Policy Brief

FUTURE-PROOFING NATURE FINANCE: TOWARDS BUILDING CLIMATE-RESILIENT BIODIVERSITY CREDITS

Biocredit initiatives still overlook how climate change will reshape ecosystems — integrating climate resilience into biodiversity markets is key to ensuring their long-term ecological and financial integrity.

EXECUTIVE SUMMARY

Biodiversity credits are emerging as key tools to finance nature-positive actions. Yet most initiatives assume today's biodiversity will remain stable for decades — a risky oversight in a changing climate. As ecosystems shift, the biodiversity once measured may no longer exist within project boundaries, risking overestimated gains and weakened credibility. This brief highlights the need to integrate climate risk and adaptation planning into biocredit design and offers recommendations to ensure the long-term ecological and financial integrity of biodiversity markets.

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COP30 BRASIL AMAZÔNIA BELÉM 2025

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The climate oversight in biodiversity credit design

Biodiversity credits have rapidly gained traction as tools to channel finance toward nature-positive actions. These initiatives aim to quantify measurable biodiversity gains, yet methods remain fragmented and credibility is still evolving. Despite this momentum**, most frameworks overlook how climate change may reshape biodiversity outcomes** — a critical gap that threatens the long-term integrity of biocredits.

A global assessment by the International Institute for Sustainability (IIS) analyzed 24 biocredit initiatives and found wide methodological divergence. While most initiatives use multimetric indicators based on diversity, landscape integrity, threat-risk (e.g. threatened or endemic species), and ecosystem services, others assume gains without metric quantification. This lack of consistency jeopardizes credibility and comparability across schemes.

Yet the most concerning gap lies in biocredits' climatic blind spot. Although several initiatives integrate carbon interfaces through co-certification or sequestration metrics, their climate recognition remains limited to mitigation. Almost none incorporate climate risks or adaptation into their design. With markets issuing credits for decades-long timeframes, ignoring how climatic and ecosystem shifts will reshape biodiversity is a critical oversight. Without embedding climate resilience, today's biocredits risk becoming tomorrow's broken promises.

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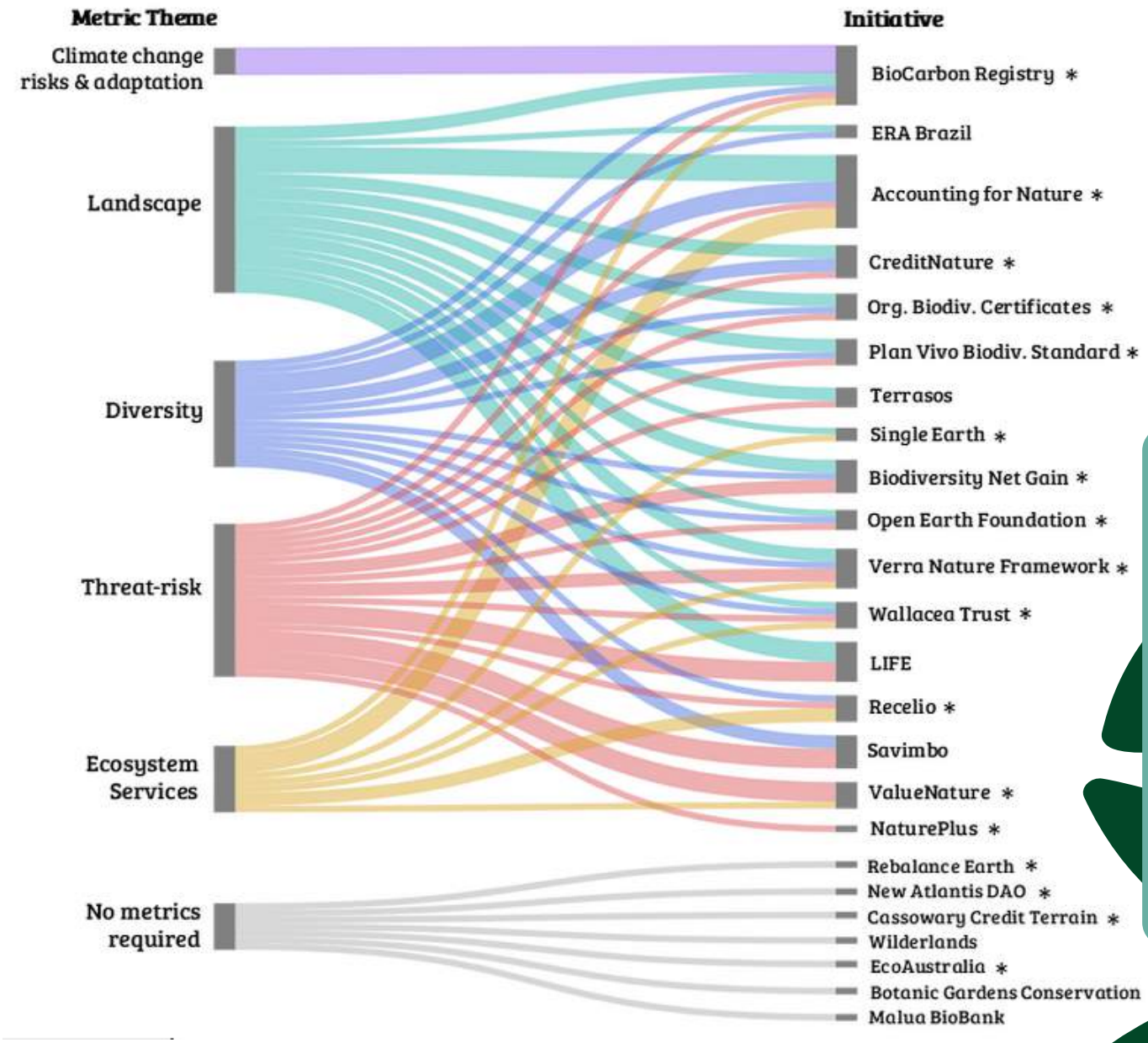

Relationship between metrics to measure biodiversity and biocredit initiatives - IIS.
Each line shows how many metrics of each theme are used across initiatives — thicker lines indicate higher counts. Grey bars show the total metrics per theme (left) and per initiative (right). Initiatives marked with an asterisk (*) also have some interface to carbon sequestration or markets.

CASE EXAMPLE: BIOCARBON REGISTRY

The initiative explicitly links biodiversity conservation with climate resilience. Its standard **requires every project to develop a climate change adaptation plan, including climate risk assessment, quantification of impacts, and identification of adaptation strategies.** Projects must: (a) identify possible climate scenarios and impacts; (b) assess likely climate interfaces with changes in land cover and use; (c) determine potential impacts on local communities and biodiversity status; and (d) evaluate how conservation actions contribute to climate adaptation.

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Why it matters for market integrity and credibility

Issuing biodiversity credits without climate foresight means selling promises based on static ecosystems in a dynamic planet. This **not only undermines ecological credibility but also exposes investors to financial risk**: credits may lose value if future monitoring reveals declines driven by climate impacts rather than management failure.

Market integrity relies on measurable and lasting biodiversity outcomes. **Climate-blind methodologies inflate short-term biodiversity gains and obscure long-term vulnerability — a pathway that could reproduce the same credibility crises faced by early carbon markets.** As demand grows for climate-resilient nature assets, integrating adaptation into biocredit standards is not just good science; it is sound investment strategy.

Recommendations for climate-resilient biocredits

To ensure the long-term integrity of biodiversity markets, initiatives should:

- **Integrate climate risk assessments** into project design, certification and verification. Projects must account for risks across multiple biodiversity dimensions to ensure comprehensive risk management.
- **Evaluate multiple climate scenario** to capture uncertainty ranges and guarantee that credited outcomes remain robust under diverse and uncertain future conditions.
- **Develop adaptation-linked metrics**, such as restoration efforts that enhance connectivity within climate refugia, allowing species persistence through climate-tracking movements.
- **Enable adaptive management.** Monitoring plans should track adaptation strategies through specific indicators, while management processes must allow flexible adjustments as conditions change.
- **Reward climate-resilient actions** that strengthen ecological resilience, including restoration with climate-tolerant native species, connectivity corridors, and nature-based adaptation solutions.
- **Foster collaboration with climate science institutions** to improve predictive capacity and monitoring frameworks, ensuring periodic reassessment as new data and technologies emerge.
- **Periodically update climate action plans,** recalibrating biodiversity performance and resilience measures as ecological conditions and climate projections evolve.

Looking Ahead — Aligning biocredits with a changing climate

As the world gathers for COP30 in Belém, the thematic axis *"Stewarding forests, oceans and biodiversity"* and particularly its focus on the key objective #6 *"Efforts to conserve, protect, and restore nature and ecosystems with solutions for climate, biodiversity and desertification"* provides the perfect backdrop to address an urgent gap: the need to integrate climate resilience into biodiversity markets.

The Intergovernmental Panel on Climate Change (IPCC) has repeatedly warned that even modest climatic shifts will transform ecosystems, species distributions, and ecosystem services. **Integrating climate foresight and adaptation into biocredit design is therefore not optional — it is essential** for the integrity, permanence, and fairness of biodiversity markets. Biocredits were designed to value nature. To do so effectively, they must also value resilience. **COP30 offers a critical platform to embed this principle — ensuring that biodiversity credits not only measure ecological recovery, but also secure nature's capacity to thrive in a changing climate.**

About IIS

This policy brief was developed by the **International Institute for Sustainability (IIS)** as part of ongoing research on the integrity of biodiversity credit frameworks and their alignment with climate adaptation goals.

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