Where Nature Meets Markets: How Offsets and Credits Fit.

1. Nature markets are a way to channel finance to nature.

Nature markets assign financial value to ecosystem services and conservation outcomes, creating economic incentives for the private sector to invest in protecting and restoring nature. By establishing tradable assets and aligning financial returns with environmental benefits, these markets channel capital into nature-positive projects and help address the undervaluation of natural capital in the economy.

Nature markets work by creating **tradable units**, such as credits, that represent specific environmental outcomes. These units can be bought and sold, funding conservation, restoration, and sustainable management efforts. Key examples include:

- **Biodiversity Offsets:** Represent compensation for unavoidable negative impacts on biodiversity caused by development projects.
- **Nature-Based Carbon Credits:** Represent carbon sequestration or emissions reductions from projects like reforestation or regenerative agriculture.
- **Biodiversity Credits:** Represent measurable improvements in biodiversity, such as increased species richness.

Nature markets are categorized as either **voluntary** or **regulatory.**

Voluntary Markets: Participation is optional, driven by corporate commitments, investor pressure, or consumer expectations. An example is the **Voluntary Carbon Market (VCM),** where businesses purchase carbon credits to meet sustainability goals.

Regulatory Markets: Participation is mandated by government policies, requiring businesses to address their environmental impacts. Regulatory markets include compensation schemes where companies must restore or protect equivalent ecosystems for the harm caused. Fiscal incentives, like tax breaks for sustainable supply chains, can also support regulatory goals.

2. Regulatory biodiversity offsets dominate financial flows in nature markets.

Nature markets are emerging as a mechanism to channel finance toward conservation and restoration, but they vary significantly in size and maturity.

Regulatory biodiversity offsets are a well-established market, driven by compliance-led schemes that require businesses to compensate for their negative impacts on biodiversity. In 2022, biodiversity offsets accounted for approximately **$12 billion** in private finance for nature-based solutions (NbS)[1], reflecting major mitigation banking programs and compensation funds. The market size is tied directly to regulatory requirements mandating developer participation. For example, Australia has implemented robust regulatory offset schemes, such as the New South Wales Biodiversity Offset Scheme, which

[1] UNEP, State of Finance for Nature, 2023

mandates compensation for biodiversity loss caused by development. In Queensland, marine-specific offsets are required for coastal developments impacting fish habitats or protected plants.

The voluntary carbon market (VCM) is a significant and rapidly growing component of nature markets, operating outside regulatory mandates. The VCM reached a value of **over $2B for the first time in 2021**[2], and although it has since contracted, it is projected to recover and grow further. Around half of carbon credits transacted in the VCM are from **nature-based projects**, such as reforestation, afforestation, and avoided deforestation, which often deliver **biodiversity co-benefits** alongside carbon sequestration.

Biodiversity credits are an emerging market designed to reward positive nature outcomes rather than offset negative impacts. The current market is small, estimated at **$2-8 million**[3], with only a few operational schemes. Biodiversity credits represent measurable biodiversity gains, such as restored habitats or preserved ecosystems. The market is expected to grow rapidly as new initiatives launch in the coming years and regulatory frameworks shift toward **biodiversity net gain** requirements.

3. Nature markets directly support scaling conservation and restoration.

Nature markets are most impactful in scaling conservation and restoration by providing direct mechanisms to fund biodiversity-positive outcomes.

Biodiversity offsets compensate for unavoidable losses caused by development projects, ensuring restoration or protection of equivalent habitats.

Biodiversity credits reward measurable gains, such as restored ecosystems or increased species diversity, by channelling financial flows into critical conservation efforts. Similarly, voluntary carbon credits from reforestation and afforestation projects deliver dual benefits: sequestering carbon while enhancing biodiversity and ecosystem health. Together, these tools drive large-scale restoration and protection of nature.

4. Nature markets indirectly support transforming supply chains and redesigning agricultural systems.

While their primary role lies in conservation, nature markets also indirectly support transforming supply chains and redesigning agricultural systems by addressing impacts and incentivizing sustainable practices.

Transforming Supply Chains. Nature markets address residual impacts and incentivize sustainable sourcing within supply chains. Biodiversity offsets compensate for unavoidable deforestation or habitat loss, while voluntary carbon credits from reforestation or avoided deforestation align sourcing strategies with conservation goals. Biodiversity credits encourage suppliers to adopt nature-positive practices, supporting the shift toward zero-deforestation and sustainable sourcing.

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[2] Ecosystem Marketplace, 2024
https://3298623.fs1.hubspotusercontent-na1.net/hubfs/3298623/SOVCM%202024/State_of_the_Voluntary_Carbon_Markets_20240529%201.pdf
[3] UNEP, State of Finance for Nature, 2023

Redesigning Agricultural Systems. Nature markets reward regenerative practices that enhance biodiversity and ecosystem health. Biodiversity credits incentivize actions like habitat restoration and soil health improvement, while voluntary carbon credits from agroforestry and no-till farming help farmers monetize sustainable methods.

5. The integrity challenge and solutions TL'DR.

No discussion of nature markets is complete without emphasizing the mitigation hierarchy.

The Science Based Targets Network's (SBTN) AR3T framework, an adaptation of the mitigation hierarchy, provides a structured approach with five steps: **Avoid** harm, **Reduce** negative impacts, **Regenerate** ecosystems, **Restore** natural cover, and **Transform** business models for a nature-positive future. By focusing first on avoidance and reduction—actions that address the root causes of nature loss—the framework ensures offsets and credits are reserved for residual impacts that cannot be avoided or mitigated.

Beyond this, the usual suspects—**additionality, leakage, and social equity**—remain key challenges. You've probably heard these before, especially after the voluntary carbon market scandals of recent years. There's plenty written on this elsewhere, so we won't repeat it here. The good news? Nature Tech solutions are emerging to fix these issues fast.

Check out the Nature Tech Playlist to see how innovation is tackling these challenges and unlocking high-integrity nature markets.