# Understand the Biodiversity Credit Lifecycle: The Market in Action.

### 1. Project development.

The process begins with identifying a site that can improve or protect biodiversity. Projects typically fall into two categories:

- **Restoration Projects:** Focused on enhancing biodiversity, such as the Orsa Forest project in Sweden, where credits fund actions like increasing old-growth characteristics and creating habitats for boreal species.
- **Avoided Loss Projects:** Preventing biodiversity loss in ecosystems under threat, like the Niue coral atoll, where Ocean Conservation Commitments protect marine biodiversity; or the Cusuco Cloud Forest in Honduras, where rePLANET's credits fund conservation while supporting local communities.

Who develops projects? Developers can include conservation NGOs, governments, biodiversity-focused startups, or Indigenous Peoples and Local Communities (IPLCs). They design projects, select methodologies, and calculate credits. For example:

Orsa Besparingsskog, a forest cooperative in central Sweden, developed the Orsa forest project. the Niue Government, in collaboration with local non-profit organizations, developed the Niue Coral Atoll Project; and rePLANET, the biodiversity project developer, developed the Cusuco cloud forest project.

**Methodologies** define how outcomes are measured, covering key aspects like baseline setting, additionality, monitoring, and credit calculation. Metrics such as species richness and ecosystem health quantify improvements. These methodologies align with broader **standards,** such as those developed by Plan Vivo, Verra, and the Gold Standard, ensuring credibility and comparability.

The developer collects data, makes project interventions, and monitors biodiversity outcomes using the chosen methodology. This data determines the number of credits generated, ensuring the project achieves measurable improvements.

The **Cusuco Cloud Forest Project** applies a methodology developed by the Wallacea Trust, focusing on key species and ecosystems at risk. It monitors outcomes through baseline studies and ongoing assessments, targeting the conservation of endangered species such as the Cortes salamander, El Cusuco salamander, Baird's tapir (Tapirus bairdii), and montane forest birds.

The project adheres to the **Natural Forest Standard (NFS),** which integrates biodiversity, carbon, and social values for REDD+ projects. This dual approach allows the issuance of separate carbon credits for avoided deforestation and biodiversity credits for habitat protection, catering to distinct conservation goals. Buyers can purchase these credits individually, aligning their investments with specific environmental priorities.

### 2. Credit validation and verification.

Validation and verification ensure biodiversity credits are credible and measurable.

- **Independent Assessment:** Third-party organizations validate the project design and verify biodiversity outcomes based on the chosen methodology.
- **Outcome:** Successful validation and verification result in the issuance of credits, each representing a quantifiable biodiversity improvement.

### 3. Credit issuance.

Once verified, biodiversity credits are issued, each representing a tangible improvement in ecosystem health—whether it's preventing loss, restoring habitats, or boosting species richness.

In the **Orsa Forest, Sweden,** credits capture measurable biodiversity gains through enhanced forest management, like increasing deadwood, fostering old-growth qualities, and improving habitat conditions for boreal species.

For the **Niue Coral Atoll,** credits reflect avoided biodiversity loss by safeguarding marine ecosystems, protecting coral reefs, and preserving species unique to Niue's Exclusive Economic Zone.

### 4. Credit purchase.

The next step is biodiversity credit purchase. Buyers—corporations, financial institutions, governments, and individuals—are driven by diverse goals, from meeting nature targets and regulatory needs to boosting their reputation or supporting conservation efforts.

A Swedish bank made history by purchasing biodiversity credits from the Orsa Forest project, one of Europe's first transactions of this kind. This move demonstrated leadership in biodiversity finance, aligned with its commitment to local conservation, and reinforced its reputation for environmental innovation. The credits also helped diversify the bank's sustainability portfolio, offering measurable outcomes tied to biodiversity improvements.

### 5. Credit retirement.

In carbon markets, credits are retired after use to ensure they can't be resold or double-counted. Registries track issuance, ownership, and retirement. For biodiversity credits, retirement systems are still developing, with some methodologies proposing retirement when a biodiversity claim is made, recorded in a registry to ensure transparency.

Although no global registry exists yet, platforms like the Regen Registry are stepping in, using blockchain technology to manage the issuance and retirement of biodiversity credits, paving the way for standardized practices.