



**Biodiversity**  
P r o g r a m m e

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.*

Version  
1.1.1

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## Acronyms and abbreviations

<b>BCP</b>	Biodiversity Crediting Project
<b>CBCP</b>	Cercarbono's Biodiversity Certification Programme
<b>EbA</b>	Ecosystem-based Adaptation
<b>EICAT</b>	Environmental Impact Classification for Alien Taxa
<b>ICCA</b>	Indigenous Peoples' and Community Conservation Areas
<b>IEP</b>	Independent Experts Panel
<b>IPBES</b>	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
<b>IUCN</b>	International Union for Conservation of Nature
<b>iVBC</b>	Innovation Voluntary Biodiversity Credit
<b>NbS</b>	Nature-based Solutions
<b>NBSAP</b>	National Biodiversity Strategy and Action Plan
<b>OECM</b>	Other Effective Area-Based Conservation Measures
<b>PADDD</b>	Preventing protected area downgrading, downsizing, and deregulation
<b>PMP</b>	Project Management Plan
<b>ROAM</b>	Restoration Opportunities Assessment Methodology
<b>VBC</b>	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's Biodiversity Certification Programme*, available at [www.cercarbono.com](http://www.cercarbono.com).

## 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 (CEO).

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 preliminary draft of this document (Version 1.0) was circulated for public review through a consultation on the Cercarbono website and by inviting feedback from individuals, public entities, and private companies. The revised version of the protocol (Version 1.1.1) has been updated to address corrections in credit calculation, rectify typographical errors, and enhance clarity for improved understanding, incorporating suggestions from participants during the public consultation. This revised version takes effect as of the publication date.

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's 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 emphasised 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>2e</sub> 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

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<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 emphasises 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 biodiversity-related 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 programme. 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 programme for biodiversity credits, designed for both area-based and non-area-based activities, suitable for implementation by individuals, community-based organisations, Non-Governmental Organisations (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	Scope	T	M	F	W	U	AB	NAB
EA01	<b>Acquisition and formalisation of other effective area-based conservation measures (OECM) status*</b>	<ul style="list-style-type: none"> <li>- Establishment and designation of previously unprotected natural areas as formal protected areas, including OECMs and Indigenous or Community-Owned Areas (ICCAs).</li> </ul> <p>*To be considered formally established protected areas, they must be listed in the National Register of Protected Areas and the Protected Planet database.</p>	X	X		X		X	
EA02	<b>Agrobiodiversity enhancement</b>	<ul style="list-style-type: none"> <li>- Biodiversity conservation activities within their own operations or supply chains. This category can include: <ul style="list-style-type: none"> <li>• Conservation of pollinators.</li> <li>• Regenerative agriculture.</li> </ul> </li> </ul>	X					X	X
EA03	<b>Collection and conservation of crop wild relatives</b>	<ul style="list-style-type: none"> <li>- Gathering and conserving priority wild plant species closely related to cultivated crops.</li> </ul>	X						X
EA04	<b>Connectivity enhancement</b>	<ul style="list-style-type: none"> <li>- The establishment and restoration of ecological corridors and pathways are essential for facilitating the movement and exchange of species, genetic material, and freshwater among fragmented natural habitats. This involves the creation of wildlife crossings and the preservation or rehabilitation of connectivity along waterways to promote the connectivity within mixed landscapes and support free-flowing river systems.</li> </ul>	X		X	X		X	
EA05	<b>Conservation of livestock genetics</b>	<ul style="list-style-type: none"> <li>- Actions to prevent the loss of genetic diversity of priority domesticated animal species and breeds.</li> </ul>	X						X
EA06	<b>Ecosystem adaptation to climate change</b>	<ul style="list-style-type: none"> <li>- Ecosystem-based Adaptation (EbA) initiatives designed in the framework of the International Union for Conservation of Nature (IUCN) EbA Standard. The initiative must be based on an ecosystem vulnerability assessment.</li> </ul>	X	X	X	X	X	X	
EA07	<b>Ecosystem conservation</b>	<ul style="list-style-type: none"> <li>- Sustainable management and protection of ecosystems.</li> <li>- Enhanced management of wildlife.</li> <li>- Collective Action to Biodiversity Conservation, according to the CDB (UNEP/CBD/COP/12/INF/7, 26.09.2014) conceptual framework.</li> <li>- Protection and maintenance of natural ecosystems in their current state, minimising human-induced changes<sup>2</sup>.</li> </ul>	X	X	X	X		X	X
EA08	<b>Ecosystem recovery and restoration</b>	<ul style="list-style-type: none"> <li>- Recovery of ecosystems with or without connectivity features.</li> <li>- Habitat rehabilitation.</li> <li>- Reforestation with native species.</li> <li>- Promotion of natural regeneration.</li> </ul>	X	X	X	X		X	
EA09	<b>Ex-situ species conservation</b>	<ul style="list-style-type: none"> <li>- Captive breeding programmes.</li> <li>- Seed banks.</li> <li>- Other methods to safeguard species' genetic diversity.</li> </ul>	X	X	X	X	X		X
EA10	<b>Human-Wildlife conflict mitigation</b>	<ul style="list-style-type: none"> <li>- Active work to mitigate human-wildlife conflict or enhance human-wildlife coexistence.</li> </ul>	X	X	X	X	X	X	

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

T: Terrestrial  
M: Marine  
F: Freshwater  
W: Wetland

U: Urban  
AB: Area-based  
NAB: Non-area-based

<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 guidelines.

### **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, utilising 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 or maintenance 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 [Protected Planet database](#).
- Inclusion of existing protected areas in the [IUCN Green List Standard of Protected Areas](#).

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 emphasises 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 mechanised 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 long-term 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: Prioritise 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. Prioritising 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

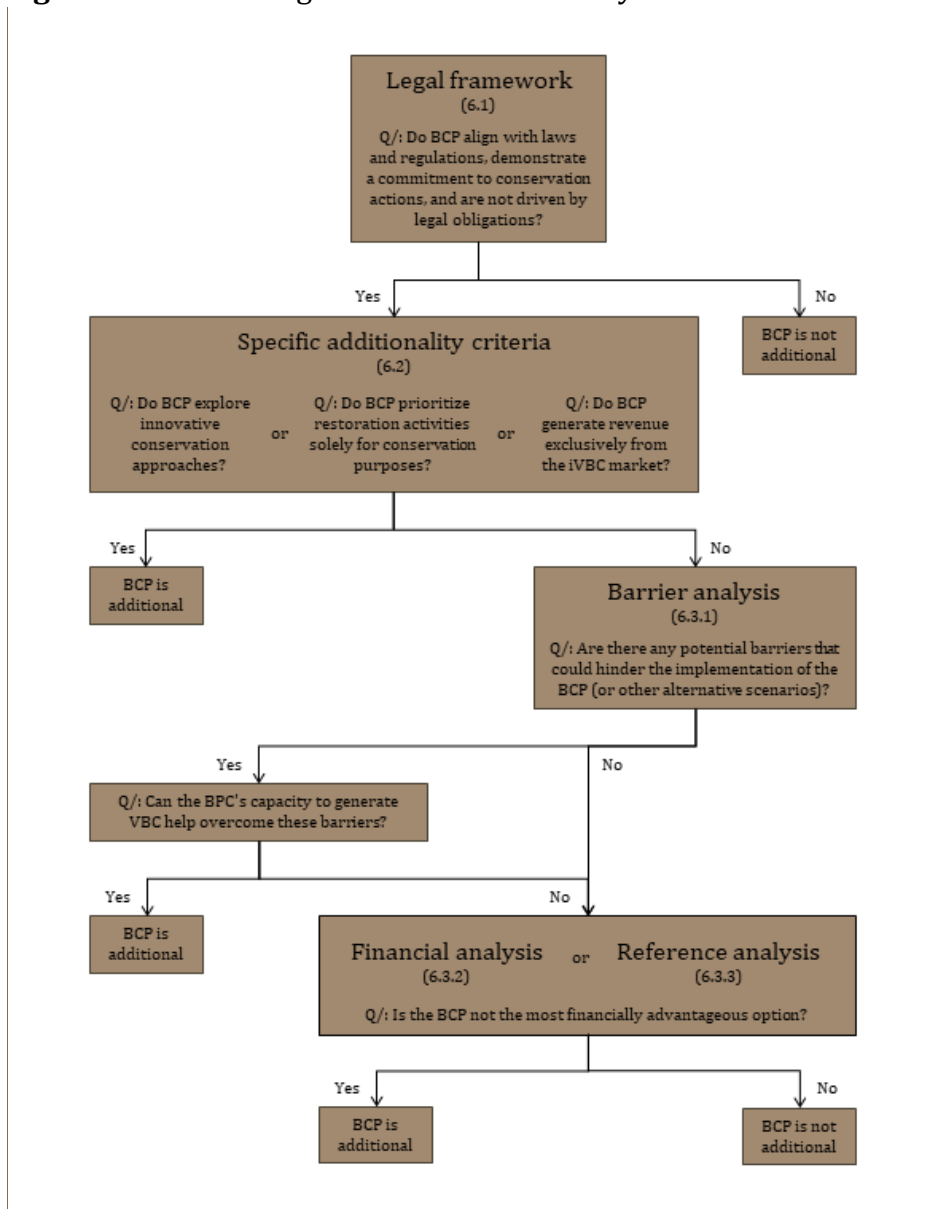


policies. Adhering to these principles will ultimately lead to more credible and effective biodiversity conservation efforts.

## 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 emphasise that the CBCP strictly prohibits

<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 emphasise 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 utilise 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 [www.cercarbono.com](http://www.cercarbono.com). 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 globalisation. 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 programme 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), standardising indicators, and ensuring uniform systems for monitoring and reporting. Therefore, BCPs must use an approved CBCP methodology, which can be found on [www.cercarbono.com](http://www.cercarbono.com).

### 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.

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<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's 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](mailto:info@cercarbono.com).

In cases where a methodology applies to a project activity, but minor deviations<sup>6</sup> if its application is 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 the 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.

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<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) Utilising 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 optimise the allocation of resources, ensuring that budget investments are utilised 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 document *Rules of Procedure of the Independent Experts Panel*, available at [www.cercarbono.com](http://www.cercarbono.com).

## 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's Certification Programme* document, available at [www.cercarbono.com](http://www.cercarbono.com).

### 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 Frequently Asked Questions (FAQs) and contact spaces under the 'About Us' section on [www.cercarbono.com](http://www.cercarbono.com), where stakeholders 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 organisations, 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.
- Utilise 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 authorised legal representative on behalf of the BCP holder, if applicable.
  - Certification programme 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 non-monetary 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 utilise flexible measurement frameworks that allow context-specific indicators to be aggregated into globally comparable metrics (such as the [Multidimensional Biodiversity Indexes](#)). 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.

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<sup>7</sup> CBCP has *Project Management Plan* template, available at [www.cercarbono.com](http://www.cercarbono.com).

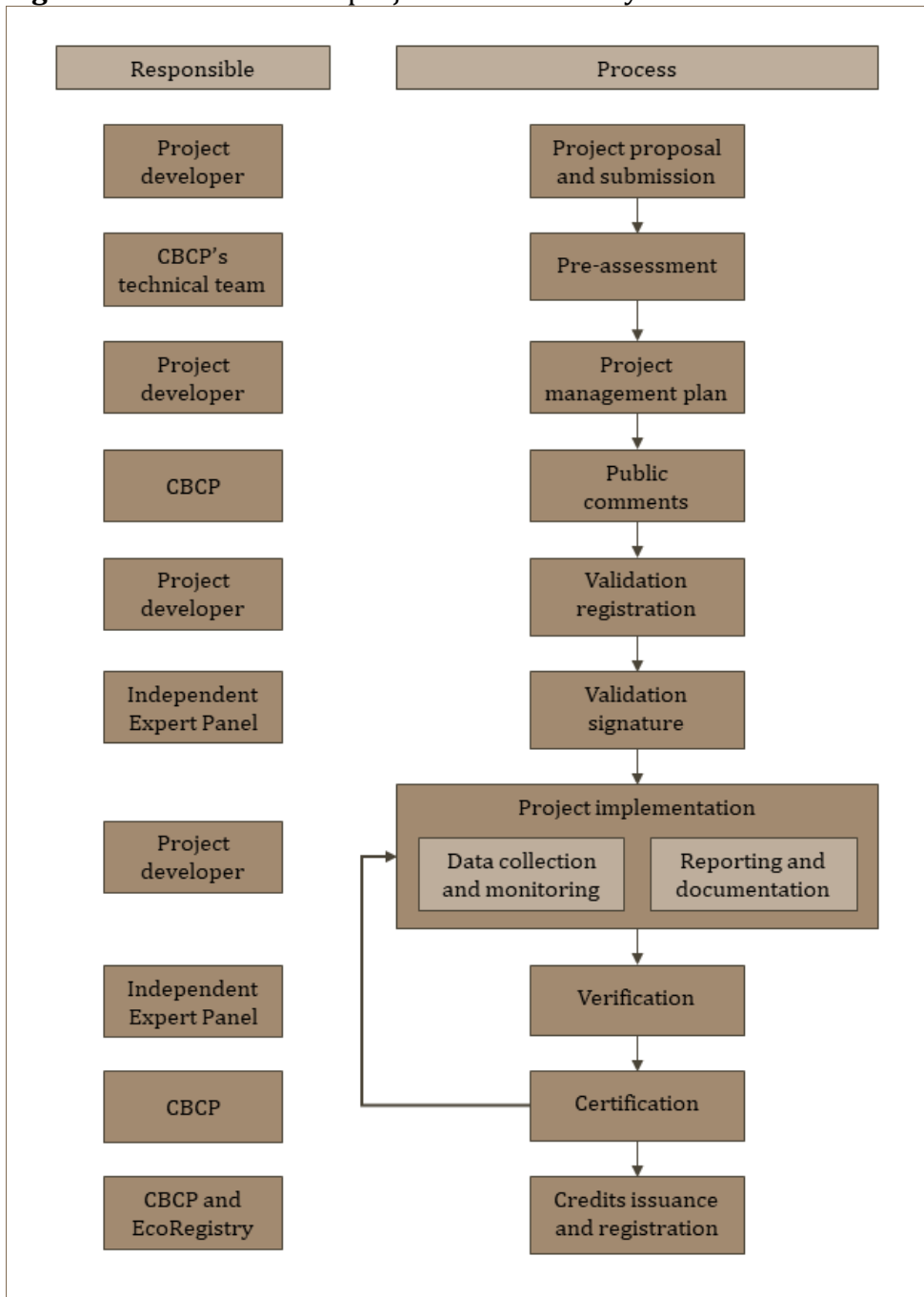
<sup>8</sup> See e.g., [Guidelines for developing national biodiversity monitoring systems](#).

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.



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

Process		Documentation
<b>Account creation</b>		
Documentation check.		<ul style="list-style-type: none"> <li>• Certificate of formation.</li> <li>• Shareholder's certificate of the company.</li> <li>• Business references.</li> <li>• Photocopy of CEO or legal representative's ID card.</li> <li>• Bank certification.</li> </ul> (Other documents may be required).
Formalisation.		<ul style="list-style-type: none"> <li>• Contract with Cercarbono and account creation.</li> </ul>
<b>Assessment of project proposal</b>		
Documentation check.		<ul style="list-style-type: none"> <li>• Project proposal.</li> </ul>
Review and approval or rejection.		<ul style="list-style-type: none"> <li>• Project proposal approval.</li> </ul>
<b>Public comments</b>		
Documentation check.		<ul style="list-style-type: none"> <li>• PMP.</li> <li>• Project location:                             <ul style="list-style-type: none"> <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 area-based 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> </ul>
Publication on Cercarbono website.		<ul style="list-style-type: none"> <li>• PMP.</li> <li>• Project location.</li> </ul>
<b>Validation registration</b>		
The developer of the BCP uploads the required documentation.		<ul style="list-style-type: none"> <li>• Updated PMP (if required).</li> <li>• Updated project location (if required).</li> <li>• Validation calculations.</li> <li>• Validation support documents.</li> </ul>
<b>Validation signature</b>		
Technical review: <ul style="list-style-type: none"> <li>• Documentation check.</li> <li>• Legal check.</li> <li>• Double-counting check.</li> <li>• Overlap check.</li> </ul>		<ul style="list-style-type: none"> <li>• PMP.</li> <li>• Project location.</li> <li>• Calculations.</li> <li>• Support documents.</li> </ul>
Project adjustments.		(As per requirements).
Validation approval.		<ul style="list-style-type: none"> <li>• IEP Declaration of Conflict of Interest.</li> <li>• Validation report.</li> <li>• Validation statement.</li> </ul>
<b>Project implementation</b>		
The developer of the BCP uploads the required documentation.		<ul style="list-style-type: none"> <li>• Monitoring report.</li> <li>• Verification calculations.</li> <li>• Verification support documents.</li> </ul>

Verification		
	Technical review: • Documentation check.	• Monitoring report and ancillary data and documentation. • Calculations.
	Verification approval.	• IEP Declaration of Conflict of Interest. • Verification report. • Verification statement.
Certification		
	Certificate issuance.	• Certification report. • Biodiversity credits certificate.
Registration		
	Registration of biodiversity credits.	• Registry issuance.
	Registration of corresponding buffer.	• Registry issuance.

### 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 [info@cercarbono.com](mailto:info@cercarbono.com) 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 the *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.

### 14.4 Public comments

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

<sup>9</sup> CBCP has a *Project Proposal* template, available at [www.cercarbono.com](http://www.cercarbono.com).

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>.

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<sup>10</sup> *Biodiversity's Tool to Report Contributions to the Sustainable Development Goals* is available at [www.cercarbono.com](http://www.cercarbono.com).

## 14.8 Verification

The IEP conducts assessments of project implementation to verify alignment with programme 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 utilise 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.

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 are 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 programmes or certification standards is allowed.

## 16 Voluntary Biodiversity Credits

While carbon markets have standardised 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 standardised 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 standardised 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 does not represent biodiversity ownership.

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

**Table 3.** Biodiversity project attributes.

Category	Attribute	
<b>Eligible activity (type of intervention)</b>	EA01	Acquisition and formalisation of OECM status
	EA02	Agrobiodiversity enhancement
	EA03	Collection and conservation of crop wild relatives
	EA04	Connectivity enhancement
	EA05	Conservation of livestock genetics

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

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



Category	Attribute
	EA06   Ecosystem adaptation to climate change
	EA07   Ecosystem preservation
	EA08   Ecosystem recovery
	EA09   Ecosystem restoration
	EA10   Ex-situ species conservation
	EA11   Inclusion of protected areas in IUCN 'Green List Standard'
	EA12   Reducing PADD 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
<b>Type of ecosystem</b>	Terrestrial
	Freshwater
	Wetland
	Marine
	Urban
	Mixed
<b>Biodiversity level</b>	Genetic
	Species
	Ecosystem
<b>Social &amp; Heritage</b>	Indigenous Peoples and Local Communities
	World Heritage
	Local heritage
<b>Leadership</b>	Community-Led
	Externally-Led
<b>UN SDG</b>	(1...17) (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
<b>Cercarbono ID</b>	CBC	Cercarbono.
<b>Project number</b>	999	Three-digit project sequential number.
<b>Validator ID</b>	9	One-digit identification of the Independent Experts Panel.
<b>Methodology</b>	99	Two-digit methodology sequential number.
<b>Verifier ID</b>	9	Same one-digit as above, identifying the Independent Experts Panel.



Credit serial fields	Code	Description
<b>Biodiversity level</b>	9	One-digit identification of the biodiversity level (genetic, species, or ecosystem).
<b>Main eligible activity</b>	99	One-digit identification of the main eligible activity (from a list).
<b>Country(ies)</b>	XX(YY)	Two-digit country code.
<b>Validation number</b>	9	One-digit identification of the validation sequential number.
<b>Verification number</b>	99	Two-digit identification of the verification sequential number.
<b>Year</b>	9999	Credit vintage.
<b>Guarantee buffer</b>	gb	If applicable, a two-letter code assigned to buffer credits.
<b>Long-term reserve</b>	ltr	If applicable, a three-letter code assigned to the long-term reserve credits.
<b>Serial number</b>	999999	Credit serial number.

### 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 long-term reserve buffer (ltr).

### 16.4 Credit calculation

This protocol outlines the guidelines for determining the VBCs associated with area-based conservation initiatives under the CBCP. In the context of CBCP, a VBC represents a substantial biodiversity-focused activity conducted in a designated area during a specified verification period. Depending on the nature of the actions taken, VBCs are categorized as bronze, silver, gold, or platinum, as detailed in [Section 16.5](#).

The programme is tailored to address two key scenarios: a project area identified as degraded and another designated as well-conserved. These scenarios encompass restoration and maintenance projects in diverse environmental settings. Credits are calculated and allocated at the conclusion of the verification period in each scenario, considering integrity, area size, and duration. The general formula for calculating VBCs is:

$$VBC = I * A * t \quad \text{Equation 1}$$

Where *VBC* represents the Voluntary Biodiversity Credits, *I* denote integrity, *A* is the area expressed in hectares (ha), and *t* is the verification time expressed in months (mo).

#### 16.4.1 Integrity

Integrity is a crucial aspect for VBC calculation, reflecting an ecosystem's health, resilience, and functional balance. It ranges from 0 (i.e., fully degraded) to 1 (i.e., intact)

state<sup>13</sup>), indicating the ecosystem's capacity to support ecological processes and biodiversity. This value is relevant to all area-based eligible activities. Calculations of integrity for a verification period should consistently yield positive results over time and may vary depending on the eligible activity and methodology used<sup>14</sup>.

This protocol emphasises the positive trend of integrity over time, with maintenance projects maintaining integrity while initiatives in degraded areas show measurable improvements. Activities can range from minor enhancements to full restoration, with the potential for partial credits to be granted for quantifiable integrity enhancements. Specific guidelines ensure the accuracy and consistency of integrity assessments. Approved methodologies and PMPs are required to adhere to a standardised Measurement, Reporting, and Verification (MRV) process that enhances integrity and may result in credit allocation. Negative impacts, as approved by the IEP, decrease integrity, while positive impacts increase it. BCPs may receive partial credits or demerits based on their effects.

The IEP is responsible for reviewing and validating the suitability of benchmark assessments (if applicable), biodiversity key indicators and metrics, and achievement thresholds proposed for each BCP. Credit calculation methods should be customized to specific methodologies, ensuring that a standardised unit is applied to maintain uniformity in the results.

#### **16.4.2 Time**

The CBCP has opted for one-month periods as the certification framework for biodiversity actions to enhance the precision of credit issuance, thereby promoting a more inclusive and accessible credit trading environment. This strategy, which involves lower credit values, simplifies retail transactions. It is essential to emphasize that projects are not mandated to undergo monthly monitoring or verification. Instead, the system guarantees that maintaining a single biodiversity area-based action throughout a year will yield biodiversity credits monthly through a single verification process<sup>15</sup>. To secure certification for VBCs, BCPs must furnish a comprehensive monitoring report and undergo verification for credit issuance, ensuring transparency and credibility in the certification process.

#### **16.4.3 Restoration projects**

In the context of the degraded area scenario, the main objective of the BCP is to encourage positive changes in integrity (indicated as  $\Delta I$ ). Although the integrity level of the BCP area can be evaluated and certified monthly, it is crucial to acknowledge that realizing positive biodiversity outcomes may demand a significant period. Therefore, methodologies should offer direction on structuring certification periods in accordance with the necessary duration for biodiversity actions to produce results. These methodologies need to precisely define the reference timeframe, key biodiversity indicators, and

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<sup>13</sup> Intactness refers to the condition where all ecological niches are available to native species and are fully occupied accordingly.

<sup>14</sup> Methodologies may incorporate logarithmic transformations or other transformations to address integrity variability.

<sup>15</sup> Since a VBC is a commodity, a BCP can earn up to 12 credits per hectare within a twelve-month verification period, based on an integrity score of 1 (equivalent to 1 VBC per hectare per month).

biodiversity metrics essential for effectively assessing integrity changes in CBCP eligible activities.

In most restoration projects,  $\Delta I$  is calculated by subtracting a benchmark integrity value from the certified integrity level. This benchmark may be reviewed at the conclusion of each monitoring period, with methodologies required to offer a mechanism to update the baseline if necessary. While this approach is specific to the methodology, clear specifications are essential.

A simplified calculation formula can be illustrated as:

$$VBC = \Delta I * A * t \qquad \text{Equation 2}$$

Where  $VBC$  represents the Voluntary Biodiversity Credits,  $\Delta I$  signify the change in integrity,  $A$  is the area of the BCP in hectares (ha), and  $t$  is the verification period expressed in months (mo).

#### 16.4.4 Maintenance projects

In a scenario where the area is well-conserved, the focus shifts to maintaining biodiversity rather than restoring it. Given that the BCP area already exhibits a high level of intactness or has been fully restored, transitioning to a maintenance project anticipates minimal changes in  $\Delta I$ . Nevertheless, acknowledging the dedication and resources essential for sustaining this positive state over time is crucial.

Typically, maintenance projects will establish a minimum integrity threshold for certification. The credits earned at the end of the verification period, determined using *Equation 1*, rely on demonstrating and obtaining approval for the well-conserved state from the IEP.

#### 16.4.5 Updating credit calculation factors

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

#### 16.4.6 Monitoring frequency

The methodology should specify how frequently data collection is required and whether there is a need for repeat sampling within a single verification period. Some methods may recommend repeat sampling within a verification 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.

Restoration projects generally require more time to achieve visible outcomes, with reporting periods typically lasting two to five years. On the other hand, maintenance projects may show results within shorter time frames. The duration for observing results is dictated by the specific methodology utilised for each eligible activity under the CBCP.

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.

### 16.5 Priority mechanism for CBCP actions

The CBCP has implemented a categorization system for VBC to prioritise 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 programme.

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 prioritising actions supporting biodiversity.

Criteria	Platinum	Gold	Silver	Bronze
<a href="#">IUCN Red List of Ecosystems categories</a>	Project is in a Critically Endangered (CR) ecosystem.	Project is in an Endangered (EN) ecosystem.	Project is in a Vulnerable (VU) ecosystem.	Project is in a Near Threatened (NT) ecosystem.
<a href="#">Biodiversity Hotspot</a>	Project is a Priority target.	Project is in a recognized hotspot.	Project is within 5km of a recognized hotspot.	Project is within 20km of a recognized hotspot.
<a href="#">Irreplaceable biodiversity and irrecoverable carbon</a>	Project is in a high irreplaceable biodiversity and irrecoverable carbon area.	Project is in a high irreplaceable biodiversity or irrecoverable carbon area.	Project is in a medium irreplaceable biodiversity and irrecoverable carbon area.	Project is in a low irreplaceable biodiversity and irrecoverable carbon area.
<a href="#">CBD National targets</a>	Project is in a deforestation region 2020 – 2030.	Project is in a deforestation region 2030 – 2050.	Project is within 5km of a deforestation region.	Project is within 20km of a deforestation region.
<a href="#">IUCN Global Ecosystem Typology</a>	Project has a >50% probability of collapse within 50 years ecosystem.	Project has a 50-20% probability of ecosystem collapse within 50 years ecosystem.	Project has a 20-10% probability of ecosystem collapse within 100 years ecosystem.	Project is in a threatened category in the near future ecosystem.
<a href="#">UNEP Forest Biodiversity Intactness Index</a>	Project has is in a 100% intact forest ecosystem with minimal human disturbance.	Project is in a >75% intact forest ecosystem with moderate human disturbance.	Project is in a >50% intact forest ecosystem with high human disturbance.	Project is in a >25% intact forest ecosystem with very high human disturbance.
<a href="#">Ramsar Wetland Classification</a>	Project is in a Ramsar Category I.	Project is in a Ramsar Category II.	Project is in a Ramsar Category III.	Project is in a threatened wetland without Ramsar category.
<a href="#">World Heritage List UNESCO</a>	Project is in a natural assets site.	Project is in a mixed assets site.	Project is in a cultural assets site.	N/A

Stakeholders can easily identify the level of prioritisation 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 programme and recognizes projects that exceed expectations in protecting and enhancing biodiversity.

The categorization of biodiversity credits within the CBCP is a valuable tool for prioritising actions and effectively allocating resources to credits with the greatest impact on biodiversity conservation. By differentiating between levels of prioritisation, the programme 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 utilise external resources to provide rankings and acknowledge 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 programmes 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 consultation.
1.1.1	30.05.2024	Updated version to address corrections in credit calculation, rectify typographical errors, and enhance clarity for improved understanding.

## 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	P1	P2	P3	P4	P5	P6	P7	P8
<b>Adaptive governance structures</b> <b>Indicator:</b> Existence of governance structures that support adaptive management.						X		
<b>Adaptive long-term monitoring and measurement framework</b> <b>Indicator:</b> Evidence of adjustments to the measurement framework based on emerging best practices and scientific understanding.					X			
<b>Adaptive management</b> <b>Indicator:</b> Evidence of the project's ability to adjust activities based on objective results, changing circumstances, and lessons learned.		X			X			
<b>Adverse impact prevention measures</b> <b>Indicator:</b> Existence and effectiveness of measures to prevent adverse social impacts.				X				
<b>Alignment with regional goals and national biodiversity strategies</b> <b>Indicator:</b> Integration of project goals with the objectives outlined in the national biodiversity strategy and action plan (NBSAP).			X					
<b>Baseline comparison</b> <b>Indicator:</b> Comparison of current biodiversity indicators with baseline data collected before the project's initiation.		X						
<b>Benefit sharing agreements</b> <b>Indicator:</b> Existence of formal benefit-sharing agreements (or mechanisms) with local communities and stakeholders.						X	X	
<b>Biodiversity benefits for communities</b> <b>Indicator:</b> Positive changes in biodiversity indicators that are important for local communities (e.g., availability of key species, access to traditional resources).						X		
<b>Biodiversity index improvement</b> <b>Indicator:</b> Positive changes in biodiversity indices (e.g., Shannon-Wiener Index, Simpson's Diversity Index, Shannon-Wiener Index, etc.).	X			X				



Indicator	P1	P2	P3	P4	P5	P6	P7	P8
<b>Biodiversity trajectory analysis</b> <b>Indicator:</b> Rate of change (either positive or negative) in key biodiversity indicators when comparing historical data (pre-project) to projected data (post-project implementation).		X						
<b>Budget allocation to on-the ground actions</b> <b>Indicator:</b> Percentage of the project budget allocated on-the-ground conservation actions.	X							
<b>Capacity building</b> <b>Indicator:</b> Number of local community members trained or empowered through the project or amount invested in local capacity building to support conservation efforts.						X		
<b>Community empowerment</b> <b>Indicator:</b> Evidence of capacity building and empowerment of affected communities.						X		
<b>Community engagement and awareness</b> <b>Indicator:</b> Percentage of local community members attending biodiversity-awareness events or participating in project-related activities.				X		X		
<b>Community engagement</b> <b>Indicator:</b> Level of community engagement and decision-making in project planning and implementation to incorporate traditional knowledge and local perspectives.						X		
<b>Community-based monitoring systems</b> <b>Indicator:</b> Number of active community-based monitoring systems established, combined with the frequency of data collection events led by local stakeholders.					X	X		
<b>Community-led decision-making</b> <b>Indicator:</b> Demonstration of decision-making power in the hands of local communities.						X		
<b>Comparative modelling</b> <b>Indicator:</b> Existence of comprehensive comparative models that compare predicted biodiversity outcomes with the project's actions versus those without.		X						
<b>Comparison to previous similar initiatives</b> <b>Indicator:</b> Comparison of the outcomes of the current initiative with those of previous similar initiatives to demonstrate its effectiveness in enhancing biodiversity.		X						
<b>Comprehensive reporting</b> <b>Indicator:</b> Inclusion of a comprehensive set of impact indicators in project reports.					X			

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

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

Indicator	P1	P2	P3	P4	P5	P6	P7	P8
<b>Gender-sensitive approaches</b> <b>Indicator:</b> Incorporation of gender-sensitive strategies and assessments to prevent gender-based social impacts.						X		
<b>Genetic diversity</b> <b>Indicator:</b> Evaluation of changes in genetic diversity within target species or populations, indicating the effectiveness of activities in maintaining genetic health.	X			X				
<b>Global benchmarking</b> <b>Indicator:</b> Adoption of standardised reporting formats or metrics for comparability across projects or engagement in global benchmarking systems for biodiversity conservation.			X					
<b>Global conservation targets</b> <b>Indicator:</b> Evidence of contributions to the Global Biodiversity Framework Targets.	X		X					
<b>Habitat connectivity enhancement:</b> <b>Indicator:</b> Improvement in degree of habitat connectivity for wildlife within the project and surrounding areas to ensure the movement and migration of species, considering factors like wildlife corridors, buffer zones, and natural pathways.	X			X				X
<b>Habitat quality improvement</b> <b>Indicator:</b> Evaluation of the improvements in habitat quality, such as enhanced vegetation cover, improved water quality, or reduced habitat fragmentation, demonstrating that the initiative is expediting the recovery of ecosystems.	X			X				
<b>Habitat restoration effectiveness</b> <b>Indicator:</b> Assessment of the effectiveness of habitat restoration efforts, by monitoring indicators such as habitat connectivity, native species colonisation, and ecosystem functionality.	X			X				
<b>Harmonised data standards</b> <b>Indicator:</b> Use of standardised data and reporting formats that align with national and international standards.			X					
<b>Impact of landscape changes</b> <b>Indicator:</b> The project assesses the potential impacts of any proposed changes in the landscape on the existing ecosystems, habitats, and species distributions.								X

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

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

Indicator	P1	P2	P3	P4	P5	P6	P7	P8
<b>Population trends</b> <b>Indicator:</b> Tracking of population trends of key species within the intervention area, focusing on population growth, stability, or recovery.	X			X				
<b>Protected area expansion</b> <b>Indicator:</b> Evidence of expansion of protected areas or conservation zones.	X			X				
<b>Public engagement</b> <b>Indicator:</b> Engagement with the public and stakeholders in the reporting process.						X	X	
<b>Recognition of cultural heritage</b> <b>Indicator:</b> Measures to protect and celebrate cultural heritage sites and practices.						X		
<b>Regular review and evaluation</b> <b>Indicator:</b> Evidence of regular reviews and evaluations to assess progress, identify challenges, and determine whether objectives are being met.	X			X	X			
<b>Resilience to climate change</b> <b>Indicator:</b> Number of climate resilience measures and strategies incorporated into the project.	X							
<b>Resource mobilisation strategies</b> <b>Indicator:</b> Number and types of resource mobilisation strategies implemented by the project.				X				
<b>Respect for cultural practices, indigenous, and local rights</b> <b>Indicator:</b> Documentation of project activities that respect and protect local cultural practices and the rights of indigenous and local communities.						X		
<b>Restoration area coverage</b> <b>Indicator:</b> Area of land or habitat within the intervention zone that has been restored or conserved because of the budget allocation.	X			X				
<b>Risk disclosure</b> <b>Indicator:</b> Inclusion of risks and uncertainties associated with project impacts in reports.							X	
<b>Scale of actions</b> <b>Indicator:</b> Extent of on-the-ground conservation actions implemented.	X							X
<b>Scenario planning</b> <b>Indicator:</b> Use of scenario planning to anticipate potential changes in environmental, social, or economic conditions, challenges, and opportunities. <b>Target:</b> Preparedness for a range of possible future scenarios.				X				



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

## **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)

Prioritise 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

### **Benchmark 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

<b>Goal A: Conserve and restore ecosystems</b>	<b>Con-serve</b>
1. 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.	
<b>Goal B: Use lands and seas sustainably</b>	<b>Avoid</b>
5. Ensure sustainable, safe, and legal use of wild species.	
6. Reduce impacts of invasive alien species.	
7. Reduce pollution to safe levels, including plastic pollution.	
8. Mitigate climate change and increase resilience.	
<b>Goal C: Share benefits and services</b>	<b>Safe-guard</b>
9. 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.	
<b>Goal D: Mobilise necessary resources</b>	<b>Act</b>
14. 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. Mobilise 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.	

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

Institution	Short description
<a href="#"><u>Crop Trust's Crop Wild Relatives Global Portal</u></a>	The Crop Wild Relatives Global Portal is an information platform that centralises information about crop wild relatives' diversity and 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).
<a href="#"><u>Domestic Animal Diversity Information System (DAD-IS)</u></a>	DAD-IS is the Domestic Animal Diversity Information System maintained and developed by FAO. It provides access to searchable databases of breed-related information and photos and links to other online resources on livestock diversity. It includes tools that allow visitors to analyse the diversity of livestock breeds on national, regional, and global levels including the status of breeds regarding their risk of extinction. More than 15 000 national breed populations from 182 countries are recorded in this information system.
<a href="#"><u>EarthRanger</u></a>	EarthRanger is a software solution that helps protected area managers to monitor wildlife and their natural habitats in real-time. It collects, 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.
<a href="#"><u>Finance Resource Database for Biodiversity (FIRE)</u></a>	The Finance Resource Database for Biodiversity (FIRE) is a database that aims at closing the financing gap for biodiversity conservation by listing over 200 funding opportunities around the world. The resources are both public and private. They include options with a conservation objective and those with other objectives which also can be 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.
<a href="#"><u>Global Forest Watch</u></a>	Global Forest Watch (GFW) is an online platform developed by the World Resource Institute that provides data and tools for forest monitoring. GFW enables anyone to access near real-time information on where and how forests are changing worldwide. It uses cutting-edge algorithms that harness the power of satellite technology and cloud computing to identify where trees are growing and disappearing.



Institution	Short description
<a href="#"><u>GLOBIO</u></a>	GLOBIO is a global biodiversity model created to support policymaking. The model calculates local terrestrial biodiversity intactness, expressed by the mean species abundance (MSA) indicator, as a function of six human pressures: land use, road disturbance, fragmentation, hunting, atmospheric nitrogen deposition and climate change. The model's core consists of quantitative pressure-impact relationships established based on extensive terrestrial biodiversity databases.
<a href="#"><u>Gnarly Landscape Utilities</u></a>	Gnarly Landscape Utilities is an ArcGIS toolbox designed to support connectivity modelling. It includes tools for creating resistance and habitat layers and core area mapping. We created the tools to support connectivity analyses by the Washington Wildlife Habitat Connectivity Working Group and work by the Western Governors' Association and the Nature Conservancy. They can be used to create resistance, habitat, and core area maps used by Linkage Mapper, Circuitscape, and other connectivity software packages.
<a href="#"><u>Habitats Classification Scheme</u></a>	The Habitat Classification Scheme is a list of major in which taxa occur. If recorded, these habitats are listed on the Fact Sheet page for each taxon under the Classification Schemes and Full Account tabs. The three levels of the hierarchy are self-explanatory, as they use familiar habitat terms that consider biogeography, latitudinal zonation, and depth in marine systems. It is acknowledged that the classification scheme used here is not entirely satisfactory, and a review of the scheme is needed.
<a href="#"><u>IMAGE</u></a>	The IMAGE integrated assessment modelling framework has been developed to understand how global, long-term environmental change and sustainability problems develop over time, driven by human activities, such as economic development and population growth. The model documentation provides a complete and concise description of the IMAGE 3.0 integrated assessment model framework. It highlights how the model assesses key policy issues, such as climate change, air pollution, land-use change, biodiversity loss, and water scarcity.
<a href="#"><u>Instituto Life - Life Key</u></a>	Life Key is a platform that centralises all information regarding a client company's relationship with biodiversity in a single place. It offers metrics that guide decision-making to effective nature conservation actions and reduction of impacts. Using LIFE Key, companies can perform a biodiversity management diagnosis based on three modules: biodiversity pressure (quantifies and monitors 5 aspects of biodiversity loss), biodiversity performance (evaluates the impact of conservation actions implemented) and LIFE Standards (shows the organisation's level of commitment to biodiversity).
<a href="#"><u>Irrecoverable Carbon</u></a>	"Irrecoverable carbon" refers to the vast stores of carbon in nature that are vulnerable to release from human activity and, if lost, could not be restored by 2050 — when the world must reach net-zero emissions to avoid the worst impacts of climate change. To avoid the catastrophic consequences of climate breakdown, there are certain places that humanity cannot afford to destroy. These ecosystems contain more than 139 billion metric tons of "irrecoverable carbon", most of

Institution	Short description
	<p>which is stored in mangroves, peatlands, old-growth forests, and marshes.</p> <p>Conservation International scientists led a team of globally renowned 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.</p> <p>Informed by this pioneering research, Conservation International is undertaking an ambitious initiative to protect 4 million square kilometres (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.</p>
<p><a href="#"><u>IUCN - Contributions for Nature Platform</u></a></p>	<p>The Contributions for Nature platform are created by IUCN and allows members to document where they are undertaking (or planning to undertake) conservation actions. It overlays data for biodiversity and for nature-based solutions to climate change. This allows IUCN constituents to document their intended contributions to IUCN's Nature 2030 Programme and, by extension, other conservation frameworks and agreements such as the Global Biodiversity Framework, Paris Agreement, and UN Sustainable Development Goals (SDGs).</p>
<p><a href="#"><u>IUCN - Panorama Platform</u></a></p>	<p>The PANORAMA platform is a global knowledge exchange initiative created by IUCN that identifies and promotes examples of tested and replicable solutions in biodiversity conservation and broader sustainability issues. It provides an open, neutral platform for anyone to share their successes, learn from the experiences of other practitioners across sectors and geographies and exchange knowledge as part of the community.</p>
<p><a href="#"><u>IUCN - ROAM</u></a></p>	<p>The Restoration Opportunities Assessment Methodology (ROAM), developed by IUCN and WRI, is a flexible and affordable framework for countries to rapidly identify and analyse opportunities for forest and landscape restoration (FLR) and identify specific priority areas at a national or sub-national level. The IUCN has developed an accompanying handbook on ROAM that offers practical advice and options to bear in mind when considering or conducting an FLR assessment, as well as real-life examples of the kinds of outputs you can expect and will enable you to commission or design a tailor-made process to meet your specific needs.</p>
<p><a href="#"><u>IUCN - World Database of Protected Areas ("Protected Planet")</u></a></p>	<p>Protected Planet is an authoritative data source on protected areas and other effective area-based conservation measures (OECMs). It exists due to the extensive efforts of governments and other stakeholders to map, monitor, and report data on protected areas and 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 Effectiveness (GD-PAME), and a wealth of associated information.</p>
<p><a href="#"><u>IUCN EbA</u></a></p>	<p>Ecosystem-based Adaptation (EbA) is an approach to adaptation promoted by the IUCN that involves a wide range of ecosystem</p>

Institution	Short description
	<p>management 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 solution for addressing the impacts of climate change on people and their environment.</p>
<p><a href="#"><u>IUCN Global Ecosystem Typology</u></a></p>	<p>The IUCN Global Ecosystem Typology is a comprehensive classification framework for Earth's ecosystems that integrates their functional and compositional features. This new typology helps identify the ecosystems most critical for biodiversity conservation, research, management, and human well-being in the future.</p>
<p><a href="#"><u>IUCN IBAT - The Integrated Biodiversity Assessment Tool</u></a></p>	<p>IBAT stands for Integrated Biodiversity Assessment Tool. It is a web-based tool that provides access to three of the world's most authoritative global biodiversity datasets: the IUCN Red List of Threatened 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 practitioners. It can be used to identify areas of high biodiversity value, assess human activities' impact on biodiversity, and develop conservation and sustainable development plans. IBAT was developed by the IBAT Alliance, a consortium of organisations working to promote the use of biodiversity data for conservation and sustainable development. The alliance includes BirdLife International, Conservation International, the International Union for Conservation of Nature (IUCN), and the World Conservation Monitoring Centre (WCMC).</p>
<p><a href="#"><u>IUCN Natural Resource Governance Framework</u></a></p>	<p>The Natural Resource Governance Framework (NRGF) is an IUCN knowledge product created to provide a robust, inclusive, and credible approach to assessing and improving natural resource governance at multiple levels and in diverse contexts. Governance is a critical determinant of the social equity, effectiveness and sustainability of natural resource use and conservation. Improving natural resource governance benefits people and nature, including securing rights and sharing power and responsibilities. Despite this, governance remains poorly understood and weakly addressed in many natural resource and conservation contexts. The NRGF addresses this gap, and it was developed through a robust and inclusive process involving IUCN experts, Members, and partners.</p>
<p><a href="#"><u>IUCN Protocol for Biodiversity Net Gain</u></a></p>	<p>The IUCN Biodiversity Net Gain (BNG) Review Protocol is an independent evaluation tool for assessing the planning and progress of specific development projects (e.g., a mine, a plantation, or a forestry concession) towards achieving a net gain for biodiversity. It is intended as a tool for projects and project assessors to use when developing and undertaking a review process to assess BNG implementation. To provide external assurance, the Protocol is explicitly designed to be implemented by independent external experts but may also be</p>

Institution	Short description
	adapted for internal monitoring needs that may take place in between more formal, external reviews.
<a href="#"><u>IUCN Red List of Ecosystems (“IUCN RLE”)</u></a>	The IUCN's Red List of Ecosystems (RLE) is a global standard for assessing risks to ecosystems. It allows us to identify common symptoms (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 dynamics, as well as which ecosystems are healthy, and which are at risk of collapse soon and why. RLE is accompanied by complementary resources such as the RLE Database, which compiles information 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 ecosystems that integrates their functional and compositional features.
<a href="#"><u>IUCN Red List of Threatened Species</u></a>	The IUCN's Red List of Threatened Species is the most comprehensive information source on the global conservation status of animal, fungi, and plant species. It provides information about range, population size, habitat, and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions. Thus, it is a powerful tool to inform and catalyse action for biodiversity conservation and policy change, critical to protecting the natural resources we need to survive.
<a href="#"><u>IUCN Restoration Barometer</u></a>	The Restoration Barometer (launched in 2016 as the Bonn Challenge 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. National and sub-national governments can use the Barometer to simplify 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.
<a href="#"><u>IUCN Restoration Intervention Typology for Terrestrial Ecosystems</u></a>	The IUCN Restoration Intervention Typology for Terrestrial Ecosystems (RITTE) is a typology that helps to classify ecosystem restoration interventions. It builds on the IUCN Global Ecosystem Typology 2.0 and the categorization of ecosystems created by the UN Decade on Ecosystem Restoration. It includes human dominated landscapes like urban and mixed-use areas, which can provide untapped potential for restoration. Continuing the development of RITTE, IUCN is now finalising typologies for seagrasses, kelp forests and shallow reefs.
<a href="#"><u>IUCN Site-level tool for identifying other effective area-based conservation measures (OECMs)</u></a>	The Site-level tool is a methodology that helps to identify sites outside protected areas that deliver effective and long-term in situ conservation of biodiversity, also known as 'other effective area-based conservation measures' (OECMs). The tool guides an assessor through three steps to apply eight criteria which determine if a site qualifies as an OECM as set out under the Convention on Biological Diversity. For sites which do not currently meet all the criteria, the tool serves to

Institution	Short description
	highlight areas where further information or improvements in governance and management are required.
<a href="#">IUCN STAR - Species Threat Abatement and Restoration</a>	The Species Threat Abatement and Restoration (STAR) metric measures the contribution investments can make to reducing species' extinction risk. It assesses the potential of actions at specific locations to contribute to global sustainability objectives. In this way, it helps governments, cities, civil society, the finance industry, investors, and companies to target their investments to achieve conservation outcomes.
<a href="#">Marxan</a>	Marxan is a suite of tools designed to help decision makers find good solutions to conservation planning problems. This includes free software 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 complex 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.
<a href="#">Natural England - Biodiversity Metric 4.0 Biodiversity</a>	Natural England is an executive non-departmental public body, sponsored by the Department for Environment, Food & Rural Affairs of UK. It has created the Biodiversity Metric 4.0 accounting tool that can 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 intertidal habitats. Work is underway to develop an approach to marine net gain for English water.
<a href="#">Omniscape.jl</a>	Omniscape.jl implements the Omniscape connectivity algorithm developed by McRae <i>et al.</i> (2016). This software package can be used to produce maps of omni-directional habitat connectivity useful for scientific 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 movement or ecological flow (modelled as electrical current) to be informed by continuous spatial data (such as a habitat suitability map). This information is combined with other spatial information on landscape resistance to movement or flow to produce habitat connectivity models. The Omniscape.jl website has an examples section with step-by-step demonstrations of how to use Omniscape.jl.
<a href="#">Project Guacamaya</a>	Project Guacamaya (Macaw in English) uses best-in-class AI models to monitor deforestation and protect the ecosystem's biodiversity. It is a joint initiative of Instituto Humboldt, the CinfonIA Research Centre at Universidad de los Andes, Instituto Sinchi and Microsoft AI for Good Lab. The project uses a mix of new AI models for satellite analysis and



Institution	Short description
	<p>modified AI models from existing projects within Microsoft for camera trap analysis and bioacoustics. The databases are stored in the cloud, and the group uses the virtual machines and computational power of Microsoft Azure to design and train the models. According to the developers, it is an open-source platform available to any research centre, environmental authority, or scientific organisation worldwide that wishes to access, use and contribute new data.</p>
<p><a href="#"><u>Ramsar Sites Management Toolkit</u></a></p>	<p>The Ramsar Sites Management Toolkit guides site managers on the key steps and components of managing a wetland of International Importance (Ramsar Site). It also identifies and provides links to more detailed information on each step, including key non-Ramsar publications where appropriate. The toolkit is aimed primarily at managers of Ramsar Sites; however, it can also be used by those managing other wetlands that are not designated as Ramsar Sites.</p>
<p><a href="#"><u>Resilience Atlas and Database</u></a></p>	<p>The RESILIENCE ATLAS is an interactive analytical tool for building (1) understanding of the extent and severity of some of the key stressors and shocks that are affecting rural livelihoods, production systems, and ecosystems in the Sahel, Horn of Africa and South and Southeast Asia; and (2) insights into the ways that different types of wealth and assets (i.e., natural capital, human capital, social capital, financial capital and manufactured capital) – and combinations among these – impact resilience in particular contexts. The RESILIENCE ATLAS database was created by integrating and analysing more than 12 terabytes of data from over 60 of the best available datasets related to resilience, and summarising the output in the form of easy-to-understand maps that can shift focus from regional to national and, where the availability and resolution of the data permit, to local scales. The goal of the RESILIENCE ATLAS analytical tool and database is to provide new insights to help catalyse a revisioning of resilience and support for the growing community of practice around resilience.</p>
<p><a href="#"><u>SEED</u></a></p>	<p>SEED is a standardised biodiversity index led by Crowther Lab at ETH Zurich that aims at measuring the full complexity of nature at the genetic, species and ecosystems' levels. SEED's innovative index of biological complexity (“biocomplexity”) will provide political and financial systems with a straightforward value of nature's complexity, ingesting the very latest environmental data to assess the impact of any organisation, positive or negative, on nature. SEED will provide a holistic measure of biocomplexity, and could be used in any of the following scenarios:</p> <ul style="list-style-type: none"> <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> <li>- A government wants to scale its biodiversity credit programme.</li> <li>- An insurer wants to assess the nature-related risks of their clients.</li> <li>- The development and scaling of sustainability-linked sovereign debt.</li> </ul>

Institution	Short description
<a href="#"><u>Stockholm Resilience Centre - Planetary boundaries</u></a>	<p>The planetary boundaries concept presents a set of nine planetary boundaries within which humanity can continue to develop and thrive for generations to come. It is a concept developed in Earth system science that represents critical environmental thresholds beyond which human activities may lead to abrupt and irreversible changes in the Earth's system, potentially causing severe consequences 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.</p>
<a href="#"><u>The Biodiversity Intactness Index (BII)</u></a>	<p>The Biodiversity Intactness Index (BII) measures biodiversity change using abundance data on plants, fungi, and animals worldwide. The Index shows how local terrestrial biodiversity responds to human pressures such as land use change and intensification. BII was produced by the Natural History Museum by collating and analysing biodiversity data from ecological studies conducted worldwide. Biodiversity indicators such as the BII are essential tools for understanding, monitoring, and communicating biodiversity changes and tracking our progress towards goals. The Index uses the most comprehensive evidence base of its kind alongside robust, peer-reviewed methodology.</p>
<a href="#"><u>The Global Biodiversity Score (GBS)</u></a>	<p>The Global Biodiversity Score (GBS) is a corporate biodiversity footprint assessment tool that seeks to answer the following questions:</p> <ul style="list-style-type: none"> <li>- How do economic activities affect biodiversity?</li> <li>- How can companies reduce their biodiversity footprint?</li> <li>- How can companies contribute to the conservation of biodiversity?</li> </ul> <p>The GBS is a robust and synthetic way to measure the biodiversity impacts of economic activities across their value chain. It is expressed in the 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.</p>
<a href="#"><u>The Harlan and de Wet Crop Wild Relative inventory</u></a>	<p>The Crop Wild Relative (CWR) Database is a database that uses gene pool and taxon group concepts to estimate CWR's relatedness for 173 priority crops to create the Harlan and de Wet inventory of globally 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, divided between 37 families, 108 genera, 1392 species and 299 sub-specific taxa. The region with the highest number of priorities CWR is western Asia with 262 taxa, followed by China with 222 and southeastern Europe with 181. Within the primary gene pool, 242 taxa are found to be under-represented in ex situ collections and the countries identified as the highest priority for further germplasm collection are China, Mexico, and Brazil. The inventory database is web-enabled (<a href="http://www.cwrdiversity.org/checklist/">http://www.cwrdiversity.org/checklist/</a>) and can be used to facilitate in situ and ex situ conservation planning at global, regional, and national levels.</p>



Institution	Short description
<a href="#"><u>The Living Planet Index (LPI)</u></a>	<p>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.</p>
<a href="#"><u>TNFD - Taskforce on Nature-related Financial Disclosures</u></a>	<p>The Taskforce on Nature-related Financial Disclosures (TNFD) is a global initiative that is developing a risk management and disclosure framework for organisations to report and act on evolving nature-related risks. The TNFD is being developed by a group of experts from the financial sector, academia, and civil society.</p>
<a href="#"><u>World Database on OECMs (WDOECM)</u></a>	<p>The World Database on Other Effective Area-based Conservation Measures (WD-OECM) was first published in December 2019. It can be integrated with the World Database on Protected Areas (WDPA) for a broader view of global conservation. The WDPAID uniquely identifies entries in both databases. The content of WD-OECM is limited but crucial for understanding the significance of OECMs in global conservation. It's vital to identify OECMs per CBD and IUCN-WCPA guidance and ensure they receive adequate support.</p>
<a href="#"><u>WWF- Terrestrial Ecoregions of the World</u></a>	<p>Terrestrial Ecoregions of the World (TEOW) is a biogeographic regionalization of the Earth's terrestrial biodiversity created by the WWF and which uses ecoregions as its main unit. Ecoregions are defined as relatively large units of land or water containing a distinct assemblage of natural communities sharing a large majority of species, dynamics, and environmental conditions. There are 867 terrestrial ecoregions, classified into 14 different biomes such as forests, grasslands, or deserts. Ecoregions represent the original distribution of distinct assemblages of species and communities.</p>
<a href="#"><u>Zonation software</u></a>	<p>Zonation is a freely available decision support software tool for ecologically based land use planning including applications in spatial conservation planning and ecological impact avoidance. It is capable of data-rich, large-scale, high resolution spatial conservation prioritisation. Zonation operates on spatial data about biodiversity features (species, habitats, ecosystem services), costs and threats. It can also utilise information about uncertainty and ecological factors such as connectivity. It is a major property of Zonation that it can maintain the many dimensions of biodiversity through prioritisation. Zonation implements a broad set of methods and analyses in one package, allowing versatile use for solving many different types of problems.</p> <p>Typical uses of Zonation include (these possibilities are conditional on data availability):</p> <ul style="list-style-type: none"> <li>- Planning of reserve networks.</li> <li>- Planning of reserve network expansions.</li> </ul>

<b>Institution</b>	<b>Short description</b>
	<ul style="list-style-type: none"><li>- Reserve network evaluation.</li><li>- Decision support for land use zoning.</li><li>- Planning for ecological impact avoidance in development projects.</li><li>- Targeting habitat restoration.</li><li>- Spatial planning for biodiversity offsets.</li></ul>