

# Deep Dive: Biodiversity Credit Schemes | Part 1

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 [sgradeckas.substack.com/p/deep-dive-biodiversity-credit-schemes](https://sgradeckas.substack.com/p/deep-dive-biodiversity-credit-schemes)

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Hi folks 🙌

For those who don't know me, I'm Simas from [Bloom Labs](#) - a biodiversity finance newsletter & consultancy. I focus on all things biodiversity markets, nature accounting & biodiversity measurement, reporting and verification (MRV).

Cheers!

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We're at the earliest stages of the biodiversity markets boom. That means we're seeing an explosion of up-and-coming biodiversity credit schemes, both voluntary and compliance. It can be an overwhelming space to follow. That's why, as I kept following it, I started compiling a list of the schemes I would find. Eventually, it became my goal to compile (almost) all of them.

Most nature-based solutions folks I've spoken with really wanted to learn more about the biodiversity credit scheme landscape, so I thought more people might find it valuable. **That's why I'm sharing the information I collected over months of research and an in-depth spreadsheet of all the schemes.**

The deep dive is separated into two parts: general observations and personal thoughts & opinions. This is the first part that basically summarizes my research with minimal thoughts of my own. Hope you enjoy it.

## Disclaimers

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Before I start, a couple of disclaimers:

Firstly, this is a simplified overview. Details and context definitely matter - it is obviously impossible to boil down all the action into a spreadsheet.

Secondly, it's likely that not everything in the list is correct. I tried my best to only add verified information but it does include educated guesses and some opinions - a result of limited information available.

Thirdly, these schemes are *\*not\** ranked. There are still no widely-accepted standards that would allow me to easily do that. Things have yet to play out. My goal is to just clearly show the landscape.

And lastly, not all schemes listed are “pure biodiversity credit schemes” (e.g. [Pivotal](#), or [WCS HIFOR](#)). They are very closely related and that’s why I still included them.

If you think I missed anything important, definitely let me know. I’ll do my best to keep this spreadsheet as a living organism that reflects the biodiversity credit scheme space.

## Observations

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Having gone through all these schemes, a couple of things become clear:

### **We’re so early**

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New schemes are announced every other week, both in the voluntary and the compliance space. Most of them are significantly different from each other. Reliable information is patchy. All these are signs of an early market explosion.

### **We have a couple of early leaders**

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Some organizations have jumped on the biodiversity markets train earlier than others and are leading the space at the moment. These are [Terrasos](#), [Operation Wallacea/Plan Vivo](#), [ValueNature](#), [CreditNature](#), [Wilderlands](#) & [GreenCollar](#).

### **Carbon remains an integral part for some**

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Valuing biodiversity is tough. Communicating that value to buyers can be even tougher. That’s why there are still some schemes whose credit units, in transition to pure biodiversity units, are connected to the carbon sequestered (e.g. [WCS HIFOR](#), [InvestConservation®](#), [Single Earth](#), etc.).

### **The compliance schemes are *very* complex**

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Unsurprisingly, the compliance schemes are incredibly complicated. At such complexity, expecting well-functioning compliance markets is difficult. We need to continue working on making these markets more accessible to non-experts without watering down the quality. Yeah, I know, a tough one.

### **Compliance scheme MRV infrastructure seems to be lacking**

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The compliance schemes are mostly limited to manual field surveys when it comes to data collection. The governments might have valid reasons why they’re not focused on the cutting-edge MRV infrastructure but to reach scale in these markets, it’s important to try to remove every possible friction, including the slow & expensive MRV stack.

## **Australia, Colombia, New Zealand and UK are leading the space in innovation**

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It seems that more global biodiversity markets action is happening in these four countries than in all the other combined.

## **Early scheme categories are taking shape**

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Here are the main ones:

### **Methodology Type: Outcome-Based vs Practice-Based**

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There is a clear divide between outcome and practice-based schemes. The former sell quantified positive biodiversity outcomes - something that the institutional/corporate demand is asking for. The latter is focused on activities that are known to increase biodiversity but are not easily quantifiable. The outcome-based projects are generally more expensive because of stricter biodiversity quantification & auditing requirements. Establishing a causal link between activities and outcomes is also more difficult than it sounds, potentially leading to gameable results. Both types have a place in the market.

### **Market Type: Voluntary vs Compliance**

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The majority of the emerging schemes are voluntary since generally they're way easier to design & launch.

### **Area Type: Terrestrial vs Marine**

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Most schemes are primarily or solely focused on the terrestrial ecosystems, simply because the terrestrial preservation and restoration science (& monitoring) is more advanced.

### **Activity Type: Preservation vs Restoration**

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Most activity types boil down to preservation and restoration, although preservation seems to be the default. That makes sense since keeping pristine biodiverse environments intact is the first step to stopping our rapidly accelerating biodiversity loss.

### **Usage: Offsetting vs Contributing**

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Unsurprisingly, most schemes do not allow using the credits for offsetting biodiversity damage done. Nature is fundamentally unique and restoring one habitat cannot "offset" the destruction of another.

## **Database: On-Chain vs Off-Chain**

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Both storage methods are relatively equally distributed among the schemes. It's great to see on-chain infrastructure being used increasingly more often.

## **Credit Calculation Approach: List of Metrics vs List of Activities**

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Most credits are calculated by either quantifying some outcome-based metrics<sup>1</sup> or by codifying a list of activities undertaken.

## **Credit Unit: Area Size vs Index**

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The most popular biodiversity units are tied to a certain area size and/or an index of metrics around the state of biodiversity there.

## **MRV: Manual vs Automated**

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Many schemes have flexible MRV protocols, ranging somewhere between completely manual and (almost) fully automated.

## **Tradability: Allowed vs Forbidden**

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Most tradable credits are either native on-chain assets or are designed by one of the incumbent environmental asset registries. Most other schemes do not permit trading.

## **3rd Party Auditing: Yes vs No**

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3rd party auditing is usually an expensive part for any scheme. Hence, some schemes (usually the environmental market newcomers) have decided to not engage in it in order to maintain financial efficiency and high accessibility.

## **Summary**

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Not only is the biodiversity scheme landscape moving fast - it is accelerating. All we're left with is seeing how all this innovation plays out - who will be the winners, what will be the credit standards and how will the wider environmental market players adjust to that.

**[Here's the link to the spreadsheet of the biodiversity credit schemes.](#)**

<sup>1</sup>

Not to be confused with Wallacea Trust's Consumer Price Index-based "basket of goods" approach, which falls into the list of metrics category.