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Review frameworks for biodiversity credit schemes

DEVELOPED BY POLLINATION



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Foreword

Since 2020, global attention on the biodiversity loss crisis and its implications for the global economy has increased. With this has also come increased expectations for economic actors to be more accountable and responsible for their impacts on nature. This includes better understanding and addressing the interface between business and nature. This will require businesses to disclose their nature-related risks and demonstrate a commitment to mitigating those risks, including by contributing to protecting, regenerating and stewarding nature.

As part of the response to the changing relationship between business and nature on the pathway to a nature-positive future, activity is underway globally to develop, support and regulate voluntary biodiversity credit schemes¹ as a means to drive private finance into positive biodiversity outcomes.

As this nascent market develops, work is needed to ensure it is able to deliver high-integrity outcomes for people and nature, including through the adoption of good governance approaches. Key to this will be alignment between the supply and demand sides of the market on how to categorise the different voluntary biodiversity credit schemes and products that are coming online as the 'supply side' grows and the business case for investment in those products is clarified.

In this context, Pollination developed an approach to assess current biodiversity credit schemes to highlight insights on the current state of the market and considerations for its ongoing development. This document contains the three frameworks developed by Pollination for comparative analysis of the key features of biodiversity credit schemes. The review frameworks focused on design, integrity and technical considerations.

Pollination has conducted a review of eight existing and emerging biodiversity credit schemes using these frameworks. The results of that comparative analysis, along with a summary of the global context and current supply and demand landscape for voluntary biodiversity credits, can be found in a separate report, 'State of voluntary biodiversity credit markets: A global review of biodiversity credit schemes'.

Biodiversity credit schemes, and the market norms and stakeholder expectations that inform their operating context, are rapidly evolving. Pollination has decided to publish these review frameworks in the hope that they may prove useful for participants in voluntary biodiversity credit markets, including scheme and project developers, buyers and investors. Pollination looks forward to refining and iterating these review frameworks as these markets mature.

¹ For the purposes of this document, the term 'biodiversity credit scheme' is used to refer broadly to schemes that seek to generate measurable positive natural-capital, ecosystem, and biodiversity outcomes, that are, in turn, represented as a token, credit or certificate that can be bought and sold.

1.

Development of the review frameworks



Development of the review frameworks

In developing the review frameworks, Pollination considered principles in existing global frameworks, schemes and standards pertaining to voluntary biodiversity credits and nature-based solutions schemes and projects. A list of sources relied upon in the development of the review frameworks is provided below in Appendix A.

The Design Review Framework was developed to compare the design features of the reviewed schemes.

The Integrity Review Framework was developed to assess the degree to which the reviewed schemes align with emerging expectations for best practice integrity approaches for voluntary biodiversity credit schemes. The Integrity Review Framework was informed by expert considerations and criteria developed by the World Economic Forum, the Biodiversity Consultancy and the International Union for Conservation of Nature.²

The Technical Review Framework was developed to assess the scientific quality and rigour of the reviewed schemes.

The objective was to determine whether the reviewed schemes have the foundations necessary to deliver high-quality outcomes over time for both species and habitats. The Technical Review Framework was developed having regard to a number of existing frameworks, guidelines, and methodologies contained in open-source publications from academic, non-profit, and multilateral institutions (see Appendix A).

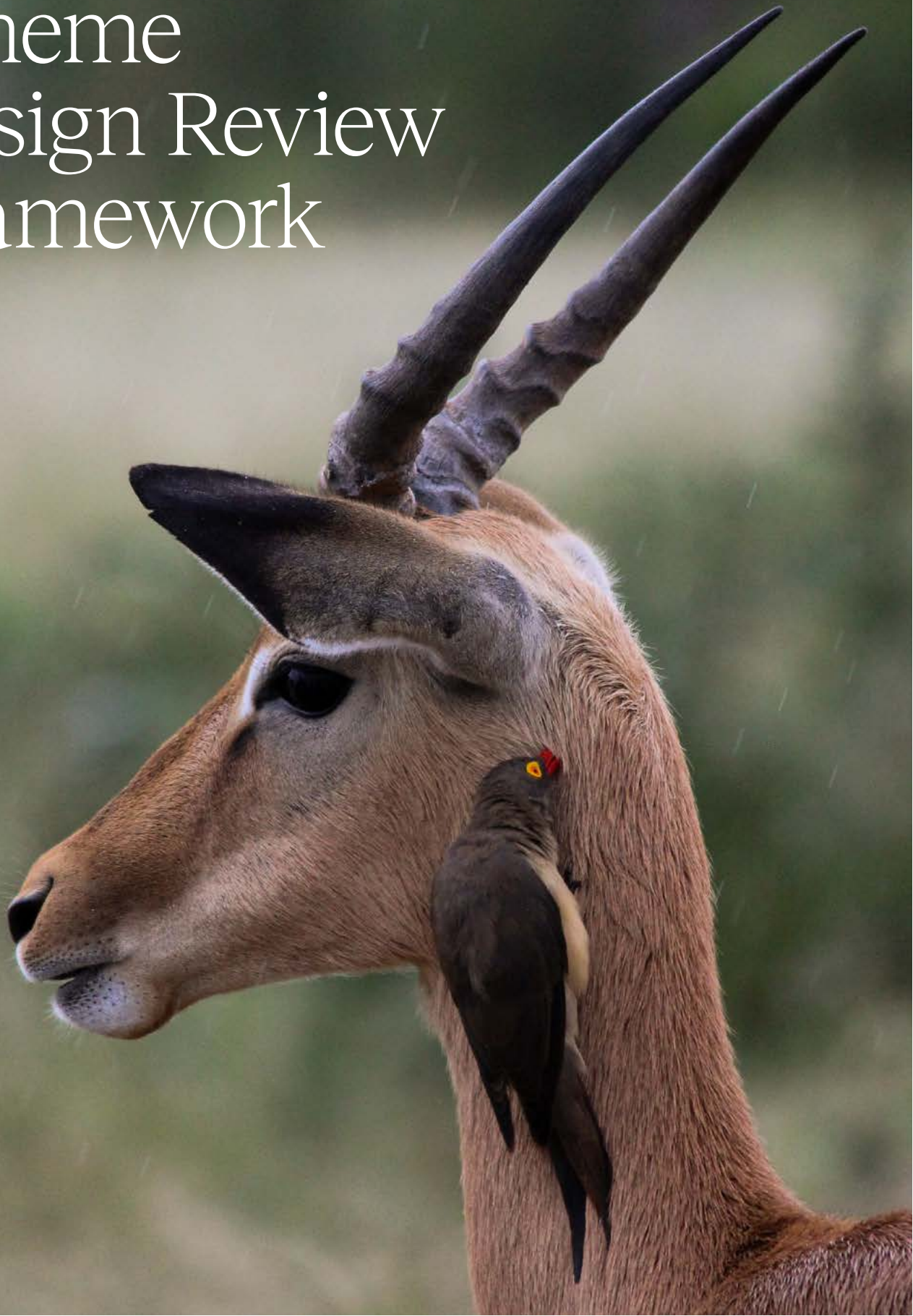
Where appropriate, Pollination has chosen to reformulate existing principles to ensure the considerations and indicators in the review frameworks are fit for purpose, sufficiently detailed and specific, and incorporate Pollination's internal best-practice expertise. Pollination has also chosen to exclude some principles where appropriate.

The considerations and indicators outlined in the review frameworks represent a non-exhaustive list of considerations/indicators that were used to inform the integrity and technical assessments.



² World Economic Forum (2022), High-level Governance and Integrity Principles for Emerging Voluntary Biodiversity Credit Markets; the Biodiversity Consultancy (2022), Exploring Design Principles for High Integrity and Scalable Voluntary Biodiversity Credits; the International Union for Conservation of Nature (2020), IUCN Global Standard for Nature-based Solutions (first edition).

2. Scheme Design Review Framework



Scheme design review framework

1. SCHEME COVERAGE

1.1 JURISDICTIONAL COVERAGE

What country(ies) does the scheme apply to or intend to apply to?

1.2 ECOSYSTEM COVERAGE

Does the scheme intend to apply to terrestrial, freshwater and/or marine/coastal ecosystems?

2. SCHEME ADMINISTRATION/ DEVELOPER

2.1 ENTITY TYPE

Is the scheme administered/ developed by a not-for-profit entity, commercial entity or a government body?

3. UNITISATION APPROACH

3.1 METRIC/UNIT

What is the applicable metric/unit of measurement?

4. CREDIT ISSUANCE/S APPROACH

4.1 ISSUANCE APPROACH

Are there multiple (periodic) credit issuances or a single issuance of credits?

4.2 CREDITING PERIOD

Is there a defined crediting period or is crediting indefinite?

3.

Integrity Review Framework



Integrity review framework

1. GOVERNANCE & SCHEME DESIGN

Transparent and sound governance, with information sharing on biodiversity credit design, measurement and issuance.

INTEGRITY CONSIDERATION 1.1

Does the scheme require project proponents to have the legal right to carry out the project?

INTEGRITY INDICATOR 1.1.1

Scheme requires that legal arrangements are in place that give the project proponent the right to carry out the project in the project area.

INTEGRITY CONSIDERATION 1.2

Does the scheme have appropriate governance arrangements in place to support the overall integrity of the scheme?

INTEGRITY INDICATOR 1.2.1

Scheme establishes a governance body or bodies with decision-making powers that support the overall integrity of the scheme (e.g. a technical advisory body).

INTEGRITY INDICATOR 1.2.2

Scheme is administered by an entity that is independent from the project proponents.

INTEGRITY INDICATOR 1.2.3

Scheme requires projects to be audited by third parties with the requisite expertise and that are independent from the project proponents at periodic intervals.

INTEGRITY INDICATOR 1.2.4

Scheme requires project proponents to have the necessary skills, capability and competency, business practices and good character that would reasonably be expected to fulfil that role.

INTEGRITY CONSIDERATION 1.3

Do the scheme governance arrangements provide comprehensive and transparent information on data, credit design and issuance and project reporting and project documentation/data?

INTEGRITY INDICATOR 1.3.1

Information on credit design and issuance as well as project reporting and project documentation/data is publicly available in an accessible, electronic format.

INTEGRITY CONSIDERATION 1.4

Are the scheme governance arrangements (including in relation to governing and advisory bodies, governing rules, standards and methodologies) regularly and independently reviewed, and the outcomes of those reviews made public?

INTEGRITY INDICATOR 1.4.1

Scheme provides for periodic, independent review of its governance arrangements.

INTEGRITY INDICATOR 1.4.2

Outcomes of governance reviews are made publicly available.

INTEGRITY INDICATOR 1.4.3

Recommendations arising from reviews are implemented in a timely manner and disclosed.

INTEGRITY INDICATOR 1.4.4

Scheme provides for the identification of stakeholders and their involvement in review processes, including incorporating independent Indigenous People and local community (IP and LC) advisors in the review process where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs.

1. GOVERNANCE & SCHEME DESIGN

Transparent and sound governance, with information sharing on biodiversity credit design, measurement and issuance.

INTEGRITY CONSIDERATION 1.5

Does the scheme have or require that systems are in place at the project level to ensure clear documentation of who will have legal ownership of the credits generated by the project?

INTEGRITY INDICATOR 1.5.1

Scheme requires project proponents to have arrangements in place that give them the legal rights in the biodiversity outcomes from the project and document who the (initial) owner of credits generated will be.

INTEGRITY CONSIDERATION 1.6

Does the scheme provide clear guidance on the appropriate use case and claims to be made on the basis of a biodiversity credit purchase and whether the biodiversity credits can be stacked?

INTEGRITY INDICATOR 1.6.1

Scheme provides clear guidance on the appropriate use case and claims to be made on the basis of a biodiversity credit purchase.

INTEGRITY INDICATOR 1.6.2

Scheme provides clear guidance on whether biodiversity credits can be stacked with carbon credit-generating methodologies within the same project area and the allocation of claims where the two units generated are sold separately.

2. INDIGENOUS PEOPLES & LOCAL COMMUNITIES

No harm to people; generation of positive, equitable benefits; respecting the rights of IPs and LCs and ensuring IPs' and LCs' leadership in biodiversity credit markets and ownership of projects on lands and waters under the stewardship of IPs and LCs.

INTEGRITY CONSIDERATION 2.1

Does the scheme ensure that projects do not infringe on human rights and require projects to demonstrate an understanding of their context?

INTEGRITY INDICATOR 2.1.1

Scheme requires project proponents to engage with stakeholders who are identified as directly or indirectly impacted by the project.

INTEGRITY INDICATOR 2.1.2

Scheme requires projects to document and respond to the rights and interests of all participating and affected stakeholders, including by determining the appropriate approach to human rights considerations and land rights.

INTEGRITY INDICATOR 2.1.3

Scheme provides for clear conflict resolution/grievance mechanisms available to all stakeholders, including IPs and LCs.

INTEGRITY CONSIDERATION 2.2

Is the scheme designed in a way that recognises and respects IPs and LCs, their claims to territories and their methods of self-governance?

INTEGRITY INDICATOR 2.2.1

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme includes indicators incorporating IP and LC Knowledge.

INTEGRITY INDICATOR 2.2.2

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires co-design of projects with IPs and LCs through a rights-based approach for projects proposed to be undertaken in areas or territories of IPs and LCs (formal and or customary).

INTEGRITY INDICATOR 2.2.3

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires project proponents to offer to partner with IPs and LCs before submitting project proposals and that where IPs and LCs have governance rights over biodiversity, they should, wherever possible, be the project proponents and/or entity receiving benefits from biodiversity credits.

INTEGRITY INDICATOR 2.2.4

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires involvement of IPs and LCs where possible to provide local knowledge and skills in MRV.

2. INDIGENOUS PEOPLES & LOCAL COMMUNITIES

No harm to people; generation of positive, equitable benefits; respecting the rights of IPs and LCs and ensuring IPs' and LCs' leadership in biodiversity credit markets and ownership of projects on lands and waters under the stewardship of IPs and LCs.

INTEGRITY CONSIDERATION 2.3

Is the scheme designed to respect the right of IPs and LCs to free, prior and informed consent (FPIC) and ensure best practice social safeguards are in place (see also Integrity Consideration 2.2 above)?

INTEGRITY INDICATOR 2.3.1

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires project proponents to secure FPIC of IP and LC rights-holders prior to any project development (including at the project application stage).

INTEGRITY INDICATOR 2.3.2

Scheme requires project proponents to consider adverse social impacts and safeguard against them.

INTEGRITY INDICATOR 2.3.3

Scheme is designed to facilitate access to transparent data and information at every stage of the project.

INTEGRITY CONSIDERATION 2.4

Is the scheme designed to ensure equitable benefit-sharing arrangements are implemented at every stage of the project and transparency of benefit-sharing arrangements?

INTEGRITY INDICATOR 2.4.1

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires equitable benefit-sharing arrangements to be implemented.

INTEGRITY INDICATOR 2.4.2

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires transparent documentation of benefit-sharing arrangements with IPs and LCs.

INTEGRITY INDICATOR 2.4.3

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires benefit-sharing measures to be structured to support IPs and LCs to benefit from increases to credit prices and secondary market activity.

INTEGRITY INDICATOR 2.4.4

Where projects carried out under the scheme could impact on lands and waters under the stewardship of IPs and LCs, scheme requires transparent documentation of benefit-/revenue-sharing arrangements with governments to avoid corruption and diversion of funds from activities that benefit nature and IPs and LCs.

3. SCHEME ARCHITECTURE

Scheme design decisions that ensure credits achieve high-integrity positive biodiversity outcomes.

INTEGRITY CONSIDERATION 3.1

Is the scheme supported by a registry that records the registration and status of projects and the issuance, transfer and cancellation/retirement of credits?

INTEGRITY INDICATOR 3.1.1

Registry clearly identifies all registered projects and project status.

INTEGRITY INDICATOR 3.1.2

Registry uniquely identifies credits upon issuance, tracks transfers and cancellation/retirement of credits.

INTEGRITY CONSIDERATION 3.2

Is the scheme designed in a way that recognises and respects IPs and LCs, their claims to territories and their methods of self-governance?

INTEGRITY INDICATOR 3.2.1

Scheme aims to achieve sustainable conservation outcomes through one or more of the following:

- adopting an indefinite crediting period or funding model that extends beyond the crediting period,
- establishing a requirement in relation to a permanence period beyond the crediting period.

INTEGRITY INDICATOR 3.2.2

Scheme establishes requirements for project additionality that address, amongst other things, the risk of deliberate degradation of biodiversity in order to make a later case for additionality (i.e. the risk of 'moral hazard').

INTEGRITY INDICATOR 3.2.3

Scheme has a mechanism which addresses the displacement of activities in the project area to areas outside the project (i.e. leakage), resulting in negative impacts on biodiversity elsewhere that negate some or all of the positive biodiversity outcomes achieved by a project.

INTEGRITY INDICATOR 3.2.4

Scheme has a mechanism which addresses reversal events.

INTEGRITY CONSIDERATION 3.3

Does the scheme address whether credits are able to be sold on a secondary market?

INTEGRITY INDICATOR 3.3.1

Scheme addresses whether credits are able to be sold on a secondary market.

4.
Technical
Review
Framework



Technical review framework

1. RELEVANCE

Use of data, methods, criteria, and assumptions that are appropriate for the project. Quantification and reporting should include only information relevant to internal and external stakeholders. Data, methods, criteria, and assumptions that are misleading or that do not conform to best practice are not relevant and should not be included

TECHNICAL CONSIDERATION 1.1

Does the scheme require and/or include the appropriate data, methods, criteria and assumptions for targeted outcomes? Does the scheme have an approach to MRV that adequately measures change in biome over time?

Does this include tracking changes to individual species over time? Does this include tracking changes to habitat cover over time?

TECHNICAL INDICATOR 1.1.1

Use of different monitoring methods (on-the-ground surveys, remote data collection, continuous monitoring, etc.)

TECHNICAL INDICATOR 1.1.2

Frequency of data collection appropriate for the biome (surveys per year, per season, etc.)

TECHNICAL INDICATOR 1.1.3

Requirement of intermittent project surveys tracking indicators identified

TECHNICAL INDICATOR 1.1.4

Use of methodologies and technologies that are based on peer-reviewed, best-in-class science and techniques

TECHNICAL INDICATOR 1.1.5

Both remote and on-the-ground monitoring strategies are utilised through the scheme

2. COMPLETENESS

Consider all relevant information that may affect the quantification of biodiversity impacts. All relevant information should be included in the quantification of biodiversity impacts, including: all of the effects of a biodiversity project should be considered and reviewed, all relevant technologies or practices should be considered to measure baselines. The biodiversity project's monitoring plan should also specify how all relevant data will be collected.

TECHNICAL CONSIDERATION 2.1

Does the scheme's framework protect against negative incentives, and ensure long-term biodiversity outcomes?

TECHNICAL INDICATOR 2.1.1

Methodology ensures project can deliver and track biodiversity improvements across an ecosystem over time

TECHNICAL INDICATOR 2.1.2

Framework requires a permanence period and articulates the process of an assurance guarantee

TECHNICAL INDICATOR 2.1.3

Process included for protecting against unanticipated biodiversity loss

2. COMPLETENESS

Consider all relevant information that may affect the quantification of biodiversity impacts. All relevant information should be included in the quantification of biodiversity impacts, including: all of the effects of a biodiversity project should be considered and reviewed, all relevant technologies or practices should be considered to measure baselines. The biodiversity project's monitoring plan should also specify how all relevant data will be collected.

TECHNICAL CONSIDERATION 2.2

Does the scheme require an initial baselining of ecosystem health for the project, and are these measurements taken before restoration activities take place?

TECHNICAL INDICATOR 2.2.1

The occurrence of different species/habitat across the project land/seascape

TECHNICAL INDICATOR 2.2.2

The abundance of individuals within a given species' population

TECHNICAL INDICATOR 2.2.3

The even distribution of individuals across the project land/seascape

TECHNICAL INDICATOR 2.2.4

The size, extent and condition of different habitat types across the project area

TECHNICAL INDICATOR 2.2.5

The occurrence of different species with local and/or international significance (i.e. IUCN Red List)

TECHNICAL INDICATOR 2.2.6

The occurrence/extent of any national and/or internationally significant habitat types (i.e. RAMSAR areas)

TECHNICAL INDICATOR 2.2.7

The occurrence of species with particular degrees of vulnerability/sensitivity (e.g. functional grazing territory, puma range habitat, etc.) or dependency on habitat type/availability

TECHNICAL INDICATOR 2.2.8

The historic documentation of species across the project land/seascape, and identification of any impact drivers that could be influenced by the project

TECHNICAL INDICATOR 2.2.9

Identification of the occurrence/extent of existing anthropogenic activities (agriculture, timber, mining, etc.)

TECHNICAL INDICATOR 2.2.10

The extent of habitat conversion that has occurred across the project area (roads, real estate development, etc.)

3. CONSISTENCY

Use of data, methods, criteria, and assumptions that allow meaningful and valid comparisons. The credible quantification of biodiversity impacts requires that methods and procedures are always applied to a project and its components in the same manner, that the same criteria and assumptions are used to evaluate significance and relevance, and that any data collected and reported will be compatible enough to allow meaningful comparisons over time.

TECHNICAL CONSIDERATION 3.1

Does the scheme have the capacity to measure the change in species/habitat presence and health over time?

TECHNICAL INDICATOR 3.1.1

Use of reference site to define restoration potential/timeline and benchmark measured uplift

TECHNICAL INDICATOR 3.1.2

Interim and final survey comparison of change in project's species/habitat presence and health to anticipated uplift

TECHNICAL CONSIDERATION 3.2

Does the scheme align with net-positive biodiversity goals set forth by the Convention of Biological Diversity in ways most appropriate for the project(s) biome?

TECHNICAL INDICATOR 3.2.1

Prioritisation of the conservation of biological diversity

TECHNICAL INDICATOR 3.2.2

Sustainable use and management of the land/seascape in line with global biodiversity targets

TECHNICAL INDICATOR 3.2.3

Integration of fair, equitable sharing of benefits arising from the land/seascape

4. TRANSPARENCY

Provide clear and sufficient information for reviewers to assess the credibility and reliability of biodiversity claims. Project information should be compiled, analysed, and documented clearly and coherently so that reviewers may evaluate its credibility. Specific exclusions or inclusions should be clearly identified, assumptions should be explained, and appropriate references should be provided for both data and assumptions. Information relating to the project boundary and the identification of baseline scenarios should be sufficient to enable reviewers to understand how all conclusions were reached. This should be supported by comprehensive documentation of any underlying evidence to confirm and substantiate the data, methods, criteria, and assumptions used.

TECHNICAL CONSIDERATION 4.1

Does the scheme require projects and their respective progress to be independently verified?

TECHNICAL INDICATOR 4.1.1

Requirement of third-party audits of scheme projects

TECHNICAL INDICATOR 4.1.2

Audits conducted by verified parties

TECHNICAL INDICATOR 4.1.3

Audits are conducted at regular predetermined intervals appropriate for monitoring biome changes over time

TECHNICAL INDICATOR 4.1.4

Audits monitor key indicators for species (richness, abundance, evenness, vulnerability, significance) and habitat (extent, condition, vulnerability, significance)

TECHNICAL INDICATOR 4.1.5

Associated project credits should be independently issued by verified third parties

5. ACCURACY

Reduce uncertainties as much as is practical. Uncertainties with respect to biodiversity measurements, estimates, or calculations should be reduced as much as is practical, and measurement and estimation methods should avoid bias. Acceptable levels of uncertainty will depend on the objectives for implementing a project and the intended use of quantified biodiversity impacts.

TECHNICAL CONSIDERATION 5.1

Does the scheme implement a rigorous scientific methodology that utilises tested, peer-reviewed processes and technologies?

TECHNICAL INDICATOR 5.1.1

Use of peer-reviewed methodologies that are documented within published, open-source scientific literature

TECHNICAL INDICATOR 5.1.2

Scientific methods, metrics, indicators, and any associated MRV processes are documented and open-source

TECHNICAL INDICATOR 5.1.3

Technologies (software or hardware) and databases utilised should be documented and available for public audit. Any innovative applications should be coupled with approved methodologies and efficacy surveys

TECHNICAL CONSIDERATION 5.2

What are the defined market principles (e.g. leakage, buffer, additionality) the scheme uses for sale and delivery of credits?

TECHNICAL INDICATOR 5.2.1

Inclusion and monitoring of the leakage effect (any externalities that may be inflicted in the surrounding environment due to project activities)

TECHNICAL INDICATOR 5.2.2

Inclusion of a buffer zone appropriate for the project area/risk (either to monitor/hedge against leakage, or to use as a credit buffer)

6. CONSERVATISM

Where accuracy is sacrificed and/or uncertainty is High, data and estimates used to quantify biodiversity impacts should be conservative.

TECHNICAL CONSIDERATION 6.1

How does the methodology address uncertainty? Does the methodology support a conservative approach to quantification?

TECHNICAL INDICATOR 6.1.1

Usage of relevant estimates or proxies that can sufficiently correlate biodiversity outcomes when sufficient accuracy data are unavailable

TECHNICAL INDICATOR 6.1.2

Use of error bars or confidence intervals

TECHNICAL INDICATOR 6.1.3

Requirements for reporting/disclosing uncertainty

Appendix A: Review framework source list



Review Framework Source List

- Accounting for Nature. Guidelines for Developing Methods to Assess the Condition of Native Vegetation. <https://static1.squarespace.com/static/5dc38cde1d028031235ca3cf/t/62a6bea0d4b1e221293a3ac8/1655094954228/AfN+Guidelines+for+Developing+Methods+to+Assess+the+Condition+of+Native+Vegetation.pdf> (2020).
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