           | connectivity modelling. It includes tools for creating resistance and<br>habitat layers and core area mapping. We created the tools to sup-<br>port connectivity analyses by the Washington Wildlife Habitat Con-   |
|  | nectivity Working Group and work by the Western Governors' Asso-<br>ciation and the Nature Conservancy. They can be used to create re-  |
|  | sistance, habitat, and core area maps used by Linkage Mapper, Cir-<br>cuitscape, and other connectivity software packages.  |
| Habitats Classifi-                         | The Habitat Classification Scheme is a list of major in which taxa oc-  |
| cation Scheme                              | cur. If recorded, these habitats are listed on the Fact Sheet page for<br>each taxon under the Classification Schemes and Full Account tabs.  |
|  | The three levels of the hierarchy are self-explanatory, as they use fa-<br>miliar habitat terms that consider biogeography, latitudinal zonation<br>and depth in marine systems. It is acknowledged that the classifica-<br>tion scheme used here is not entirely satisfactory, and a review of the   |
|  | scheme is needed.   |
| IMAGE                                      | The IMAGE integrated assessment modelling framework has been<br>developed to understand how global, long-term environmental<br>change and sustainability problems develop over time, driven by hu-<br>man activities, such as economic development and population<br>growth. The model documentation provides a complete and concise<br>description of the IMAGE 3.0 integrated assessment model frame-<br>work. It highlights how the model assesses key policy issues, such as<br>climate change, air pollution, land-use change, biodiversity loss, and<br>water scarcity.   |
| <u>Instituto Life -</u><br><u>Life Key</u> | Life Key is a platform that centralizes all information regarding a cli-<br>ent company's relationship with biodiversity in a single place. It of-<br>fers metrics that guide decision-making to effective nature conserva-<br>tion actions and reduction of impacts. Using LIFE Key, companies can<br>perform a biodiversity management diagnosis based on three mod-<br>ules: biodiversity pressure (quantifies and monitors 5 aspects of bio-<br>diversity loss), biodiversity performance (evaluates the impact of<br>conservation actions implemented) and LIFE Standards (shows the<br>organization's level of commitment to biodiversity). |
| <u>Irrecoverable</u><br><u>Carbon</u>      | "Irrecoverable carbon" refers to the vast stores of carbon in nature<br>that are vulnerable to release from human activity and, if lost, could<br>not be restored by 2050 — when the world must reach net-zero<br>emissions to avoid the worst impacts of climate change. To avoid the<br>catastrophic consequences of climate breakdown, there are certain   |





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|                         | places that humanity cannot afford to destroy. These ecosystems         |
|                         | contain more than 139 billion metric tons of "irrecoverable car-        |
|                         | bon", most of which is stored in mangroves, peatlands, old-growth       |
|                         | forests and marshes.  |
|                         | Conservational International scientists led a team of globally re-      |
|                         | nowned experts to determine where these carbon stocks are,              |
|                         | whether human activities threaten them and how quickly the stocks       |
|                         | could be recovered if lost — creating a global map of irrecoverable     |
|                         | carbon in Earth's ecosystems.   |
|                         | Informed by this pioneering research, Conservation International is     |
|                         | undertaking an ambitious initiative to protect 4 million square kilo-   |
|                         | meters (more than 1.5 million square miles) of ecosystems — an          |
|                         | area about the size of India and Bolivia combined — containing high     |
|                         | amounts of irrecoverable carbon and biodiversity.                       |
| IUCN - Contribu-        | The Contributions for Nature platform is created by IUCN and allows     |
| tions for Nature        | members to document where they are undertaking (or planning to          |
| Platform                | undertake) conservation actions. It overlays data for biodiversity and  |
|                         | for nature-based solutions to climate change. This allows IUCN con-     |
|                         | stituents to document their intended contributions to IUCN's Nature     |
|                         | 2030 Program and, by extension, other conservation frameworks           |
|                         | and agreements such as the Global Biodiversity Framework, Paris         |
|                         | Agreement, and UN Sustainable Development Goals (SDGs).                 |
| <b>IUCN - Panorama</b>  | The PANORAMA platform is a global knowledge exchange initiative         |
| <b>Platform</b>         | created by IUCN that identifies and promotes examples of tested and     |
|                         | replicable solutions in biodiversity conservation and broader sus-      |
|                         | tainability issues. It provides an open, neutral platform for anyone to |
|                         | share their successes, learn from the experiences of other practition-  |
|                         | ers across sectors and geographies and exchange knowledge as part       |
|                         | of the community.   |
| <b>IUCN - ROAM</b>      | The Restoration Opportunities Assessment Methodology (ROAM),            |
|                         | developed by IUCN and WRI, is a flexible and affordable framework       |
|                         | for countries to rapidly identify and analyze opportunities for forest  |
|                         | and landscape restoration (FLR) and identify specific priority areas    |
|                         | at a national or sub-national level. The IUCN has developed an ac-      |
|                         | companying handbook on ROAM that offers practical advice and op-        |
|                         | tions to bear in mind when considering or conducting an FLR assess-     |
|                         | ment, as well as real-life examples of the kinds of outputs you can ex- |
|                         | pect and will enable you to commission or design a tailor-made pro-     |
|                         | cess to meet your specific needs.                                       |
| <u>IUCN - World Da-</u> | Protected Planet is an authoritative data source on protected areas     |
| tabase of Pro-          | and other effective area-based conservation measures (OECMs). It        |
| tected Areas            | exists due to the extensive efforts of governments and other stake-     |
| <u>("Protected</u>      | holders to map, monitor, and report data on protected areas and         |
| <u>Planet")</u>         | OECMs. Through the Protected Planet website, users can explore the      |
|                         | World Database on Protected Areas (WDPA), World Database on             |
|                         | OECMs, Global Database on Protected Area Management Effective-          |
|                         | ness (GD-PAME), and a wealth of associated information.                 |





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| IUCN EbA                 | Ecosystem-based Adaptation (EbA) is an approach to adaptation             |
|                          | promoted by the IUCN that involves a wide range of ecosystem man-         |
|                          | agement activities, such as the sustainable management of forests,        |
|                          | grasslands, and wetlands, that increase the resilience and reduce the     |
|                          | vulnerability of people and the environment to climate change. It is      |
|                          | also referred to as Nature-based Solutions for Adaptation. Since          |
|                          | 2009, IUCN has promoted the use of EbA as a nature-based solu-            |
|                          | tion for addressing the impacts of climate change on people and their     |
|                          | environment.  |
| IUCN Global Eco-         | The IUCN Global Ecosystem Typology is a comprehensive classifica-         |
| <u>system Typology</u>   | tion framework for Earth's ecosystems that integrates their func-         |
|                          | tional and compositional features. This new typology helps identify       |
|                          | the ecosystems most critical for biodiversity conservation, research,     |
|                          | management, and human well-being in the future.                           |
| <u>IUCN IBAT - The</u>   | IBAT stands for Integrated Biodiversity Assessment Tool. It is a web-     |
| Integrated Biodi-        | based tool that provides access to three of the world's most authori-     |
| <u>versity Assess-</u>   | tative global biodiversity datasets: the IUCN Red List of Threatened      |
| <u>ment Tool</u>         | Species, the World Database on Protected Areas, the World Database        |
|                          | of Key Biodiversity Areas, and STAR. IBAT is designed for use by a        |
|                          | wide range of users, including researchers, policymakers, and practi-     |
|                          | tioners. It can be used to identify areas of high biodiversity value, as- |
|                          | sess human activities' impact on biodiversity, and develop conserva-      |
|                          | tion and sustainable development plans. IBAT was developed by the         |
|                          | IBAT Alliance, a consortium of organizations working to promote the       |
|                          | use of biodiversity data for conservation and sustainable develop-        |
|                          | ment. The alliance includes BirdLife International, Conservation In-      |
|                          | ternational, the International Union for Conservation of Nature           |
|                          | (IUCN), and the World Conservation Monitoring Centre (WCMC).              |
| <b>IUCN Natural Re-</b>  | The Natural Resource Governance Framework (NRGF) is an IUCN               |
| <u>source Govern-</u>    | knowledge product created to provide a robust, inclusive, and credi-      |
| ance Framework           | ble approach to assessing and improving natural resource govern-          |
|                          | ance at multiple levels and in diverse contexts. Governance is a criti-   |
|                          | cal determinant of the social equity, effectiveness and sustainability    |
|                          | of natural resource use and conservation. Improving natural re-           |
|                          | source governance benefits people and nature, including securing          |
|                          | rights and sharing power and responsibilities. Despite this, govern-      |
|                          | ance remains poorly understood and weakly addressed in many nat-          |
|                          | ural resource and conservation contexts. The NRGF addresses this          |
|                          | gap, and it was developed through a robust and inclusive process in-      |
|                          | volving IUCN experts, Members, and partners.                              |
| <b>IUCN Protocol for</b> | The IUCN Biodiversity Net Gain (BNG) Review Protocol is an inde-          |
| <b>Biodiversity Net</b>  | pendent evaluation tool for assessing the planning and progress of        |
| <u>Gain</u>              | specific development projects (e.g., a mine, a plantation, or a forestry  |
|                          | concession) towards achieving a net gain for biodiversity. It is in-      |
|                          | tended as a tool for projects and project assessors to use when devel-    |
|                          | oping and undertaking a review process to assess BNG implementa-          |
|                          | tion. To provide external assurance, the Protocol is explicitly           |





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|                         | designed to be implemented by independent external experts but            |
|                         | may also be adapted for internal monitoring needs that may take           |
|                         | place in between more formal, external reviews.                           |
| <b>IUCN Red List of</b> | The IUCN's Red List of Ecosystems (RLE) is a global standard for as-      |
| Ecosystems              | sessing risks to ecosystems. It allows us to identify common symp-        |
| ("IUCN RLE")            | toms (both spatial and functional) to understand the level of risk that   |
|                         | an ecosystem is facing. The RLE is a scientifically robust, transparent,  |
|                         | evidence-based support tool that helps us understand ecosystem dy-        |
|                         | namics, as well as which ecosystems are healthy, and which are at         |
|                         | risk of collapse soon and why. RLE is accompanied by complemen-           |
|                         | tary resources such as the RLE Database, which compiles infor-            |
|                         | mation from ecosystem risk assessments from around the world that         |
|                         | follow the IUCN RLE Categories and Criteria, and the IUCN Global          |
|                         | Ecosystem Typology, a classification framework for Earth's ecosys-        |
|                         | tems that integrates their functional and compositional features.         |
| <b>IUCN Red List of</b> | The IUCN's Red List of Threatened Species is the most comprehen-          |
| <b>Threatened Spe-</b>  | sive information source on the global conservation status of animal,      |
| <u>cies</u>             | fungi, and plant species. It provides information about range, popula-    |
|                         | tion size, habitat, and ecology, use and/or trade, threats, and conser-   |
|                         | vation actions that will help inform necessary conservation deci-         |
|                         | sions. Thus, it is a powerful tool to inform and catalyze action for bio- |
|                         | diversity conservation and policy change, critical to protecting the      |
|                         | natural resources we need to survive.                                     |
| <b>IUCN Restoration</b> | The Restoration Barometer (launched in 2016 as the Bonn Challenge         |
| <b>Barometer</b>        | Barometer) is a tool used by governments to track the progress of         |
|                         | restoration targets across all terrestrial ecosystems, including          |
|                         | coastal and inland waters. It was designed for countries committed        |
|                         | to restoring landscapes under international goals or agreements. Na-      |
|                         | tional and sub-national governments can use the Barometer to sim-         |
|                         | plify and streamline reporting on restoration commitments. They           |
|                         | can help track and record progress towards global goals, such as The      |
|                         | Bonn Challenge, The 30x30 target, the Paris Agreement, the Land           |
|                         | Degradation Neutrality Target and 1 trillion Trees.                       |
| <b>IUCN Restoration</b> | The IUCN Restoration Intervention Typology for Terrestrial Ecosys-        |
| Intervention            | tems (RITTE) is a typology that helps to classify ecosystem restora-      |
| Typology for Ter-       | tion interventions. It builds on the IUCN Global Ecosystem Typology       |
| <u>restrial</u>         | 2.0 and the categorization of ecosystems created by the UN Decade         |
| <u>Ecosystems</u>       | on Ecosystem Restoration. It includes human dominated landscapes          |
|                         | like urban and mixed-use areas, which can provide untapped poten-         |
|                         | tial for restoration. Continuing the development of RITTE, IUCN is        |
|                         | now finalizing typologies for seagrasses, kelp forests and shallow reefs. |
| IUCN Site-level         | The Site-level tool is a methodology that helps to identify sites out-    |
| tool for identify-      | side protected areas that deliver effective and long-term in situ con-    |
| ing other effec-        | servation of biodiversity, also known as 'other effective area-based      |
| tive area-based         | conservation measures' (OECMs). The tool guides an assessor               |
| <u>conservation</u>     | through three steps to apply eight criteria which determine if a site     |
|                         | in ough ance steps to apply eight effect a which determine if a site      |





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| measures                 | qualifies as an OECM as set out under the Convention on Biological          |
| (OECMs)                  | Diversity. For sites which do not currently meet all the criteria, the      |
|                          | tool serves to highlight areas where further information or improve-        |
|                          | ments in governance and management are required.                            |
| <b>IUCN STAR - Spe-</b>  | The Species Threat Abatement and Restoration (STAR) metric                  |
| cies Threat              | measures the contribution investments can make to reducing spe-             |
| Abatement and            | cies' extinction risk. It assesses the potential of actions at specific lo- |
| <b>Restoration</b>       | cations to contribute to global sustainability objectives. In this way, it  |
|                          | helps governments, cities, civil society, the finance industry, inves-      |
|                          | tors and companies to target their investments to achieve conserva-         |
|                          | tion outcomes.  |
| Marxan                   | Marxan is a suite of tools designed to help decision makers find good       |
|                          | solutions to conservation planning problems. This includes free soft-       |
|                          | ware that can be used to solve several types of planning problems           |
|                          | and extensive documentation and examples describing a framework             |
|                          | for approaching conservation planning. Over the years, Marxan has           |
|                          | grown from its standard two zone application to consider more com-          |
|                          | plex challenges like incorporating connectivity, probabilities and          |
|                          | multiple zones. Along the way, Marxan's user community has also             |
|                          | built plug-ins and interfaces to assist with planning projects. Marxan      |
|                          | is the most frequently used conservation planning software and has          |
|                          | been applied to hundreds of spatial conservation planning problems          |
|                          | around the world.   |
| Natural England -        | Natural England is an executive non-departmental public body, spon-         |
| <b>Biodiversity Met-</b> | sored by the Department for Environment, Food & Rural Affairs of            |
| ric 4.0 Biodiver-        | UK. It has created the Biodiversity Metric 4.0 accounting tool that can     |
| <u>sity</u>              | be used for the purposes of calculating biodiversity net gain by any        |
|                          | development project, consenting body, or landowner that needs to            |
|                          | calculate biodiversity losses and gains for terrestrial and/or inter-       |
|                          | tidal habitats. Work is underway to develop an approach to marine           |
|                          | net gain for English water.   |
| <b>Omniscape.jl</b>      | Omniscape.jl implements the Omniscape connectivity algorithm de-            |
|                          | veloped by McRae <i>et al.</i> (2016). This software package can be used to |
|                          | produce maps of omni-directional habitat connectivity useful for sci-       |
|                          | entific research as well as landscape management and conservation.          |
|                          | Omniscape.jl is built on Circuitscape.jl. It offers a unique approach to    |
|                          | connectivity modelling, particularly among circuit theoretic methods,       |
|                          | by allowing the sources, destinations, and intensity of animal move-        |
|                          | ment or ecological flow (modelled as electrical current) to be in-          |
|                          | formed by continuous spatial data (such as a habitat suitability map).      |
|                          | This information is combined with other spatial information on land-        |
|                          | scape resistance to movement or flow to produce habitat connectiv-          |
|                          | ity models. The Omniscape.jl website has an examples section with           |
|                          | step-by-step demonstrations of how to use Omniscape.jl.                     |
| Project Guaca-           | Project Guacamaya (Macaw in English) uses best-in-class AI models           |
| maya                     | to monitor deforestation and protect the ecosystem's biodiversity. It       |
|                          | is a joint initiative of Instituto Humboldt, the CinfonIA Research          |





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|                         | Center at Universidad de los Andes, Instituto Sinchi and Microsoft AI<br>for Good Lab. The project uses a mix of new AI models for satellite<br>analysis and modified AI models from existing projects within Mi-<br>crosoft for camera trap analysis and bioacoustics. The databases are<br>stored in the cloud, and the group uses the virtual machines and<br>computational power of Microsoft Azure to design and train the<br>models. According to the developers, it is an open-source platform<br>available to any research center, environmental authority or scien-<br>tific organization worldwide that wishes to access, use and contrib-<br>ute new data.   |
| Ramsar Sites            | The Ramsar Sites Management Toolkit guides site managers on the   |
| Management              | key steps and components of managing a wetland of International   |
| <u>Toolkit</u>          | Importance (Ramsar Site). It also identifies and provides links to<br>more detailed information on each step, including key non-Ramsar<br>publications where appropriate. The toolkit is aimed primarily at<br>managers of Ramsar Sites; however, it can also be used by those<br>managing other wetlands that are not designated as Ramsar Sites.  |
| <b>Resilience Atlas</b> | The RESILIENCE ATLAS is an interactive analytical tool for building   |
| and Database            | (1) understanding of the extent and severity of some of the key<br>stressors and shocks that are affecting rural livelihoods, production<br>systems, and ecosystems in the Sahel, Horn of Africa and South and<br>Southeast Asia; and (2) insights into the ways that different types of<br>wealth and assets (i.e., natural capital, human capital, social capital,<br>financial capital and manufactured capital) – and combinations<br>among these – impact resilience in particular contexts. The RESILI-<br>ENCE ATLAS database was created by integrating and analysing<br>more than 12 terabytes of data from over 60 of the best available da-<br>tasets related to resilience, and summarizing the output in the form<br>of easy to understand maps that can shift focus from regional to na-<br>tional and, where the availability and resolution of the data permit,<br>to local scales. The goal of the RESILIENCE ATLAS analytical tool and<br>database is to provide new insights to help catalyse a revisioning of<br>resilience and support for the growing community of practice around<br>resilience. |
| SEED                    | <ul> <li>SEED is a standardized biodiversity index led by Crowther Lab at</li> <li>ETH Zurich that aims at measuring the full complexity of nature at</li> <li>the genetic, species and ecosystems' levels. SEED's innovative index</li> <li>of biological complexity ("biocomplexity") will provide political and</li> <li>financial systems with a straightforward value of nature's complex-</li> <li>ity, ingesting the very latest environmental data to assess the impact</li> <li>of any organization, positive or negative, on nature. SEED will provide a holistic measure of biocomplexity, and could be used in any of</li> <li>the following scenarios:</li> <li>A corporation needs to measure and disclose the biodiversity impact of their supply chain.</li> <li>An asset manager wants to measure the biodiversity impact &amp; risk of their portfolios.</li> </ul>   |





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|   | - A government wants to scale its biodiversity credit program.  |
|   | - An insurer wants to assess the nature-related risks of their clients.   |
|   | - The development and scaling of sustainability-linked sovereign  |
| Charleha las Darili                             | debt.   |
| Stockholm Resili-                               | The planetary boundaries concept presents a set of nine planetary   |
| <u>ence Center -</u><br><u>Planetary bound-</u> | boundaries within which humanity can continue to develop and<br>thrive for generations to come. It is concept developed in Earth sys-   |
| aries   | tem science that represents critical environmental thresholds be-   |
|   | yond which human activities may lead to abrupt and irreversible   |
|   | changes in the Earth's system, potentially causing severe conse-  |
|   | quences for human societies and ecosystems. These boundaries are  |
|   | intended to provide a framework for understanding the limits of our   |
|   | planet's capacity to support life as we know it.  |
| The Biodiversity                                | The Biodiversity Intactness Index (BII) measures biodiversity change  |
| Intactness Index                                | using abundance data on plants, fungi and animals worldwide. The  |
| <u>(BII)</u>                                    | Index shows how local terrestrial biodiversity responds to human  |
|   | pressures such as land use change and intensification. BII was pro-   |
|   | duced by the Natural History Museum by collating and analyzing bio-   |
|   | diversity data from ecological studies conducted worldwide. Biodi-  |
|   | versity indicators such as the BII are essential tools for understand-  |
|   | ing, monitoring and communicating biodiversity changes and track-<br>ing our progress towards goals. The Index uses the most comprehen- |
|   | sive evidence base of its kind alongside robust, peer-reviewed meth-  |
|   | odology.  |
| The Global Biodi-                               | The Global Biodiversity Score (GBS) is a <b>corporate biodiversity</b>  |
| versity Score                                   | footprint assessment tool that seeks to answer the following ques-  |
| <u>(GBS)</u>                                    | tions:  |
|   | - How do economic activities affect biodiversity?   |
|   | - How can companies reduce their biodiversity footprint?  |
|   | - How can companies contribute to the conservation of biodiversity?   |
|   | The GBS is a robust and synthetic way to measure the biodiversity   |
|   | impacts of economic activities across their value chain. It is ex-  |
|   | pressed in surface area of destroyed pristine natural areas. The  |
|   | methodology makes it possible to quantify a business's biodiversity footprint all the way along the value chain.                        |
| The Harlan and                                  | The Crop Wild Relative (CWR) Database is a database that uses gene  |
| <u>de Wet Crop Wild</u>                         | pool and taxon group concepts to estimate CWR's relatedness for   |
| Relative inven-                                 | 173 priority crops to create the Harlan and de Wet inventory of glob-   |
| tory  | ally important CWR taxa. Further taxa more remotely related to  |
|   | crops are added if they have historically been found to have useful   |
|   | traits for crop improvement. The inventory contains 1667 taxa, di-  |
|   | vided between 37 families, 108 genera, 1392 species and 299 sub-  |
|   | specific taxa. The region with the highest number of priority CWR is  |
|   | western Asia with 262 taxa, followed by China with 222 and south-   |
|   | eastern Europe with 181. Within the primary gene pool, 242 taxa are   |
|   | found to be under-represented in ex situ collections and the coun-  |
|   | tries identified as the highest priority for further germplasm  |





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|   | collection are China, Mexico and Brazil. The inventory database is<br>web-enabled (http://www.cwrdiversity.org/checklist/) and can be<br>used to facilitate in situ and ex situ conservation planning at global,<br>regional and national levels.   |
| <u>The Living Planet</u><br><u>Index (LPI)</u>  | The Living Planet Index (LPI) is a measure of the state of the world's biological diversity based on population trends of vertebrate species from terrestrial, freshwater and marine habitats. It is based on trends of thousands of population time series collected from monitored sites around the world. The LPI was adopted by the Convention of Biological Diversity (CBD) as an indicator of progress towards its 2011-2020 targets and can play an important role in monitoring progress towards the post-2020 goals and targets negotiated at COP15. The LPI website allows visitors to search, download and contribute data.  |
| <u>TNFD - Taskforce</u><br><u>on Nature-related</u><br><u>Financial Disclo-</u><br><u>sures</u> | The Taskforce on Nature-related Financial Disclosures (TNFD) is a<br>global initiative that is developing a risk management and disclosure<br>framework for organizations to report and act on evolving nature-re-<br>lated risks. The TNFD is being developed by a group of experts from<br>the financial sector, academia, and civil society.   |
| <u>World Database</u><br>on OECMs<br><u>(WDOECM)</u>  | The World Database on Other Effective Area-based Conservation<br>Measures (WD-OECM) was first published in December 2019. It can<br>be integrated with the World Database on Protected Areas (WDPA)<br>for a broader view of global conservation. The WDPAID uniquely<br>identifies entries in both databases. The content of WD-OECM is lim-<br>ited but crucial for understanding the significance of OECMs in global<br>conservation. It's vital to identify OECMs per CBD and IUCN-WCPA<br>guidance and ensure they receive adequate support.   |
| <u>WWF- Terrestrial</u><br><u>Ecoregions of the</u><br><u>World</u>                             | Terrestrial Ecoregions of the World (TEOW) is a biogeographic re-<br>gionalization of the Earth's terrestrial biodiversity created by the<br>WWF and which uses ecoregions as its main unit. Ecoregions are de-<br>fined as relatively large units of land or water containing a distinct<br>assemblage of natural communities sharing a large majority of spe-<br>cies, dynamics, and environmental conditions. There are 867 terres-<br>trial ecoregions, classified into 14 different biomes such as forests,<br>grasslands, or deserts. Ecoregions represent the original distribution<br>of distinct assemblages of species and communities.   |
| Zonation soft-<br>ware  | Zonation is a freely available decision support software tool for eco-<br>logically based land use planning including applications in spatial<br>conservation planning and ecological impact avoidance. It is capable<br>of data-rich, large-scale, high resolution spatial conservation prioriti-<br>zation. Zonation operates on spatial data about biodiversity features<br>(species, habitats, ecosystem services), costs and threats. It can also<br>utilize information about uncertainty and ecological factors such as<br>connectivity. It is a major property of Zonation that it can maintain<br>the many dimensions of biodiversity through prioritization. Zonation<br>implements a broad set of methods and analyses in one package, al-<br>lowing versatile use for solving many different types of problems. |





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|             | Typical uses of Zonation include (these possibilities are conditional |
|             | on data availability):  |
|             | - Planning of reserve networks.                                       |
|             | - Planning of reserve network expansions.                             |
|             | - Reserve network evaluation.   |
|             | - Decision support for land use zoning.                               |
|             | - Planning for ecological impact avoidance in development projects.   |
|             | - Targeting of habitat restoration.                                   |
|             | - Spatial planning for biodiversity offsets.                          |