

No one should be left behind

Cercarbono's Biodiversity Certification Programme Protocol







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Biodiversity: no one should be left behind.

Version 1.1.1

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Acronyms and abbreviations

BCP Biodiversity Crediting Project

CBCP Cercarbono Biodiversity Certification Programme

EbA Ecosystem-based Adaptation

ICCA Indigenous Peoples' and Community Conservation Areas

IEP Independent Experts Panel

IPBES Intergovernmental Science-Policy Platform on Biodiversity and

Ecosystem Services

IUCN International Union for Conservation of NatureiVBC Innovation Voluntary Biodiversity Credit

NbS Nature-based Solutions

NBSAP National Biodiversity Strategy and Action PlanOECM Other Effective Area-Based Conservation Measures

PADDD Preventing protected area downgrading, downsizing, and deregula-

tion

PMP Project Management Plan

ROAM Restoration Opportunities Assessment Methodology

VBC Voluntary Biodiversity Credit. The biodiversity certification unit of

Cercarbono





Terms and definitions

Terms and definitions guiding the understanding of these procedures have been deposited in the document *Terms and Definitions of the Cercarbono Biodiversity Certification Programme*, available at 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 Biodiversity Certification Programme (CBCP) aims to enable credible quantification, verification, and certification of positive biodiversity outcomes from biodiversity conservation activities¹. 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_2e 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

¹ 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	Servation activities under the CBCP. Scope	Т	M	F	W	U	AB	NAB
EA01	Acquisition and formalisation of other effective area-based conservation measures	 Establishment and designation of previously unprotected natural areas as formal protected areas, including OECMs and Indigenous or Community-Owned Areas (ICCAs). *To be considered formally established protected areas, 	X	X		X		X	
	(OECM) status*	they must be listed in the National Register of Protected Areas and the Protected Planet database.							
EA02	Agrobiodiversity enhancement	 Biodiversity conservation activities within their own operations or supply chains. This category can include: Conservation of pollinators. Regenerative agriculture. 	X					X	X
EA03	Collection and con- servation of crop wild relatives	- Gathering and conserving priority wild plant species closely related to cultivated crops.	X						Х
EA04	Connectivity enhancement	- 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.	X		X	X		X	
EA05	Conservation of livestock genetics	- Actions to prevent the loss of genetic diversity of priority domesticated animal species and breeds.	X						X
EA06	Ecosystem adaptation to climate change	- 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.	X	X	X	X	X	X	
EA07	Ecosystem conservation	 Sustainable management and protection of ecosystems. Enhanced management of wildlife. Collective Action to Biodiversity Conservation, according to the CDB (UNEP/CBD/COP/12/INF/7, 26.09.2014) conceptual framework. Protection and maintenance of natural ecosystems in their current state, minimising human-induced changes². 	X	X	X	х		X	Х
EA08	Ecosystem recovery and restoration	 Recovery of ecosystems with or without connectivity features. Habitat rehabilitation. Reforestation with native species. Promotion of natural regeneration. 	X	X	X	X		X	
EA09	Ex-situ species con- servation	Captive breeding programmes.Seed banks.Other methods to safeguard species' genetic diversity.	X	X	X	X	X		Х
EA10	Human-Wildlife conflict mitigation	- Active work to mitigate human-wildlife conflict or enhance human-wildlife coexistence.	X	Х	X	X	X	X	

 $^{^2}$ 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.

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ID	Eligible activity	Scope	Т	M	F	W	U	AB	NAB
EA11	Inclusion of pro- tected areas in the IUCN Green List Standard	- 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.	Х	Х	х	Х		Х	
EA12	Reducing legal downgrading and derecognition, and other threats to the conservation of of- ficial Protected Ar- eas	 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	Regenerative aquaculture	 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	Species adaptation to climate change	 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	Species in situ con- servation ³	 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). 	Х	X	x	X		Х	
EA16	Species restoration	- 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.	Х	X	X	X		Х	
EA17	Urban biodiversity	*According to the IUCN Red List of Threatened Species. - 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

³ 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 <u>Protected Planet database</u>.
- Inclusion of existing protected areas in the <u>IUCN Green List Standard of Protected</u> 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



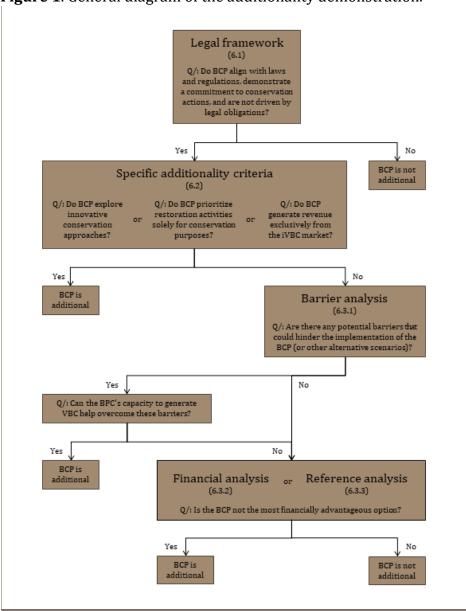


policies. Adhering to these principles will ultimately lead to more credible and effective biodiversity conservation efforts.

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 efforts⁴. It is crucial to emphasise that the CBCP strictly prohibits

⁴ 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. 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 decade⁵, 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.

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.

⁵ i.e., the reserve accumulated in years one to nine is returned in full in year ten.





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

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

8.2 Request for methodological deviations

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

In cases where a methodology applies to a project activity, but minor deviations⁶ 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.

⁶ 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.

12 Safeguards

To ensure that BCPs do not have a net negative impact on the environment, society, and economy, they must adhere to the guidelines set forth in the *Safeguarding Principles* and *Procedures of Cercarbono Certification Programme* document, available at 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, 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 PMP⁷, which should include, as a minimum, the following elements:

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

When designing and implementing biodiversity conservation projects, BCP developers should utilise flexible measurement frameworks that allow context-specific indicators to be aggregated into globally comparable metrics (such as the <u>Multidimensional Biodiversity Indexes</u>). These flexible measurement frameworks should facilitate scalability and comparability by providing standard methods to scale local species/ecosystems into global standardised indicators, enabling standardised reporting on contributions to national⁸ and global biodiversity targets.

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

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





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

14 Project certification cycle

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

Figure 2. Overview of the project certification cycle. Responsible Process Project Project proposal developer and submission CBCP's Pre-assessment technical team Project Project developer management plan Public **CBCP** comments Validation Project developer registration Independent Validation signature Expert Panel Project implementation Project Data collection Reporting and developer and monitoring documentation Independent Verification Expert Panel Certification CBCP CBCP and Credits issuance EcoRegistry and registration





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

	ification process and required documentation.
Process	Documentation
Account creation	
Documentation check.	 Certificate of formation. Shareholder's certificate of the company. Business references. Photocopy of CEO or legal representative's ID card. Bank certification. (Other documents may be required).
Formalisation.	Contract with Cercarbono and account creation.
Assessment of project proposal	
Documentation check.	Project proposal.
Review and approval or rejection.	Project proposal approval.
Public comments	
Publication on Cercarbono website.	 PMP. Project location: Multilevel map (if area-based or linear project), Geo-referenced map (*.shp or *.kml), and Narrative legal boundary document (if area-based or linear project). Proof of ownership or tenure of the project area or facility or authorization to act in the project area. Power of attorney (if applicable). Mandate orders (if applicable). Governance analysis (if applicable, only projects developed on community land). PMP. Project location.
	• Froject location.
The developer of the BCP uploads the required documentation.	 Updated PMP (if required). Updated project location (if required). Validation calculations. Validation support documents.
Validation signature	
Technical review:Documentation check.Legal check.Double-counting check.Overlap check.	PMP.Project location.Calculations.Support documents.
Project adjustments. Validation approval.	 (As per requirements). IEP Declaration of Conflict of Interest. Validation report. Validation statement.
Project implementation	
The developer of the BCP uploads the required documentation.	 Monitoring report. Verification calculations. Verification support documents.





Verif	Verification						
	Technical review:	Monitoring report and ancillary data and documen-					
	 Documentation check. 	tation.					
		Calculations.					
	Verification approval.	IEP Declaration of Conflict of Interest.					
		Verification report.					
		Verification statement.					
Certi	ification						
	Certificate issuance.	Certification report.					
		Biodiversity credits certificate.					
Regi	stration						
	Registration of biodiversity cred-	Registry issuance.					
	its.						
	Registration of corresponding buffer.	Registry issuance.					

14.1 Development of project proposal

The project developer drafts a short document using a *Project Proposal* template⁹, 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 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.

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⁹ CBCP has a *Project Proposal* template, available at <u>www.cercarbono.com</u>.





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'¹⁰.

¹⁰ *Biodiversity's Tool to Report Contributions to the Sustainable Development Goals* is available at 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 bundling¹¹ of carbon and biodiversity credits. Future developments of the CBCP may allow this type of bundling if ground issues are solved.

Stacking¹² 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	Attribu	Attribute					
	EA01	Acquisition and formalisation of OECM status					
Eligible activ- EA02		Agrobiodiversity enhancement					
ity (type of in-	EA03	Collection and conservation of crop wild relatives					
		Connectivity enhancement					
		Conservation of livestock genetics					

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

¹² 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 PADDD and other threats to the conservation of			
		official Protected Areas			
	EA13	Regenerative agriculture			
	EA14	Regenerative aquaculture			
	EA15	Species adaptation to climate change			
	EA16	Species conservation and preservation			
	EA17	Species restoration			
	EA18	Urban biodiversity			
	Terrestrial				
	Freshwater				
Type of ecosys-	Wetland				
tem	Marine				
	Urban				
	Mixed				
D' 1' ''	Genetic				
Biodiversity level	Species				
levei	Ecosystem				
G . 1 G TT	Indiger	genous Peoples and Local Communities			
Social & Herit-	World Heritage				
age	Local h	eritage			
T d 1-?	Commi	ınity-Led			
Leadership	Externally-Led				
UN SDG	(117) (optional during CBCP 'Innovation Phase')				

16.2 Credit serials

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

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

Credit serial fields	Code	Description			
Cercarbono ID	CBC	Cercarbono.			
Project number	999	Three-digit project sequential number.			
Validator ID	9	One-digit identification of the Independent Ex-			
		perts Panel.			
Methodology	99	Two-digit methodology sequential number.			
Verifier ID	9	Same one-digit as above, identifying the Inde-			
		pendent Experts Panel.			





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

$$VBC = I * A * t$$
 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





state¹³), 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 used¹⁴.

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 process¹⁵. 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 ΔI). 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

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

 $^{^{14}}$ Methodologies may incorporate logarithmic transformations or other transformations to address integrity variability.

¹⁵ 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, ΔI 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:

$$VBC = \Delta I * A * t$$
 Equation 2

Where VBC represents the Voluntary Biodiversity Credits, ΔI 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 ΔI . 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
IUCN Red List of Eco- systems categories	Project is in a Critically Endangered (CR) ecosystem.	Project is in an Endangered (EN) ecosystem.	Project is in a Vul- nerable (VU) eco- system.	Project is in a Near Threatened (NT) ecosystem.
Biodiversity Hotspot	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.
Irreplaceable biodi- versity and irrecover- able carbon	Project is in a high irreplaceable biodiversity and irrecoverable carbon area.	Project is in a high irreplaceable biodiversity or ir- recoverable car- bon area.	Project is in a medium irreplaceable biodiversity and irrecoverable carbon area.	Project is in a low irreplaceable biodiversity and irrecoverable carbon area.
CBD National targets	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.
IUCN Global Ecosys- tem Typology	Project has a >50% probability of collapse within 50 years ecosystem.	Project has a 50- 20% probability of ecosystem col- lapse within 50 years ecosystem.	Project has a 20- 10% probability of ecosystem col- lapse within 100 years ecosystem.	Project is in a threatened category in the near future ecosystem.
UNEP Forest Biodiversity Intactness Index	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.
Ramsar Wetland Classification	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 wet- land without Ramsar category.
World Heritage List UNESCO	Project is in a nat- ural 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.





Document history

Version	Date	Comments or changes
1.0	01.12.2023	Initial version of the protocol in public consultation
		from 01.12.2023 to 15.01.2024.
1.1	22.03.2024	Revised version of the protocol following public con-
		sultation.
1.1.1	30.05.2024	Updated version to address corrections in credit calcu-
		lation, 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
Adaptive governance structures								
Indicator: Existence of governance structures that						X		
support adaptive management.								
Adaptive long-term monitoring and measure-								
ment framework								
Indicator: Evidence of adjustments to the measure-					X			
ment framework based on emerging best practices								
and scientific understanding.								
Adaptive management								
Indicator: Evidence of the project's ability to adjust		X			X			
activities based on objective results, changing cir-		**			11			
cumstances, and lessons learned.								
Adverse impact prevention measures								
Indicator: Existence and effectiveness of measures				X				
to prevent adverse social impacts.								
Alignment with regional goals and national bio-								
diversity strategies								
Indicator: Integration of project goals with the ob-			X					
jectives outlined in the national biodiversity strat-								
egy and action plan (NBSAP).								
Baseline comparison								
Indicator: Comparison of current biodiversity indi-		X						
cators with baseline data collected before the pro-		Λ.						
ject's initiation.								
Benefit sharing agreements								
Indicator: Existence of formal benefit-sharing						X	X	
agreements (or mechanisms) with local communi-						11	11	
ties and stakeholders.								
Biodiversity benefits for communities								
Indicator: Positive changes in biodiversity indica-								
tors that are important for local communities (e.g.,						X		
availability of key species, access to traditional re-								
sources).								
Biodiversity index improvement								
Indicator: Positive changes in biodiversity indices	X			X				
(e.g., Shannon-Wiener Index, Simpson's Diversity In-								
dex, Shannon-Wiener Index, etc.).								





Indicator	P1	P2	P3	P4	P5	P6	P7	P8
Biodiversity trajectory analysis								
Indicator: Rate of change (either positive or nega-								
tive) in key biodiversity indicators when comparing		X						
historical data (pre-project) to projected data (post-								
project implementation).								
Budget allocation to on-the ground actions								
Indicator: Percentage of the project budget allo-	X							
cated on-the-ground conservation actions.								
Capacity building								
Indicator: Number of local community members								
trained or empowered through the project or						Χ		
amount invested in local capacity building to sup-								
port conservation efforts.								
Community empowerment								
Indicator: Evidence of capacity building and em-						X		
powerment of affected communities.						11		
Community engagement and awareness								
Indicator: Percentage of local community members								
attending biodiversity-awareness events or partici-				X		X		
pating in project-related activities.								
Community engagement								
Indicator: Level of community engagement and de-								
cision-making in project planning and implementa-						X		
tion to incorporate traditional knowledge and local								
perspectives.								
Community-based monitoring systems								
Indicator: Number of active community-based								
monitoring systems established, combined with the					X	X		
frequency of data collection events led by local								
stakeholders.								
Community-led decision-making								
Indicator: Demonstration of decision-making						X		
power in the hands of local communities.								
Comparative modelling								
Indicator: Existence of comprehensive comparative								
models that compare predicted biodiversity out-		X						
comes with the project's actions versus those with-								
out.								
Comparison to previous similar initiatives								
Indicator: Comparison of the outcomes of the cur-								
rent initiative with those of previous similar initia-		X						
tives to demonstrate its effectiveness in enhancing								
biodiversity.								
Comprehensive reporting								
Indicator: Inclusion of a comprehensive set of im-					X			
pact indicators in project reports.								





Indicator	P1	P2	P3	P4	P5	P6	P7	P8
Conflict resolution mechanisms								
Indicator: Existence and effectiveness of conflict						3.7		
resolution mechanisms for addressing disputes				X		X		
among stakeholders.								
Continuous improvement culture								
Indicator: Frequency of team feedback sessions,				X				
orkshops, or brainstorming events focused on			Λ					
generating ideas to enhance project outcomes.								
Control area comparison								
Indicator: Comparison of biodiversity indicators in								
the intervention area with a similar area that has		X						
not undergone the project's actions, demonstrating								
the added value of the initiative.								
Cross-border collaboration								
Indicator: Engagement in cross-border collabora-			X					X
tions and initiatives for transboundary conserva-			1					1
tion.								
Data collection efficiency								
Indicator: Time and resources required for data					X			
collection.								
Data harmonisation								
Indicator: Efforts to harmonise and reconcile data					X			
from different sources.								
Data integration framework								
Indicator: Use of a data integration framework that					X			
allows for aggregation and synthesis of diverse data								
types.								
Data transparency								
Indicator: Accessibility and transparency of project					X		X	
data and monitoring information.								
Demonstrated threat reduction								
Indicator: Reduction percentage in identified	X			X				
threats (e.g., habitat destruction, pollution, overfish-	11			**				
ing) affecting target species and habitats.								
Demonstration of long-term impact								
Indicator: Change in the population of target spe-	X			X				
cies or health metrics of key habitats.								
Documentation and knowledge management								
Indicator: Number of documented lessons, feed-				X	X			
back sessions held, and implemented adaptations.								
Ecosystem functionality								
Indicator: Change in key ecosystem functionality	X			X	X			
metrics such as nutrient cycling efficiency or water	Λ			Λ	Λ			
filtration rate.								





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





Indicator	P1	P2	P3	P4	P5	P6	P7	P8							
Gender-sensitive approaches															
Indicator: Incorporation of gender-sensitive strate-															
gies and assessments to prevent gender-based so-						X									
cial impacts.															
Genetic diversity															
Indicator: Evaluation of changes in genetic diver-															
sity within target species or populations, indicating	X			X											
the effectiveness of activities in maintaining genetic															
health.															
Global benchmarking															
Indicator: Adoption of standardised reporting for-															
mats or metrics for comparability across projects or			X												
engagement in global benchmarking systems for bi-															
odiversity conservation.															
Global conservation targets															
Indicator: Evidence of contributions to the Global	X		X												
Biodiversity Framework Targets.															
Habitat connectivity enhancement:															
Indicator: Improvement in degree of habitat con-															
nectivity for wildlife within the project and sur-	X			X				X							
rounding areas to ensure the movement and migra-				Λ				Λ							
tion of species, considering factors like wildlife cor-															
ridors, buffer zones, and natural pathways.															
Habitat quality improvement															
Indicator: Evaluation of the improvements in habi-															
tat quality, such as enhanced vegetation cover, im-	X			X											
proved water quality, or reduced habitat fragmenta-	Α.			Λ.											
tion, demonstrating that the initiative is expediting															
the recovery of ecosystems.															
Habitat restoration effectiveness															
Indicator: Assessment of the effectiveness of habi-															
tat restoration efforts, by monitoring indicators	X										X				
such as habitat connectivity, native species colonisa-															
tion, and ecosystem functionality.															
Harmonised data standards															
Indicator: Use of standardised data and reporting			X												
formats that align with national and international			1												
standards.															
Impact of landscape changes															
Indicator: The project assesses the potential im-															
pacts of any proposed changes in the landscape on								X							
the existing ecosystems, habitats, and species distri-															
butions.															





In director	D4	DO	DO	D.4	DE	D.C.	D=	DO
Indicator	۲1	P2	P3	P4	P5	P6	P7	P8
Income generation Indicator: Increase in income or economic opportunities for local communities that contribute to conservation, such as ecotourism, sustainable harvesting, or value-added products from natural re-	X			X		X		
sources.								
Indicator species response Indicator: Evidence of monitoring the presence and behaviour of indicator species that are particularly sensitive to environmental changes.	X			X				
Integration of qualitative data Indicator: Integration of qualitative information (e.g., local ecological knowledge) into quantitative metrics.	X				X			
Integration with local economies Indicator: 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.				X		X		
International agreements compliance Indicator: Conformity with international agreements and conventions related to biodiversity (e.g., CBD, CITES).			X					
Landscape restoration and enhancement Indicator: Number of hectares restored, enhanced, or converted into wildlife corridors within the project area.								X
Lesson learning workshops Indicator: Number of workshops or sessions to facilitate stakeholder discussions, where lessons learned, and best practices are shared and discussed.				X				
Local employment and training Indicator: Number of local community members employed by or trained through the project.						X		
Local governance structures Indicator: Integration of local governance structures and institutions in project governance.						X		
Local livelihood enhancement Indicator: Improved livelihoods of local communities because of project activities.				X		X		
Local ownership and empowerment Indicator: Percentage of local community members actively participating in decision-making processes related to conservation activities.				X		X		





Indicator	P1	P2	P3	P4	P5	P6	P7	P8
Local stakeholder engagement								
Indicator: Inclusion of local communities, indige-						37		
nous groups, and relevant stakeholders in project						X		
planning and decision-making.								
Long-term benefit sustainability								
Indicator: Sustainability of benefits beyond the pro-				X				
ject's duration.								
Long-term conservation plan								
Indicator: Detailed plan outlining how the conser-				X				
vation efforts and positive impacts will be sustained				Λ.				
beyond the project's initial duration.								
Metric alignment with global standards								
Indicator: Alignment of project metrics with glob-								
ally recognized biodiversity measurement standards			X					
and tools (e.g., IUCN Red List categories).			1					
Target: Ensuring that project metrics conform to								
widely accepted standards.								
Milestone reflections								
Indicator: Evidence of periodical reflections on				X				
achieved milestones to identify what worked well								
and what could be improved for future stages.								
Monitoring and reporting alignment								
Indicator: Evidence of alignment with established					37			
reporting frameworks at local, national, and interna-					X			
tional levels (as relevant), ensuring transparent and								
accountable progress tracking.								
Monitoring and reporting frequency								
Indicator: Frequency of project impact monitoring and reporting to credit buyers and stakeholders.								
Target: Regular but not excessive and timely report-	X			X	X			
ing of impacts, typically on an annual or agreed-								
upon schedule.								
Monitoring feedback loop								
Indicator: Evidence of effective feedback mecha-								
nisms for sharing monitoring results with stake-					X			
holders.								
Percentage of benefits to local communities								
Indicator: Percentage of project benefits directed to						X	X	
local communities and indigenous groups.						11	11	
Policy and legal alignment								
Indicator: Compliance with local, regional, national,			X					
and international relevant policies and laws.			Λ					
Population size								
Indicator: Quantification of the size of target spe-								
cies populations to track population growth or re-	X			X				
covery.								
covery.			<u> </u>	<u> </u>	<u> </u>			





Indicator	P1	P2	P3	P4	P5	P6	P7	P8
Population trends								
Indicator: Tracking of population trends of key spe-	37			17				
cies within the intervention area, focusing on popu-	X			X				
lation growth, stability, or recovery.								
Protected area expansion								
Indicator: Evidence of expansion of protected areas	X			X				
or conservation zones.								
Public engagement								
Indicator: Engagement with the public and stake-						X	X	
holders in the reporting process.								
Recognition of cultural heritage								
Indicator: Measures to protect and celebrate cul-						X		
tural heritage sites and practices.								
Regular review and evaluation								
Indicator: Evidence of regular reviews and evalua-	X			X	X			
tions to assess progress, identify challenges, and de-	/ A			/ A	1			
termine whether objectives are being met.								
Resilience to climate change								
Indicator: Number of climate resilience measures	X							
and strategies incorporated into the project.								
Resource mobilisation strategies								
Indicator: Number and types of resource mobilisa-				X				
tion strategies implemented by the project.								
Respect for cultural practices, indigenous, and								
local rights								
Indicator: Documentation of project activities that						X		
respect and protect local cultural practices and the								
rights of indigenous and local communities.								
Restoration area coverage								
Indicator: Area of land or habitat within the inter-	X			X				
vention zone that has been restored or conserved								
because of the budget allocation.	_							
Risk disclosure								
Indicator: Inclusion of risks and uncertainties asso-							X	
ciated with project impacts in reports.								
Scale of actions								
Indicator: Extent of on-the-ground conservation ac-	X							X
tions implemented.								
Scenario planning								
Indicator: Use of scenario planning to anticipate po-								
tential changes in environmental, social, or eco-				X				
nomic conditions, challenges, and opportunities.								
Target: Preparedness for a range of possible future								
scenarios.								





Indicator	P1	P2	P3	P4	P5	P6	P7	P8
Social risk assessments								
Indicator: Completion of thorough social risk as-						X		
sessments prior to project initiation.								
Species abundance increase								
Indicator: Measure changes in the abundance and								
diversity of target species within the intervention	X			X				
area, indicating the success of activities in support-								
ing local biodiversity.								
Species habit use								
		X						
patterns, indicating successful habitat restoration.								
Stakeholder consultation								
Indicator: Extent and quality of stakeholder consul-						X		
tations conducted during project planning.								
Stakeholder engagement in adaptation								
Indicator: Engagement of stakeholders in decision-						X		
making related to project adaptations.								
Stakeholder involvement in project design								
Indicator: Level of meaningful involvement of local						X		
stakeholders in the design phase.								
Timely updates								
Indicator: Timely updates to buyers and stakehold-							v	
ers in case of unexpected developments or signifi-							X	
cant changes.								
Transparency and communication								
Indicator: Evidence of open communication chan-						X	X	
nels to share feedback, lessons learned, and adjust-						Λ	Λ	
ments with stakeholders and the public.								
Transparency in benefit distribution								
Indicator: Transparent reports on the allocation						X	X	
and distribution of project benefits.								
Use of technology								
Indicator: Integration of technology (e.g., remote					X			
sensing, data analytics) to streamline monitoring ef-					1			
forts.								





Annexe 2. Suggested Table of Contents for Methodologies

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

Scope

Types of Biodiversity Targeted

Qualifying Activities

Ancillary activities

Geographical Scope

Principles for certification

Alignment with CBCP Core Principles and how they govern the methodology

Be Nature-oriented

Be additional

Local to global alignment

Have long-term outcomes

Have an adaptative management approach

Use flexible measurement frameworks (use of existing and independent monitoring systems)

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

Goal A: Conserve and restore ecosystems	
1. Participatory planning and management for biodiversity-rich areas.	
2. Restore 30% of degraded ecosystems by 2030.	Con-
3. Effectively conserve 30% of terrestrial and marine areas by 2030.	serve
4. Prevent extinction and recover threatened species.	
Goal B: Use lands and seas sustainably	
5. Ensure sustainable, safe, and legal use of wild species.	
6. Reduce impacts of invasive alien species.	Avoid
7. Reduce pollution to safe levels, including plastic pollution.	
8. Mitigate climate change and increase resilience.	
Goal C: Share benefits and services	
9. Promote sustainable use of wild species.	
10. Sustainable management of agriculture, aquaculture, and more.	Safe-
11. Enhance nature's contributions through nature-based solutions.	guard
12. Expand green and blue spaces in urban areas.	
13. Ensure fair benefit-sharing from genetic resources.	
Goal D: Mobilise necessary resources	
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.	Act
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
Biodiversity	Biodiversity Hotspots is a 2016 downloadable shapefile map of 36 bi-
<u>Hotspots</u>	odiversity hotspots. Biodiversity hotspots are the earth's most biolog-
	ically rich—yet threatened—terrestrial regions. To qualify as a
	hotspot, a region must contain at least 1,500 species of endemic vas-
	cular plants and have lost at least 70 percent of its primary native veg-
Circorito	etation. Many hotspots exceed these criteria.
<u>Circuitscape</u>	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 land-
	scapes. Its most common applications include modelling movement
	and gene flow of plants and animals (including as a response to cli-
	mate change) and identifying areas important for connectivity conser-
	vation. The algorithms that are used are borrowed from electronic cir-
	cuit theory. Landscapes are conductive surfaces, with low and high re-
	sistances assigned to landscape features that are most and least per-
	meable to movement. Effective resistances, current flow, and voltages
	calculated across the landscapes can be related to ecological pro-
	cesses, such as individual movement and gene flow.
<u>CreditNature -</u>	NARIA - Natural Asset Recovery Investment Analytics is a tool that
<u>NARIA</u>	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 instru-
	ments (such as nature impact tokens) and nature-positive reporting.
G D I	Its scientific rigour is undergoing third-party accreditation.
Crop Relatives in	GRIN-Global is a project that aims to provide a scalable version of the
GRIN-Global	Germplasm Resource Information Network (GRIN) suitable for use by
	any interested genebank in the world. The GRIN-Global database plat- form 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 Novem-
	ber 30, 2015.
	100-00/-000





Institution	Short description
Crop Trust's Crop	The Crop Wild Relatives Global Portal is an information platform that
Wild Relatives	centralises information about crop wild relatives' diversity and
Global Portal	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 rel-
	ative regional network" (2019-2022).
Domestic Animal	DAD-IS is the Domestic Animal Diversity Information System main-
Diversity Infor-	tained and developed by FAO. It provides access to searchable data-
mation System	bases of breed-related information and photos and links to other
(DAD-IS)	online resources on livestock diversity. It includes tools that allow visitors to 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.
EarthRanger	EarthRanger is a software solution that helps protected area manag-
<u>Eur tintunger</u>	ers to monitor wildlife and their natural habitats in real-time. It col-
	lects, integrates, and displays all historical and available data on wild-
	life 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 spe-
	cific areas to continent-wide migrations. It also helps protected area
	managers, ecologists, and wildlife biologists to make more informed
	The Finance Resource Database for Biodiversity (FIRE) is a database
diversity (FIRE)	
	* '
Global Forest	
	_
	computing to identify where trees are growing and disappearing.
Finance Resource Database for Biodiversity (FIRE) Global Forest Watch	operational decisions for wildlife conservation. 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. 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





Institution	Short description
GLOBIO	GLOBIO is a global biodiversity model created to support policymak-
	ing. The model calculates local terrestrial biodiversity intactness, ex-
	pressed 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.
Gnarly Landscape	Gnarly Landscape Utilities is an ArcGIS toolbox designed to support
Utilities	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 Connectiv-
	ity 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.
Habitats Classifi-	The Habitat Classification Scheme is a list of major in which taxa occur.
cation Scheme	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.
<u>IMAGE</u>	The IMAGE integrated assessment modelling framework has been de-
	veloped to understand how global, long-term environmental change
	and sustainability problems develop over time, driven by human ac-
	tivities, 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
Y Y	pollution, land-use change, biodiversity loss, and water scarcity.
<u>Instituto Life -</u>	Life Key is a platform that centralises all information regarding a client
<u>Life Key</u>	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 per-
	form a biodiversity management diagnosis based on three modules:
	biodiversity pressure (quantifies and monitors 5 aspects of biodiver-
	sity loss), biodiversity performance (evaluates the impact of conservation actions implemented) and LIFE Standards (shows the organi-
	sation's level of commitment to biodiversity).
<u>Irrecoverable</u>	"Irrecoverable carbon" refers to the vast stores of carbon in nature
<u>Carbon</u>	that are vulnerable to release from human activity and, if lost, could
<u>Cai DUII</u>	not be restored by 2050 — when the world must reach net-zero emis-
	sions to avoid the worst impacts of climate change. To avoid the cata-
	strophic 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
	more than 107 billion metric tons of infectiverable carbon, most of





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	which is stored in mangroves, peatlands, old-growth forests, and
	marshes.
	Conservational International scientists led a team of globally re-
	nowned experts to determine where these carbon stocks are, whether
	human activities threaten them and how quickly the stocks could be
	recovered if lost — creating a global map of irrecoverable carbon in
	Earth's ecosystems.
	Informed by this pioneering research, Conservation International is
	undertaking an ambitious initiative to protect 4 million square kilo-
	metres (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.
<u>IUCN - Contribu-</u>	The Contributions for Nature platform are created by IUCN and allows
tions for Nature	members to document where they are undertaking (or planning to un-
<u>Platform</u>	dertake) conservation actions. It overlays data for biodiversity and for
	nature-based solutions to climate change. This allows IUCN constitu-
	ents 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 Agree-
	ment, and UN Sustainable Development Goals (SDGs).
<u>IUCN - Panorama</u>	The PANORAMA platform is a global knowledge exchange initiative
<u>Platform</u>	created by IUCN that identifies and promotes examples of tested and
	replicable solutions in biodiversity conservation and broader sustain-
	ability issues. It provides an open, neutral platform for anyone to
	share their successes, learn from the experiences of other practition-
	ers across sectors and geographies and exchange knowledge as part
	of the community.
<u>IUCN - ROAM</u>	The Restoration Opportunities Assessment Methodology (ROAM), de-
	veloped 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 accompa-
	nying 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.
IUCN - World Da-	Protected Planet is an authoritative data source on protected areas
tabase of Pro-	and other effective area-based conservation measures (OECMs). It ex-
tected Areas	ists due to the extensive efforts of governments and other stakehold-
("Protected	ers to map, monitor, and report data on protected areas and OECMs.
Planet")	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.
IUCN EbA	Ecosystem-based Adaptation (EbA) is an approach to adaptation pro-
	moted by the IUCN that involves a wide range of ecosystem





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	management activities, such as the sustainable management of for-
	ests, 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.
IUCN Global Eco-	The IUCN Global Ecosystem Typology is a comprehensive classifica-
system Typology	tion 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.
IUCN IBAT - The	IBAT stands for Integrated Biodiversity Assessment Tool. It is a web-
Integrated Biodi-	based tool that provides access to three of the world's most authorita-
versity Assess-	tive global biodiversity datasets: the IUCN Red List of Threatened Spe-
ment Tool	cies, 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 hu-
	man activities' impact on biodiversity, and develop conservation and
	sustainable development plans. IBAT was developed by the IBAT Alli-
	ance, a consortium of organisations working to promote the use of bi-
	odiversity data for conservation and sustainable development. The al-
	liance includes BirdLife International, Conservation International, the International Union for Conservation of Nature (IUCN), and the World Conservation Monitoring Centre (WCMC).
IUCN Natural Re-	The Natural Resource Governance Framework (NRGF) is an IUCN
source Govern-	knowledge product created to provide a robust, inclusive, and credi-
ance Framework	ble 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 nat-
	ural 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 ex- perts, Members, and partners.
IUCN Protocol for	The IUCN Biodiversity Net Gain (BNG) Review Protocol is an inde-
Biodiversity Net	pendent evaluation tool for assessing the planning and progress of
Gain	specific development projects (e.g., a mine, a plantation, or a forestry
	concession) towards achieving a net gain for biodiversity. It is in-
	tended as a tool for projects and project assessors to use when devel-
	oping and undertaking a review process to assess BNG implementa-
	tion. To provide external assurance, the Protocol is explicitly designed
	to be implemented by independent external experts but may also be





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	adapted for internal monitoring needs that may take place in between
HICN Dod I !at af	more formal, external reviews.
IUCN Red List of	The IUCN's Red List of Ecosystems (RLE) is a global standard for as-
Ecosystems	sessing risks to ecosystems. It allows us to identify common symp-
("IUCN RLE")	toms (both spatial and functional) to understand the level of risk that
	an ecosystem is facing. The RLE is a scientifically robust, transparent,
	evidence-based support tool that helps us understand ecosystem dynamics, as well as which ecosystems are healthy, and which are at risk
	of collapse soon and why. RLE is accompanied by complementary re-
	sources 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 Ty-
	pology, a classification framework for Earth's ecosystems that inte-
	grates their functional and compositional features.
IUCN Red List of	The IUCN's Red List of Threatened Species is the most comprehensive
Threatened Spe-	information source on the global conservation status of animal, fungi,
cies	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 con-
	servation and policy change, critical to protecting the natural re-
	sources we need to survive.
IUCN Restoration	The Restoration Barometer (launched in 2016 as the Bonn Challenge
<u>Barometer</u>	Barometer) is a tool used by governments to track the progress of res-
	toration targets across all terrestrial ecosystems, including coastal
	and inland waters. It was designed for countries committed to restor-
	ing 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 Degrada-
	tion Neutrality Target and 1 trillion Trees.
IUCN Restoration	The IUCN Restoration Intervention Typology for Terrestrial Ecosys-
Intervention	tems (RITTE) is a typology that helps to classify ecosystem restoration
Typology for Ter-	interventions. It builds on the IUCN Global Ecosystem Typology 2.0
restrial	and the categorization of ecosystems created by the UN Decade on
Ecosystems	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 final-
	ising typologies for seagrasses, kelp forests and shallow reefs.
IUCN Site-level	The Site-level tool is a methodology that helps to identify sites outside
tool for identify-	protected areas that deliver effective and long-term in situ conserva-
ing other effec-	tion of biodiversity, also known as 'other effective area-based conser-
tive area-based	vation measures' (OECMs). The tool guides an assessor through three
conservation	steps to apply eight criteria which determine if a site qualifies as an
measures (OECMa)	OECM as set out under the Convention on Biological Diversity. For
(OECMs)	sites which do not currently meet all the criteria, the tool serves to





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	highlight areas where further information or improvements in gov-
	ernance and management are required.
IUCN STAR - Species Threat Abatement and Restoration	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 out-
Marxan	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.
Natural England -	Natural England is an executive non-departmental public body, spon-
Biodiversity Met-	sored by the Department for Environment, Food & Rural Affairs of UK.
ric 4.0 Biodiver-	It has created the Biodiversity Metric 4.0 accounting tool that can be
sity	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.
Omniscape.jl	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.
Project Guaca- maya	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





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montation	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.
Ramsar Sites	The Ramsar Sites Management Toolkit guides site managers on the
<u>Management</u> <u>Toolkit</u>	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.
Resilience Atlas	The RESILIENCE ATLAS is an interactive analytical tool for building
and Database	(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.
SEED	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: - A corporation needs to measure and disclose the biodiversity impact of their supply chain. - An asset manager wants to measure the biodiversity impact & risk of their portfolios. - A government wants to scale its biodiversity credit programme. - An insurer wants to assess the nature-related risks of their clients. - The development and scaling of sustainability-linked sovereign debt.





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Stockholm Resilience Centre - Planetary boundaries The Biodiversity	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. The Biodiversity Intactness Index (BII) measures biodiversity change
Intactness Index (BII)	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.
The Global Biodiversity Score (GBS)	The Global Biodiversity Score (GBS) is a corporate biodiversity footprint assessment tool that seeks to answer the following questions: - How do economic activities affect biodiversity? - How can companies reduce their biodiversity footprint? - How can companies contribute to the conservation of biodiversity? The GBS is a robust and synthetic way to measure the biodiversity impacts of economic activities across their value chain. It is 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.
The Harlan and de Wet Crop Wild Relative inventory	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 underrepresented 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 (http://www.cwrdiversity.org/checklist/) and can be used to facilitate in situ and ex situ conservation planning at global, regional, and national levels.





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The Living Planet	The Living Planet Index (LPI) is a measure of the state of the world's
Index (LPI)	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.
TNFD - Taskforce	The Taskforce on Nature-related Financial Disclosures (TNFD) is a
on Nature-related	global initiative that is developing a risk management and disclosure
<u>Financial Disclo-</u>	framework for organisations to report and act on evolving nature-re-
sures	lated risks. The TNFD is being developed by a group of experts from the financial sector, academia, and civil society.
World Database	The World Database on Other Effective Area-based Conservation
on OECMs	Measures (WD-0ECM) was first published in December 2019. It can
(WDOECM)	be integrated with the World Database on Protected Areas (WDPA)
	for a broader view of global conservation. The WDPAID uniquely iden-
	tifies entries in both databases. The content of WD-OECM is limited
	but crucial for understanding the significance of OECMs in global con-
	servation. It's vital to identify OECMs per CBD and IUCN-WCPA guidance and ensure they receive adequate support.
WWF- Terrestrial	Terrestrial Ecoregions of the World (TEOW) is a biogeographic re-
Ecoregions of the	gionalization of the Earth's terrestrial biodiversity created by the
World	WWF and which uses ecoregions as its main unit. Ecoregions are de-
	fined as relatively large units of land or water containing a distinct as-
	semblage 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, grass-
	lands, or deserts. Ecoregions represent the original distribution of dis-
7	tinct assemblages of species and communities.
Zonation soft- ware	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.
	 Typical uses of Zonation include (these possibilities are conditional on data availability): Planning of reserve networks. Planning of reserve network expansions.
	ramming of reserve network expansions.





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	- Reserve network evaluation.
	- Decision support for land use zoning.
	- Planning for ecological impact avoidance in development projects.
	- Targeting habitat restoration.
	- Spatial planning for biodiversity offsets.