The Biodiversity Market: Simplified.

1. Understand demand - voluntary and regulatory drivers.

Demand for biodiversity credits comes from two sources: **voluntary action** and **regulatory requirements.**

Many companies are stepping up with nature-positive strategies, aiming to restore ecosystems and reduce their impacts on biodiversity. Frameworks like the Science-Based Targets Network (SBTN) guide these efforts, helping businesses set measurable goals.

For example, a beverage company dependent on water might commit to becoming "water-positive," pledging to replenish more water than it uses by 2030. Internal efficiency measures can go only so far, so external projects—like restoring local watersheds—become essential. Biodiversity credits help fund these large-scale solutions.

Voluntary demand can come from corporates, financial institutions, government agencies, and philanthropists. Each use credits to meet sustainability goals or fund specific conservation outcomes.

Early buyers of biodiversity credits include:

- **Swedbank:** Purchased Europe's first biodiversity credits in 2023 to explore innovative ways of supporting ecosystems.
- **HSBC:** Invested in Reef Credits, directly financing marine conservation efforts.

Regulations are creating another stream of demand by requiring companies to offset the harm they cause to biodiversity. These frameworks tie biodiversity credits to land-use or resource permits, compelling action where voluntary measures might not reach.

Take England's **Biodiversity Net Gain (BNG)** policy: Developers must ensure biodiversity is left at least 10% better than it was before a project begins. This can be done through on-site restoration, off-site offsets, or by purchasing credits from a government-managed system.

2. Know the difference: Offsets vs. Credits

Many people mistakenly equate biodiversity credits with biodiversity offsets, assuming they are interchangeable terms. While both mechanisms address biodiversity loss, they have distinct purposes and applications.

Biodiversity Offsets are regulatory requirements designed to compensate for unavoidable negative impacts on biodiversity caused by development projects. They follow a "Like-for-Like" principle: Offsets must restore or protect similar habitats in the same region to directly compensate for local biodiversity loss.

Biodiversity Credits, in contrast, are voluntary market-based instruments not tied to a specific location. Their goal is to finance activities that lead to a net gain for biodiversity, such as conservation, restoration, and sustainable land management, that would not have occurred without the credit-financed intervention.

Biodiversity credits are generated through projects that either avoid future biodiversity loss or reduce existing pressures on biodiversity, following the mitigation hierarchy. Unlike carbon credits, which are standardized (e.g., one ton of CO_2 equivalent), biodiversity credits lack a universal metric due to the complexity of biodiversity, which includes species diversity, genetic diversity, ecosystem integrity, and ecosystem services.

3. Certification: The bridge between supply and demand

Certification is the backbone of trust in biodiversity credits. It ensures that credits are credible, impactful, and worth investing in. Without strong certification, the market cannot scale or deliver real conservation outcomes. Unlike carbon markets, which have established standards, biodiversity credits face the added challenge of reflecting the complexity of ecosystems, species, and genetic diversity. Efforts to create rigorous standards and methodologies are underway but remain fragmented, reflecting the market's early stage.

Certification frameworks rest on two key pillars: **standards** and **methodologies.** Standards are the broad rules that guide how biodiversity credit projects are designed, verified, and issued. These cover aspects like validation, crediting periods, stakeholder engagement, and claims processes. Methodologies, on the other hand, focus on the technical details of how biodiversity outcomes are measured and monitored. They address critical factors like additionality (ensuring the project delivers new benefits), permanence (long-term impact), and ecosystem-specific considerations. Although distinct, standards and methodologies often overlap, reflecting the evolving nature of the field.

For example:

Verra's Climate, Community & Biodiversity (CCB) Standards: While referred to as "standards," these guidelines from Verra, a prominent environmental standard developer, also delve into methodologies. The CCB Standards incorporate principles for project development, crediting rules, and guidance on quantifying biodiversity outcomes, effectively blending elements of both standards and methodologies.

Architecture for REDD+ Transactions (ART) TREES Standard: This standard, designed specifically for REDD+ projects, similarly provides a framework for project design and implementation, while also specifying methodologies for measuring and monitoring carbon sequestration and biodiversity co-benefits. The inclusion of methodological components within the standard illustrates the interconnectedness of these concepts.

As the market grows, certification will need clearer definitions and sharper distinctions between standards and methodologies to enhance transparency and credibility. For now, the overlap reflects the market's early development and the push to build robust, science-based systems for valuing biodiversity.

4. Nature Tech solutions support demand, certification, and supply.

Nature Tech solutions support the biodiversity credit market, plugging into demand, certification, and supply. These solutions are grouped into five categories under the Nature Tech Taxonomy.

1. **Market Pressures.** Market pressure solutions primarily drive demand by leveraging financial mechanisms and market incentives. For example, sustainability-linked bonds and loans tie

borrowing costs to biodiversity performance, providing financial incentives for companies to adopt biodiversity-positive practices.

2. **Monetization.** Monetization solutions streamline access to biodiversity credits, facilitating both demand and supply by connecting buyers and developers. For example, biodiversity credit marketplaces are online platforms that connect project developers with buyers to facilitate the efficient trading of biodiversity credits.
3. **Modeling.** Modeling solutions process raw biodiversity data into actionable insights for supply by guiding project development and implementation. For example, connectivity models analyze movement patterns of species and genes across landscapes, identifying critical corridors and barriers to support effective conservation strategies and maintain species connectivity.
4. **Material Change.** Material change solutions facilitate the implementation of biodiversity projects, supporting supply. They also help reduce costs, making projects more viable for developers and accessible for buyers. For example, innovations like seed banking, assisted migration, and bioremediation restore degraded ecosystems and deliver measurable biodiversity gains.
5. **Measurement & Monitoring.** Measurement and monitoring tools support certification (the bridge between demand and supply) by collecting, analyzing, and reporting biodiversity data. These technologies help quantify impacts, establish baselines, monitor progress, and verify biodiversity outcomes. For example, bioacoustic monitoring uses acoustic sensors to analyze soundscapes, detecting species presence and behavior, even in remote or inaccessible areas.

5. Finance Flows: Fuelling growth from all angles.

Finance is what helps the biodiversity market grow. While most funding into the market comes from demand, other financial flows play a role in expanding the market.

- **Philanthropy:** Philanthropy funds early-stage conservation work and projects that might not attract regular investors. This type of funding reduces risks for future investment and lays the groundwork for bigger initiatives. For example, the MAVA Foundation has supported biodiversity for over 25 years, helping launch efforts like Finance for Biodiversity (F4B) to channel more resources into conservation.
- **Venture Capital.** Venture capital (VC) supports startups creating new tools and technologies for the market. These include innovations like biodiversity marketplaces, remote sensing tools, and eDNA analysis.
- **Project Financiers:** These investors focus on economic returns, not credits, by funding large-scale biodiversity projects and generating returns from future biodiversity credit sales. This includes a mix of private equity funds, impact investors, and specialized funds.

Finance from these sources complements demand-driven funding.