

Biodiversity Credits and the Forestry Sector: Managing Impacts, Mobilizing Finance, and Scaling Nature-Positive Outcomes

I. Introduction

Forests are among the most valuable and at-risk ecosystems globally. They cover over 32%¹ of the Earth's land area, approximately 4.14 billion hectares.² Yet, deforestation remains a critical threat; tropical primary forest loss (accounting for 90% of all forest loss) averages 4-5 million hectares per year.³ The forestry sector occupies a unique position in the biodiversity credit market, with well-established technical standards and methods, and experience supporting biodiversity-friendly practices.

Forestry can influence habitat condition and species persistence at landscape scale. Depending on context, management, and enforcement, forestry can drive biodiversity loss through conversion and degradation, or deliver measurable gains through habitat improvement, threat reduction, avoided degradation and long-term stewardship. Forests therefore represent a high-leverage domain for outcome-based conservation and restoration finance, and a valuable test case for whether biodiversity credits can deliver real, scalable nature-positive results.

The sector can play multiple roles in the biodiversity credit market, both on the supply and demand sides. Forestry organizations are often landowners or long-term tenure holders, and therefore could have incentives to generate biodiversity credits in their operating jurisdictions. However, since forestry actions can also potentially have impacts on biodiversity, the sector could be a credit buyer as well, particularly forest industry and processing companies relying on primary forest products (timber, pulpwood, or biofuel) as key input materials, whose supply chain dependencies create nature-related risks and impacts. Forest-owning and managing companies, by contrast, should prioritize

avoidance and minimization measures before considering credit purchases. Forestry is particularly relevant because forests combine: 1. high biodiversity value; 2. large spatial scale; 3. well-developed MRV systems; 4. buyer familiarity through carbon markets; and 5. experience engaging Indigenous Peoples and local communities.

The following characteristics make forestry well-suited for biodiversity crediting: interventions are spatially explicit, outcomes can be monitored over time, and core integrity requirements—including robust baselines, additionality, leakage risk, durability, transparent MRV and independent assurance, and safeguards (including rights, tenure, FPIC, and equitable benefit-sharing)—can be addressed. This creates significant potential to interface with a biodiversity credit market with strong principles of quality, integrity, and equity. At the same time, forestry presents demanding integrity challenges. It is therefore relevant not only for project-level supply and demand, but also as a critical testing ground for market infrastructure and integrity standards.

II. One Market, Two Roles: Forestry as Buyer and Supplier of Biodiversity Credits

The forestry sector can interact with biodiversity credits as a buyer, channeling finance toward verified biodiversity outcomes, and as a supplier generating measurable outcomes through stewardship, restoration, and threat reduction that could underpin credit issuance.

Forestry Organizations as Buyers of Biodiversity Credits

Forestry organizations, understood here primarily as forest-based supply chain companies, may purchase biodiversity credits as part of a nature-positive outcomes-based financing approach, either as compensation for residual

1 FAO (2025). Global Forest Resources Assessment 2025.

2 According to the GFRA, tropical forests represent 45%, while boreal forests represent 28%, temperate 17% and subtropical 11%.

3 WRI (2026). Global Forest Review: Latest Analysis of Deforestation Trends.



impacts after full application of the mitigation hierarchy, or as non-compensatory investments driven by physical risk management (e.g.: flood or fire risk), fiduciary obligations associated with nature-related financial risk, value creation, and reputation. Where strategic opportunities exist to invest in positive nature outcomes within the value chain, these are generally preferred over external investments. Biodiversity credits representing evidence-based positive nature outcomes can be useful financial instruments to measure the returns of such investment in a standardized manner. In order to maintain high transaction integrity, full transparency of the organizations' positive and negative nature impacts is critical. Potential demand drivers include:

- Addressing residual biodiversity impacts after application of the mitigation hierarchy.
- Demonstrating fiduciary obligations associated with nature-related financial risk. High integrity biodiversity credits can target an organisation's dependency, providing both a mechanism for risk reduction and a channel for value creation, enabling organizations to demonstrate measurable ecosystem outcomes, strengthen resilience, and align with the growing expectations of nature focused investors.
- Supporting landscape-level conservation beyond operational boundaries, as forestry operations often sit within mosaics of land tenure and land use, which enable credits to finance outcomes that strengthen connectivity, watershed integrity, and habitat condition across the broader landscape.
- Aligning with emerging disclosure expectations and corresponding corporate nature strategies and targets (see Section 4.1).
- Meeting voluntary nature targets, as organizations increasingly set portfolio-level nature commitments that go beyond compliance, purchasing credits to support conservation outcomes independently of any negative impact obligations.

Forestry as a Supplier of Biodiversity Credits

In the role of credit supplier, the forestry sector is well positioned as interventions are typically spatially explicit, forest management is well-documented through plans and prescriptions, and outcomes are monitored over time. Supply could be generated by a range of forestry sector participants, including Indigenous Peoples and local communities, community forest enterprises, large landholders, private concessionaires, restoration practitioners, and governance entities. There are a wide range of potential biodiversity-positive restoration or

conservation measures that could be taken, such as restoration of deforested lands. Forestry projects are well suited for implementation of crediting approaches due to long-term management control, feasibility of monitoring, and clear baselines and intervention logic. Forestry companies that are large landowners or tenure holders may be able to make use of unproductive forestry lands by leveraging biodiversity credits as an additional revenue opportunity. Preservation-focused projects require robust demonstration of additionality, as the absence of active intervention makes it harder to prove that conservation outcomes would not have occurred without credit finance.

However, forestry's ability to deliver outcomes at scale, combined with the concentration of the most visible integrity and quality risks (including baselines, additionality, leakage, durability, rights), makes it a priority sector for developing and testing high-integrity biodiversity credit methodologies, safeguards, and claims guidance.

Implications for Community-based Forestry, Smallholder Forestry Lease Arrangements, and Land Restoration

In many regions, forest landscapes are managed not only by large forestry companies, but also through community-based forestry arrangements, long-term lease agreements, or smallholder management systems and forests stewarded by Indigenous Peoples and local communities. These actors often operate on marginal or degraded forest lands, with limited access to finance and few economic incentives to invest in long-term ecological restoration. Where land tenure or use rights are sufficiently secure, biodiversity credits could offer a pathway to align local livelihood opportunities with measurable improvements in biodiversity outcomes. This could include contexts where credit development is layered alongside selective logging or other low-impact productive uses. By rewarding verified biodiversity uplift—rather than extractive use—biodiversity credits have the potential to shift incentives toward restoration, regeneration, and improved forest stewardship in community-managed landscapes.

If designed with appropriate safeguards, governance, and benefit-sharing arrangements, biodiversity credits could enable communities and local forest users to generate revenue from restoring degraded forests, enhancing habitat connectivity, and improving ecosystem condition over time. This approach could support national and global restoration targets by mobilizing local actors at scale, while reducing pressure on high-value or intact forests.



Such models require robust integrity standards across several dimensions: rigorous quantification of biodiversity outcomes and appropriate metric selection; demonstration of financial and legal additionality; credible approaches to leakage accounting; and durability safeguards to ensure gains are maintained over time. These integrity criteria apply equally to projects implemented by Indigenous Peoples and local communities as to any other project type. When these conditions are met, biodiversity credits could help channel finance to communities as active stewards of forest landscapes, reinforcing nature-positive land management approaches while supporting sustainable livelihoods.

III. Examples of Forestry-focused Biodiversity Credit Schemes

Forestry-focused biodiversity credit transactions represent an important early area of activity in the emerging market.

Qarlbo Biodiversity & 6M Properties LLC (United States)

In May 2025, Qarlbo Biodiversity and 6M Properties LLC (a timberland-focused firm) announced the completion of their off-take voluntary biodiversity credit agreement. In the operation, Qarlbo acts as both the biodiversity credit supplier and the proprietary methodology operator, while 6M Properties LLC is the off-taker/buyer. The credits are being issued from a defined project area forming part of a wider 4,280 ha asset with an intended focus on restoring and recovering a longleaf pine threatened ecosystem.

Key lessons:

- Off-take structures can improve bankability for multi-year restoration but raise scrutiny on: 1. Baseline design; 2. Timing of issuance vs verified delivery; and 3. Risk buffers and contractual provisions for addressing underperformance or reversals.
- Hectare-year unit definition is relevant in the forestry context, but integrity depends on credited indicators reflecting biodiversity outcomes rather than only management inputs or forest cover.

Natural Forest Standard (Global – integrating carbon and biodiversity)

The Natural Forest Standard (NFS) is an independent certification framework for voluntary carbon crediting, designed for jurisdictional-scale forest conservation and restoration projects under REDD+. It issues Natural Capital Credits (NCC), each denoting one ton of CO₂e avoided or removed, bundled with biodiversity and community co-benefits—not standalone biodiversity credits, but an early example of how forestry carbon standards are integrating measurable biodiversity requirements alongside emissions accounting. While credits are not separated into standalone biodiversity units, biodiversity performance is a core component of credit integrity and valuation.

Key lessons:

- Forestry carbon projects provide a near-term pathway to monetize biodiversity through bundled credit structures, leveraging existing MRV systems and channeling existing carbon market demand toward positive biodiversity outcomes.
- Integrating biodiversity into credit design strengthens environmental integrity but raises unsolved questions around value attribution—particularly how much of a credit's price is assigned to, or reflects, carbon versus biodiversity within a single unit. One approach to resolving this is stacking, where carbon and biodiversity outcomes are credited and priced separately under distinct methodologies, allowing buyers to purchase each independently and enabling clearer attribution of value and additionality.
- Bundled approaches may accelerate early market activity but could create challenges for fungibility and cross-standard comparability, reinforcing the potential long-term need for clearer separation or modular crediting of biodiversity outcomes.
- In biodiverse forest landscapes, biodiversity integrity is inseparable from the rights and stewardship of Indigenous Peoples, local communities and Afro-descendants; therefore, positive social outcomes are a precondition rather than a co-benefit, aligning with the High-Level Principles.
- The forestry carbon experience underscores the value of independent integrity infrastructure. Equivalent systems are still nascent for biodiversity credits, presenting both a risk and an early-mover opportunity for standard-setting.



IV. Where Biodiversity Credits Fit in Forestry Organizations' Decision-Making

Within Corporate Nature Frameworks and Strategies

Biodiversity credits can help operationalize commitments that may be otherwise difficult to implement. Forestry is a high-priority sector for nature-related risk and impact. For forestry companies undertaking TNFD LEAP assessments, the TNFD Forestry guidance places strong emphasis on identifying material biodiversity dependencies and impacts across entire landscapes, and on translating those findings into strategy, resource allocation, and transition planning. For many forestry companies, this analysis reveals risks and opportunities that cannot be fully addressed within operational boundaries alone.

Along similar lines, SBTN's Land Targets guidance includes a strong focus on forests, and forest conversion, and SBTN's Land Target 3 on Landscape Engagement, aims "to enable regenerative, restorative, and transformational actions in landscapes that are relevant for an organization's operations and supply chains."

In this context, biodiversity credits, when designed and used with high integrity, can provide a mechanism to finance measurable biodiversity outcomes beyond the forest management unit. This can be achieved at the landscape scale, supporting transition plans and addressing residual, material impacts, whether as compensation for residual impacts after adherence to the previous steps of the mitigation hierarchy, or as non-compensatory strategic investments, with the transparent claims disclosed in either case. Biodiversity credits can support transition planning for forestry sector companies seeking to operate in biodiversity-positive ways. Importantly, biodiversity credits are not a substitute for responsible forest management or certification, but a complementary tool for mobilizing finance toward verified biodiversity outcomes. The use of biodiversity credits can demonstrate credible action beyond disclosures.

In Relation to Forestry Sustainability Frameworks

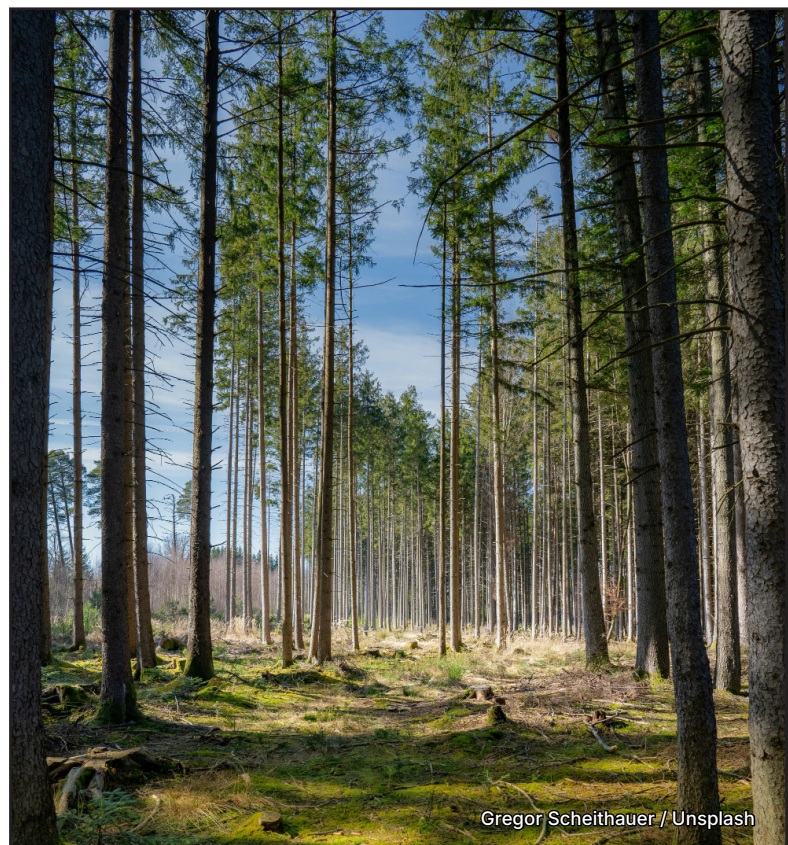
Biodiversity credits do not replace existing forestry standards. Rather, they operate in a different, though related, space. Forest certification schemes, such as those focused on responsible forest management, play an important role in establishing baseline practices and minimum standards for environmental and social performance. In practice, these systems can help reduce implementation risks, support safeguards, and in some cases, may provide a foundation for eligibility by ensuring that basic management requirements are met.

However, certification is primarily designed to define acceptable practices and verify compliance with management standards, rather than to quantify and remunerate measurable biodiversity outcomes.

Biodiversity credits, by contrast, are intended to recognize and finance demonstrable improvements in biodiversity conditions that go beyond compliance and standard management expectations. Certification and biodiversity crediting methodologies can serve as complementary mechanisms to deliver sustainable and nature-positive forest management.

V. Conclusion

Forests are among the world's most biodiverse and threatened ecosystems, yet conservation finance remains insufficient. Biodiversity credits offer a credible mechanism to close this gap. The forestry sector is uniquely well-placed to engage, both as a supplier of verified outcomes through restoration and stewardship, and as a buyer addressing residual impacts under TNFD, SBTN, and emerging nature disclosure frameworks. Forestry's spatially explicit interventions, established MRV systems, and long-term tenure make it a natural testing ground for high-integrity crediting and a high-leverage domain for mobilizing landscape-scale, nature-positive finance.



Gregor Scheithauer / Unsplash

About the Biodiversity Credit Alliance

The Biodiversity Credit Alliance (BCA) was established at COP15 in 2022. The BCA is a UN-backed coalition of like-minded organizations **working to shape the future of the biodiversity credit market** by bringing together scientific experts, conservation practitioners, and businesses to establish a **high-integrity, transparent, and scalable** biodiversity credit market. We're focused on ensuring that investments in nature generate **positive outcomes for biodiversity and communities**. By creating clear guidance and supporting market development in line with **principles of integrity, quality, and equity**, BCA helps unlock new funding streams for biodiversity conservation while ensuring credibility and impact. Whether you're a business, civil society organization, government, or land steward, we're providing the insights and framework to make biodiversity credits work effectively for people and the planet.

BCA Mission

BCA is a voluntary international alliance that brings together diverse stakeholders to support the realization of the Kunming–Montreal Global Biodiversity Framework, in particular Targets 19(c) and (d), which “encourage the private sector to invest in biodiversity” utilizing, amongst others “biodiversity credits ... with social safeguards.”

Our mission is twofold:



Help steer the development of a biodiversity credit market by building a framework of high-level, science-based principles.



Provide guidance and encourage best practice for market participants on the application of these principles, empowering them to achieve and maintain equitable, high-quality transactions that meet strict integrity criteria.

BCA Vision

BCA's **vision** is a transparent, trustworthy and efficient global market in biodiversity credits founded on just and equitable principles, and underpinned by innovation.

BCA works to facilitate the transition to a nature positive economy aided by an integrated, efficient and scaled biodiversity credit market. BCA considers biodiversity credits to be an effective complement to, but not a replacement of, the private sector's supply chain transformation efforts. BCA views biodiversity credits as an effective mechanism for advancing the private sector's participation in ecosystem remediation and transformative landscape approaches in line with science-based principles.