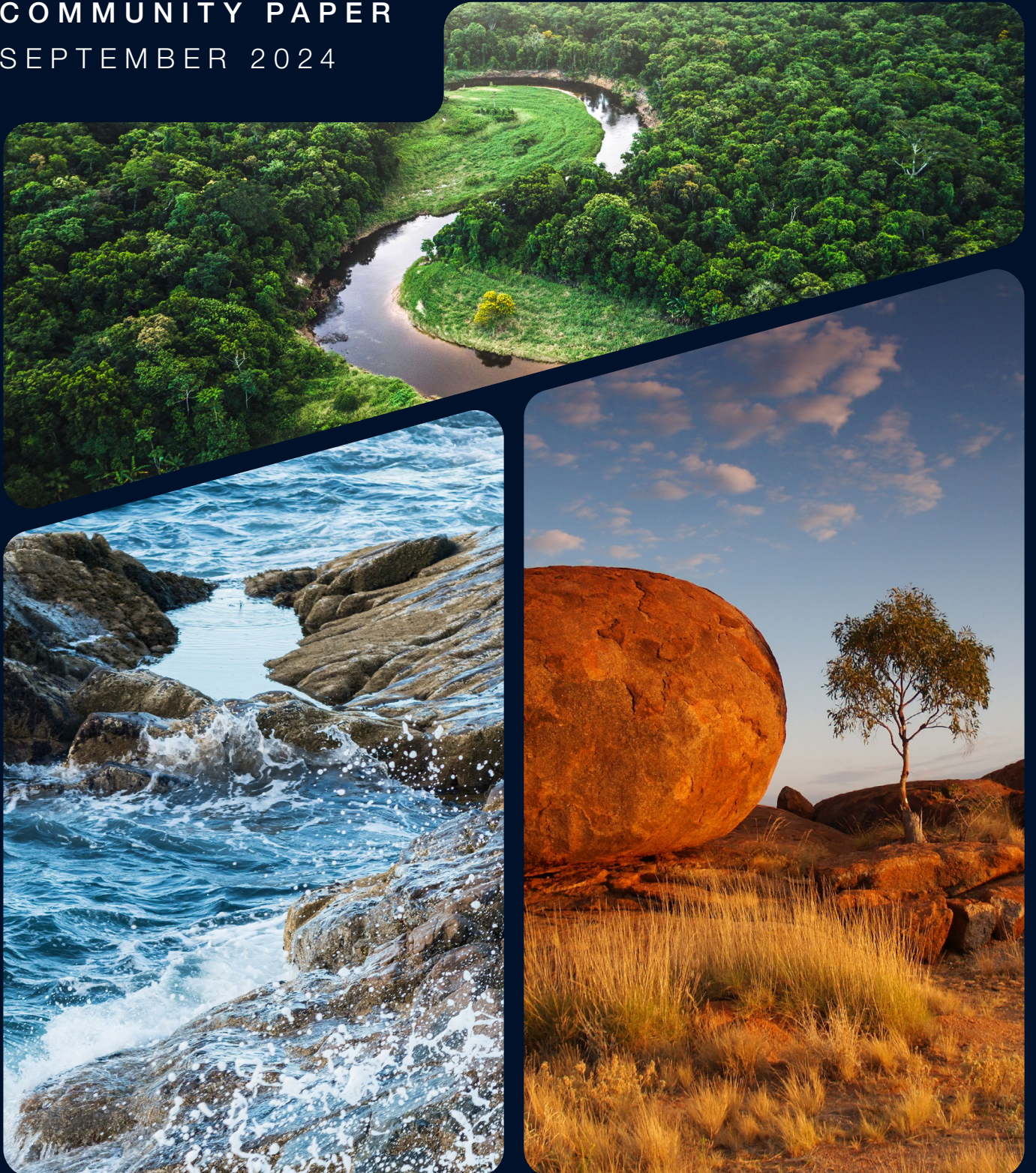


In collaboration with  
McKinsey & Company



# Biodiversity Credits: A Guide to Identify High-Integrity Projects

COMMUNITY PAPER  
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# Foreword



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In December 2022, 196 parties signed the historic Kunming-Montreal Global Biodiversity Framework (GBF), marking a groundbreaking global commitment to halt and reverse biodiversity loss by 2030 and live in harmony with nature by 2050. Achieving it will require a paradigm shift in society and the economy, including bridging the current annual \$700 billion gap for nature.

Biodiversity credits are one of the potentially impactful tools to help conserve and restore nature and contribute to bridging the financing gap. The success of biodiversity credits is directly linked to their integrity. If used well, biodiversity credits can mitigate nature-related risks, direct funding towards crucial ecosystems and generate benefits – particularly for Indigenous peoples and local communities (IPs and LCs). However, if biodiversity credits fail to meet high integrity standards, there is a considerable risk of causing adverse effects. A common understanding of what “high integrity” means is, therefore, key to guiding the development and purchase of high-integrity biodiversity credits.

This document presents a practical guide for biodiversity credit buyers, offering a structured overview of ten key integrity guardrails, including a set of review criteria against each guardrail. These guidelines are intended to complement existing corporate due diligence processes, not replace them.

Furthermore, this report is a non-exhaustive working document aiming to reflect the current state of the rapidly evolving biodiversity credit market. As new, broadly accepted practices and standards emerge, ongoing consultations will continue to update each guardrail. All actors are encouraged to put this report to the test and use it in combination with other procurement guidance, which has been or will be developed to procure the most advanced and high-integrity biodiversity credits.

# Executive summary

Clear socioeconomic criteria and guardrails are necessary for biodiversity credit buyers to assess projects and mitigate market risks.

High-integrity biodiversity credits can mitigate nature-related risks, direct funding towards crucial ecosystems and generate benefits for Indigenous peoples and local communities (IPs and LCs). Ensuring high standards of environmental and socioeconomic integrity in biodiversity credit projects is critical to preventing adverse impacts on the environment and harm to IPs and LCs. It is critical that high-integrity biodiversity credits deliver real, lasting benefits for nature and people.

Clear criteria are therefore essential to assessing projects and project developers, and ensuring that investments in biodiversity credits are both effective and beneficial. This is particularly important in the biodiversity market, where projects vary widely in attributes, such as type (e.g. conservation, restoration and sustainable management) and ecosystem or biome (e.g. forests, coral reefs, savannahs), and where multiple context-specific methodologies exist.

In December 2022, the World Economic Forum released high-level governance and integrity principles to promote social inclusion and environmental benefits in emerging biodiversity credit markets.<sup>1</sup> This guide builds on that earlier publication, including 10 guardrails:

- 1 Rights of IPs and LCs
- 2 Benefit-sharing arrangements with IPs and LCs
- 3 Legal rights
- 4 Transparency requirements
- 5 Independent validation and verification
- 6 Monitoring, reporting and verification (MRV)
- 7 Third-party issuance
- 8 Additionality
- 9 Durability (permanence)
- 10 Leakage

Based on these guardrails, this guide aims to support biodiversity credit buyers in identifying high-integrity projects and mitigating market risks, thereby ensuring that biodiversity credits realize their potential benefits. This guide is intended to complement, not replace, existing due diligence processes for buyers, which remain essential.

Finally, this guide, built in collaboration with stakeholders from public and private sectors and civil society, will continue to evolve through ongoing consultations and with the emergence and adoption of new integrity standards.

# Introduction

High-integrity biodiversity credits are an opportunity to generate benefits for nature and people, in particular Indigenous peoples and local communities.

The World Economic Forum launched the [Biodiversity Credits Initiative](#) in 2022 to assess how biodiversity credits could help to mitigate systemic nature-related risks and promote investment in vital ecosystems. The goal was to identify how biodiversity credits could benefit society and, in particular, Indigenous peoples and local communities (IPs and LCs). To fulfil their potential, biodiversity credits must be anchored in principles of integrity, both from a demand and supply perspective.

Biodiversity credits projects that do not uphold high standards of environmental and socioeconomic integrity could result in adverse outcomes for nature and biodiversity, and inflict significant harm on IPs and LCs. Conversely, failure to purchase high-integrity biodiversity credits – namely those that deliver durable benefits for nature and people – represents a misspent investment for businesses and investors. It is therefore critical for buyers of biodiversity credits to have clear procurement criteria that they can use to effectively assess projects and project developers.

In December 2022, during the Convention on Biological Diversity's 15th meeting of the Conference of Parties Convention (COP15) in Montreal, the Forum released a set of [High-Level Governance and Integrity Principles for](#)

[Emerging Voluntary Biodiversity Credit Markets](#).

That paper highlights key principles to ensure both social inclusion and environmental benefits. Building on those principles, this document proposes a guide – comprised of 10 guardrails – to help buyers minimize the risks associated with identifying high-integrity projects. This guide aims to support buyers in procurement analysis and encourage pilot transactions at the early stage, but is not intended to replace existing due diligence processes, which remain the buyer's responsibility. Furthermore, ensuring the integrity of biodiversity projects may not fully shield buyers from other risks, such as strategic or reputational risks. A report from the World Economic Forum ([Biodiversity Credits: A Guide to Support Early Use with High Integrity](#)) offers a risk management guide to support businesses with the identification and alleviation of various types of risks.

This guide, including the ten integrity guardrails, has been drafted in consultation with project developers and subject experts (from academia, civil society and IPs and LCs).<sup>1</sup> Comments were received through surveys, workshops, bilateral calls, emails and inline edits.<sup>2</sup> This guide is intended to be a working document that continues to evolve through ongoing consultations, reflecting the latest developments in market and key considerations about integrity.

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# Project attributes

Biodiversity credit projects vary significantly in their attributes based on the ecosystem and local specifics.

“ It is beneficial for buyers to understand that biodiversity projects have a range of attributes and often differ in what a unit of credit represents.

Biodiversity credits are a relatively novel financial instrument for channelling capital towards the conservation and restoration of nature. They are verifiable and tradable instruments that reward positive biodiversity outcomes, such as increases in populations of species or improvements in ecosystem conditions. To meet global goals like 30 by 30 (the protection and sustainable management of 30% of land and ocean areas by 2030), credits need to be issued from conservation and restoration projects.<sup>3</sup>

Before entering the integrity examination phase of specific projects, it is beneficial for buyers to understand that biodiversity projects have a range of attributes and often differ in what a unit of credit represents. The variety of potential project attributes can make it challenging and confusing for buyers to compare credits and determine which projects they should examine and further engage with.

Figure 1 illustrates how three projects might differ across seven key attributes. Buyers can use some or all of these attributes to assess and compare projects and identify projects of interest. A structured overview of project characteristics reduces barriers to entry for buyers looking to engage in the biodiversity credit market.

For example, a unit of biodiversity credit has an area attribute, measured by the extent of geographical

surface. Hectares (ha) could be an appropriate unit and would be consistent with the Science-Based Targets for Nature (SBTN) reporting guidelines for businesses. There is, however, flexibility for project developers to choose a surface metric and scale that suits their ecosystem, geography or business plan (e.g. 1 ha, 10 m<sup>2</sup>, 1 m<sup>2</sup>).

Additionally, project developers have flexibility in how they package their measurements into a credit unit, provided their method involves demonstrated biodiversity outcomes and community inclusion. Management inputs and process improvements alone, for example, would not qualify. This approach balances the need for context-specific measurements and verifiable ecological outcomes, thereby mitigating the risk of low-integrity credits.

For a more detailed analysis of the methodologies and metrics of biodiversity credits projects, see the Forum's *Biodiversity Credits: Demystifying Metrics for Nature Markets* report.

After identifying projects of interest based on their attributes, buyers can refer to the following review criteria, which includes 10 integrity guardrails with specific screening criteria. This enables them to examine whether shortlisted projects meet integrity requirements before making a purchase decision.

FIGURE 1 A structured overview of the key project attributes (illustrative)

	Project example	1	2	3
Area	1 Surface area	Per 1 ha	Per 10 m <sup>2</sup>	Per 1 m <sup>2</sup>
Integrity measures	2 Project type	Restoration	Conservation	Restoration
	3 Improvement/avoided loss <sup>1</sup>	2% increase per year above baseline	1 quality ha maintained against a declining baseline	5% reduction in gap to desired target state
	4 Permanence <sup>2</sup>	30 years	1 year	5 years
Biome and community value	5 Keystone/endangered species			
	6 Ecosystem type	Boreal forests	Savannahs	Coral reefs
	7 Community inclusion	Robust benefit-sharing arrangements with IPs and LCs plus free, prior and informed consent (FPIC)	Robust benefit-sharing arrangements with IPs and LCs plus FPIC	Robust benefit-sharing arrangements with IPs and LCs plus FPIC

Notes: 1. Defined by individual standards; 2. Guarantees impacts on land generating credit for a specified time.

Source: World Economic Forum.

2

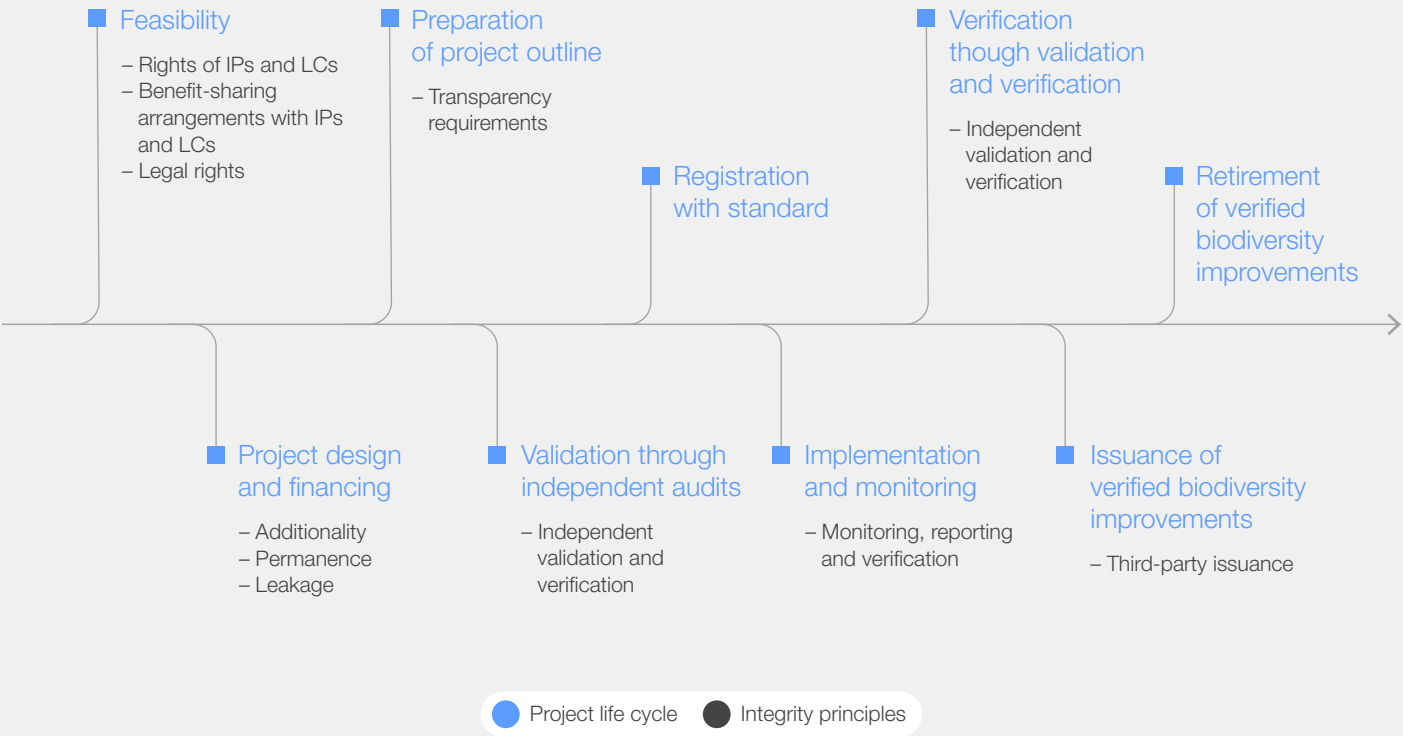
# Integrity guardrails and review criteria

Integrity frameworks will allow biodiversity credits to deliver positive outcomes for nature and equitable benefits to its stewards.

This section presents 10 integrity guardrails, along with respective review criteria and documentary evidence, that buyers can use

to evaluate biodiversity credit projects. Figure 2 illustrates how the guardrails map on to the life cycle stages of a project.

FIGURE 2 Guardrails in the stages of a project’s life cycle



Source: Adapted from ClimatePartner. (n.d.). *What is the life cycle of a climate project?*  
<https://www.climatepartner.com/en/climate-projects/project-life-cycle>.



## 2.1 Rights of IPs and LCs

### Integrity principle

Biodiversity credit project developers should recognize, respect and protect the rights of IPs and LCs to: land and resource tenure, claims to self-determination, methods and institutions of self-governance, traditional knowledge, cultural norms and values, and free, prior and informed consent (FPIC).<sup>4</sup> Furthermore, project developers should ensure their inclusion at all project stages – across project design, execution

and measurement, reporting and verification (MRV) – in meaningful, inclusive and equitable ways. Benefit-sharing arrangements should also be in place (addressed in section 2.2).

### Rationale

The proposed review criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 1 Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Stakeholder identification</b>	Project developers should provide an analysis of the stakeholders that identifies rights to territories and resources.
<b>Evidence of existing rights</b>	Project developers should provide evidence of existing tenure and rights to lands, territories and resources, including all related ecosystem services and benefits.
<b>Stakeholder engagement plan, materials and documentation of negotiation process</b>	<p>Project developers should provide evidence of an effective process of community consultation.</p> <p>This should include clear and culturally appropriate communication of comprehensive information on markets, compensation, implementation and other risks. They should also provide access to legal and technical advice. Project developers should provide evidence that they have facilitated direct and independent communication between communities and the validation and verification body.</p> <p>For example, the Indigenous Carbon Industry Network suggests a nine-step FPIC engagement process as best practice.<sup>5</sup></p>
<b>Agreements demonstrating community consent</b>	<p>Project developers should provide proof that FPIC was obtained and is subject to ongoing community review. An early-stage project developer planning a forward sale should at least provide evidence of and outcomes from an initial meeting with relevant communities where the documentary evidence listed above was presented and discussed. The project should also supply evidence that the communities involved have consented to continued project development. All development should be subject to ongoing formal consent and benefit-sharing negotiations.</p> <p>Projects carried out on protected areas should give special consideration to the findings of the Commission on Human Rights' <a href="#">Special Rapporteur on the rights of Indigenous Peoples</a>.</p>

## 2.2 Benefit-sharing arrangements with IPs and LCs

### Integrity principle

Project developers should ensure transparent, equitable and mutually agreed-upon benefit-sharing arrangements with IPs and LCs and clearly document who will own (and be accountable for) biodiversity credits from a project. This should include respect for traditional knowledge, fair compensation for any current and future impacts, and the preservation of locally defined livelihoods and priorities.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards. Benefit-sharing and community inclusion and participation are given special consideration, given their critical role in supporting other integrity principles such as permanence.



TABLE 2 | Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Assessment report of project benefits with proposed community distribution</b>	Project developers should provide an assessment of the economic benefits of a project (including identification of the different types of benefits and proposed distribution mechanisms that reflect the norms of relevant communities). This would inform equitable benefit-sharing.
<b>Evidence of meaningful participation with FPIC</b>	Project developers should demonstrate that IPs and LCs have meaningfully participated in defining the terms of benefit-sharing through FPIC.
<b>Evidence of the outcomes of benefit-sharing agreements</b>	Project developers should supply evidence of the outcomes of benefit-sharing agreements with any stakeholders or rights-holders (including IPs and LCs), providing clarity on how benefits are shared in proportion to credit price increases.  This information does not necessarily have to be public if the rights-holders prefer it not to be, but it needs to be assessed by buyers. This can be done under non-disclosure agreements.
<b>Evidence of commensurate benefit distribution</b>	The proportion of benefits that goes to communities should ideally be commensurate with what is outlined in established standards and methodologies.

## 2.3 Legal rights

### Integrity principle

Project developers should have the legal right to carry out a biodiversity credit project.

### Rationale

A legally held title and a full due diligence would strengthen current practice in established carbon markets, biodiversity projects and conservation

standards (because evidence from carbon markets shows that titles may be obtained fraudulently or without FPIC). The criterion for centralized fund-based projects reflects an effort to accommodate more innovative market practices that have not yet been used in existing carbon markets, biodiversity projects and conservation standards. However, such schemes will be exposed to risk if it is not recognized that most lands (particularly in developing countries) are customarily claimed by IPs and LCs.

TABLE 3 | Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Document of legal rights with project ownership</b>	Project developers should demonstrate that they have the legal right to carry out the project. They should provide at least one document evidencing project ownership arising from or granted under law, statute, regulation or decree by a competent authority, or entitlement to control and operate the project by way of applicable property or contractual rights.
<b>Report of legal due diligence</b>	Project developers should provide a legal due diligence report, carried out with legal experts based in the project's location. The due diligence report should assess country-specific tenure systems as well as legal versus legislated tenure system rights (considering environmental and social contexts, political scenarios and other factors). The due diligence report should take all legislation and common and customary law into account. It should demonstrate completion of a tenure risk assessment with neighbouring IPs and LCs (and any other claimants).  Buyers should carry out their own verification of the due diligence report. <sup>6</sup>

**Note:** For centralized fund-based projects that act as an intermediary in the sale of credits between project developers and buyers, the documents listed above could be provided by the project developers managed under the fund.



## 2.4 Transparency requirements

### Integrity principle

Governance arrangements (the rules and procedures for how project management decisions are made) should provide publicly available, comprehensive and transparent information on project design and credit issuance. Governance arrangements have direct implications for a project's ability to deliver high-integrity outcomes.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 4 Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Background documents of project information with public accessibility</b>	<p>Project developers should provide 1) a project description, 2) monitoring reports, and 3) validation reports. Such reports should be made publicly accessible and retained for at least two years after the end of the project crediting period. The documentary evidence should include the following information:</p> <ul style="list-style-type: none"> <li>– Location</li> <li>– Objectives</li> <li>– Baseline scenario</li> <li>– Key dates</li> <li>– Direct and indirect outcomes associated with project activities</li> <li>– Governance arrangements (including how IPs and LCs are included in project design and decision-making)</li> </ul>
<b>Involvement of affected communities in governance arrangements</b>	<p>Governance arrangements should involve participation of IPs and LCs and other relevant communities and/or claimants in collaborative design and implementation. This could be evidenced through mailing lists and communications, contracts and registries.</p>

**Note:** Potential reputational issues linked to past performance and history of human rights abuses and incidents need to be identified and precluded.

## 2.5 Independent validation and verification

### Integrity principle

Governance arrangements should include regular independent validation and verification, and the outcomes of those reviews should be made public. Independent validation and verification should involve affected stakeholders (such as IPs and LCs, local governments or other claimants) and be based on transparent data collection.

Recommendations arising from such reviews should be disclosed and implemented in a timely manner.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 5 Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Independent validation and review report</b>	<p>Project developers should demonstrate adherence to the relevant standards through an independent third-party review of their project descriptions and monitoring approach.</p> <p>Various forms of third-party verification with the requisite expertise could be acceptable, such as peer reviews or a review by natural resource management experts or organizations. The validation and verification process should ideally ensure that all integrity guardrails listed in this document are met.</p>

## 2.6 Monitoring, reporting and verification (MRV)

### Integrity principle

Projects should have robust MRV of outcomes (including biodiversity, social and community well-being outcomes). The quantification of biodiversity outcomes should be underpinned by sound scientific methods and techniques, a set of transparent metrics (that should be publicly available for audit) and traditional

knowledge, where relevant. This should be developed with meaningful, effective and inclusive participation of IPs and LCs.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 6 Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Monitoring plan with evidence of execution</b>	<p>Project developers should provide biophysical, biodiversity and social monitoring plans. These should include identification of biodiversity and community well-being variables linked to project outcomes, and sampling approach, data and parameters.<sup>7</sup> There can be flexibility in how the plan is presented, but the scientific rigour behind it is critical.</p> <p>Additionally, developers should supply evidence that the monitoring plan is being delivered and that the project team has the capacity and expertise to implement it.</p>

## 2.7 Third-party issuance

### Integrity principle

Third parties, independent of the project developers, should administer projects and issue credits. Project developers should use registries that uniquely identify, record and track projects and credit issuances while securely and unambiguously retiring credits to avoid double counting.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 7 Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Specification of registry that will issue credits</b>	Project developers should specify the independent registry (or technology solution) they are currently using or will be using to issue credits. If technology solutions (e.g. blockchain methods that replace classic registries) are used, a description could be provided and made available for third-party review.
<b>Measures in place to avoid double counting</b>	Project developers should specify measures to avoid the double counting of credits issued. Double counting in this context refers to a situation in which credits issued based on a certain biodiversity outcome are sold to multiple buyers or where the same credits are listed on more than one registry.
<b>Safeguards for forward contracts</b>	For forward-sold credits, project developers should specify safeguards to ensure the credits are not promised to multiple buyers. For example, this could be in the form of tags for ownership to specific buyers.

## 2.8 Additionality

### Integrity principle

In carbon markets, additionality is a guiding principle that ensures outcomes would not be achieved without the project. However, additionality has not yet been clearly defined for biodiversity credits, and since biodiversity credits might be used for different purposes than carbon credits, the applicability of the additionality clauses requires further thinking.

### Rationale

The two changes to traditional methods are designed to address key challenges in conservation

(including the chronic underfunding of protected areas and incentivizing biodiversity-friendly land uses against the opportunity cost of non-friendly land uses, such as mining, agriculture or forestry). They are also designed in accordance with the rights-based prerogatives highlighted in the Kunming-Montreal Global Biodiversity Framework (GBF).<sup>8</sup> Allowing the stacking of carbon credits and biodiversity credits, for example, helps to maximize potential revenue. Governments should also recognize the need to engage the private sector to deliver on their GBF targets and goals, as well as the need to direct such funding to the people and communities who are able to deliver and sustain positive results.



TABLE 8 | Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Statement of satisfaction with financial additionality</b>	Financial additionality means that the project is not financially viable in the absence of credit revenues. <b>Traditional definitions are changing:</b> Revenues from carbon credits do not count towards or undermine financial additionality claims of biodiversity credit projects.
<b>Statement of satisfaction with regulatory additionality</b>	Regulatory additionality means that project activity goes beyond what is legally required. For example, a designated conservation area should not generate avoidance credits unless management actions address other project barriers. <b>Traditional definitions are changing:</b> Many government-protected areas are underfunded and would likely remain so without credit finance. In these cases (especially if a co-management agreement is in place with a non-governmental or private sector party), regulatory additionality could be waived. In other words, if a project developer cannot demonstrate regulatory additionality, they might still be eligible for consideration if they can demonstrate financial additionality. This is because proposed management actions wouldn't be possible without credit finance.

## 2.9 Durability (permanence)

### Integrity principle

Project developers should aim to achieve long-term positive biodiversity outcomes. Permanence risk, durability periods and measures in place to manage the risks of or compensate for reversals should be transparently communicated.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards.

TABLE 9 | Documentary evidence and review criteria

Documentary evidence	Review criteria
<b>Permanence risk assessment report</b>	Project developers should provide evidence that they have conducted a permanence risk assessment using a well-established project risk analysis framework, and make this publicly accessible.  Project developers should also include plans to manage the risk of reversals. These should include calculations for credits to be deposited into a reserve or buffer pool (if used) and compensation for reversals. These proposals are aligned with specified criteria regarded as good practice within established carbon standards.  The guardrails for safeguarding the rights of IPs and LCs and ensuring benefit arrangements are also critical in evidencing durability. Emerging scholarship suggests that if projects do not generate benefits for local communities, they will fail to deliver ecological (or financial) outcomes.

## 2.10 Leakage

### Integrity principle

Project developers should address any risk of leakage (the unintended displacement of activities within a project area to outside the project area). Leakage results in negative impacts on biodiversity elsewhere, undermining the positive biodiversity outcomes that projects are supposed to achieve.

### Rationale

The proposed criteria build on practices widely used within established carbon markets, biodiversity projects and conservation standards (recognizing that the standards used to date have proven insufficient in some areas).

TABLE 10 | Documentary evidence and review criteria

Documentary evidence	Review criteria
<p><b>Leakage risk review and management plan</b></p>	<p>Project developers should provide evidence on the types of leakage (e.g. activity-shifting,<sup>9</sup> ecological leakage<sup>10</sup>) that are most likely to take place.</p> <p>This review should include an impact estimation of the leakage and evidence that the impact of potential leakage has been deducted from biodiversity outcomes using appropriate methodologies.</p> <p>Project developers should also present a leakage management plan that includes measures to mitigate the risk of leakage.</p>

## 2.11 | Discussion on bundling or stacking of credits

Beyond the 10 integrity guardrails presented above, there is a debate around the possibility of bundling or stacking biodiversity credits. This paper does not exclude either option. Instead, buyers should assess the credit issuance to identify suitable options in accordance with their purchase preference. At the same time, project developers should at least disclose the relevant details and

specify where the credits are bundled or stacked for full transparency. They should also provide clear guidance on the appropriate use case and claims to be made on the basis of a biodiversity credit purchase.<sup>11</sup> To avoid the same benefit being claimed twice, buyers should not claim carbon or biodiversity co-benefits through the purchased credits that are stacked.



# Conclusion

The biodiversity credit market is an innovative and rapidly evolving field, with new environmental and socioeconomic integrity considerations, principles and standards being constantly developed. This is also caused by increased attention towards the rights, inclusion and meaningful participation of IPs and LCs, who are at the forefront of conservation and restoration efforts. Biodiversity markets will fall short of their potential if they fail to recognize those communities and their fundamental role.

Businesses and investors have a crucial role to play in the development and growth of the market, mobilizing early-stage capital for pilot transactions and assuring integrity by engaging

only with project developers that comply with the highest integrity standards. This guide is intended to equip businesses and investors with a tool to support them in establishing integrity.

Reflecting the dynamic state of the market, this guide is to be considered an iterative work that will evolve through ongoing consultations. It will be adjusted with the emergence of new accepted practices and remain aligned with the latest integrity standards. All actors are encouraged to put it to test, and use it in combination with other procurement guidance that has been or will be developed to procure the most advanced and cutting-edge biodiversity credits.

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# Endnotes

1. Feedback from project developers should be used to check feasibility and ensure the criteria do not preclude a robust project pipeline from developing. Their inputs are balanced against those of the independent expert panel, whose role is to ensure scientific rigour and integrity of the review criteria with documentary evidence.
2. The survey was conducted in August 2023 and received responses from over 20 biodiversity credit project developers across four continents, with projects focused on either conservation or restoration efforts or both.
3. Allan, J. et al. (2022). The minimum land area requiring conservation attention to safeguard biodiversity, *Science*. <https://www.science.org/doi/10.1126/science.abl9127>.
4. This principle is not limited to biodiversity credit projects that occur in or near areas that are legally or customarily held by Indigenous peoples and local communities. All biodiversity credit project developers must demonstrate this principle.
5. Indigenous Carbon Industry Network. (n.d.). *Free, Prior and Informed Consent (FPIC)*. [https://assets.nationbuilder.com/icin/pages/185/attachments/original/1664414313/7. Free\\_Prior\\_and\\_Informed\\_Consent\\_%28FPIC%29.pdf?1664414313](https://assets.nationbuilder.com/icin/pages/185/attachments/original/1664414313/7. Free_Prior_and_Informed_Consent_%28FPIC%29.pdf?1664414313).
6. In carbon markets, it is typical for buyers themselves to carry out due diligence (for example, Verra only requires project developers to submit documentation evidencing legal right to carry out a project, which is verified by a validation and verification body). However, consultation with experts suggests the most cost-effective arrangement is for developers to carry out due diligence, with buyers verifying any elements they require to minimize risk.
7. Relevant data and parameters may include – but are not limited to – species abundance, population size, range, trends and diversity, habitat area, quality and diversity, and landscape connectivity and forest fragmentation.
8. UN Environment Programme Convention on Biological Diversity. (2022). *Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity*. [https://www.unep.org/resources/kunming-montreal-global-biodiversity-framework?gad\\_source=1&gclid=CjwKCAjw1920BhA3EiwAJT3ISZffTQ\\_cgSNuOJfLIBWjOePwWlex3PsOMDqv-TMsr0hTJUCcY8p\\_HxoCzDQQAvD\\_BwE](https://www.unep.org/resources/kunming-montreal-global-biodiversity-framework?gad_source=1&gclid=CjwKCAjw1920BhA3EiwAJT3ISZffTQ_cgSNuOJfLIBWjOePwWlex3PsOMDqv-TMsr0hTJUCcY8p_HxoCzDQQAvD_BwE).
9. Activity-shifting is an example of leakage wherein a protected area is created for restoration efforts but those who were previously harming biodiversity in the area (e.g. through illegal timber/poaching activities) move to another location. This leads to negative impacts on biodiversity in the new area.
10. Ecological leakage is another example of leakage, wherein interventions aimed at improving ecological pressures at one site may be locally successful but increase negative outcomes elsewhere.
11. Pollination. (2023). *Review frameworks for biodiversity credit schemes*. <https://pollinationgroup.com/wp-content/uploads/2023/10/Review-Frameworks-for-biodiversity-credit-schemes-Pollination-October-2023.pdf>.



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