Voluntary Biodiversity Market, Visualized

sgradeckas.substack.com/p/voluntary-biodiversity-market-visualized

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I recently realized that after almost a year of non-stop biodiversity market research, I haven't yet thoroughly mapped out the space visually (nor have I seen anyone else do it). Naturally, I then had to sketch something out. The result below is a flowchart of the voluntary biodiversity market (VBM). It's a slightly simplified version that should still get the point across.

Disclaimer: This is not an exhaustive list of all the stakeholders and market players. It's not meant to be. The goal is to illustrate how the market works at a high level and who are, in my opinion, the *main* players so far (and who will become important players soon). Having said that, I'm also slowly compiling a very long list of the biodiversity ecosystem players - something I'm planning to start sharing over the year.

Context

Schemes, standards, frameworks, methodologies: what's that?

This is confusing many folks. Personally, here's how I differentiate these:

- Scheme: a catch-all term for different biodiversity credit systems (standards, frameworks, methodologies, programs). You can find a list of them I made here.

- Standard/framework: a holistic set of rules on how to develop biodiversity credit projects. It usually covers topics like credit validation & verification, crediting periods, stakeholder engagement, credit registration & issuance, claims and some other general standard-specific rules. Usually managed by an environmental credit registry/certifier.
- Methodology: a set of lowest-level rules on how to develop biodiversity credit projects & calculate biodiversity credits. Usually, the core topics covered are biodiversity unit quantification & monitoring. Often permanence, additionality, baselines & specific applicable ecosystems are also covered here but sometimes can also be found in the standard documents.

In the VBM, the difference between standards, frameworks and methodologies is especially fuzzy. Many organizations publish both a standard and a methodology in the same paper and call it by one of these names.

Some assumptions

I made a couple of assumptions in the flowchart. Firstly, I'm banking on many voluntary carbon market (VCM) players entering VBM sooner rather than later. We're already seeing that happen - I just assumed that the rest would follow. I also added governments as potential end buyers. To my knowledge, no government has yet purchased voluntary biodiversity credits but there is an increasing pressure for corporate demand building via regulations and price floors. Clear governmental decisions can be very important in scaling biodiversity markets with integrity. Lastly, I'm implicitly assuming that VBM will turn out to become a commodity (not an asset) market. I'm aware that this might sound sacrilegious to some - more on it in a future piece.

Observations

Voluntary biodiversity market is built on the voluntary carbon market

If I was mapping out the voluntary carbon market, I think I would've landed on something close to identical (though more sophisticated). We have to remember that VCM & VBM are tied at the hip. VBM is directly building on the lessons of carbon markets, trying to adopt the things that work and improve the things that don't. There are so many carbon players gearing to enter the biodiversity market. In many cases, they have strong market expertise and supply/demand relationship advantages heading into the biodiversity markets compared to the biodiversity-only players.

The biodiversity-only organizations have one thing carbon folks don't though - the nature positive framing. It speaks to people (importantly, landowners) way more than trying to appeal to them about excessive levels of invisible gas molecules (no offense to carbon finance - its structural ability for scale will probably never be matched). It's also more physically graspable - we're directly tracking life that can be recorded (e.g. visually, with audio or even genes) and better connected to the increased ecosystem services coming from intact biodiversity. Biodiversity-only organizations have less dead carbon market weight to carry as well.

The lines between the stakeholders are blurry

Spinning up new markets with a clear separation of roles from the start is a tough cookie. We're seeing that in real-time in the voluntary biodiversity market.

You might've noticed many of the same logos in both the credit schemes and the project developers categories. These companies indeed do both. And if you'd think of a potential conflict of interest, you'd be right.

There's also a (very) small overlap between the Indigenous Peoples and local communities (IPs and LCs) & project developers. Although historically there's been a clear separation between the two, it's getting bridged (excruciatingly slowly). There's plenty of evidence of IPs and LCs historically being badly mistreated by some carbon market players. If the project benefits are fairly shared with the local land stewards, it would only make sense for them to become project developers themselves. If things go right, we should land there in applicable geographies.

Demand facilitators is also an interesting case. Since the market infrastructure is just now being built, players take up multiple roles within the demand value chain.

Ideally, as the market matures, the roles become more separated, especially for the credit schemes and project developers. We're actually already seeing it happen: some of the independent schemes have started to position themselves as methodologies under the established standards (e.g. Wallacea Trust, Organization for Biodiversity Certificates, Savimbo, Terrasos).

Credit schemes rule

Credit schemes (in particular standards) set the rules of the game. They control how credits are quantified, validated/verified, issued, transacted and what claims can be made with them. There's a reason why we're seeing an explosion of new schemes being spun up. Only if the best ones get adopted, is scaling the market actually possible.

Indigenous Peoples and local communities (IPs & LCs): the backbone of the market

Historically, the environmental markets haven't been the kindest neither to IPs nor LCs (they're different). Unsurprisingly, many of these projects failed to deliver either environmental or social benefits.

I completely understand that beyond practical/selfish reasons, there are also structural/cultural reasons for IP & LC exclusion. I won't get tired of repeating this though: if the environmental credit projects don't benefit IP and/or LCs *on their own terms*, we shouldn't expect these projects to succeed in the long-run. Or for financial folks: there won't be permanence. The environmental and social crisis is the same crisis. We can't solve one without the other.

Now, I might be preaching to the choir here. The reason I'm bringing this up again is because I'm hearing a lot of talk about including IP and/or LCs into biodiversity credit design. They have (rightfully) become a very popular group to mention and consult. In practice though, I'm not seeing a lot of action here. We need to do better.

Demand facilitator side is still very early

There are still very few demand facilitators for biodiversity credits. That makes sense since they only facilitate selling the credits to the end buyers. And the end buyers are forming at this very moment. Biodiversity unit standardization & the regulatory demand push should be the key unlocks here.

Most of the players I mentioned have just officially entered the voluntary biodiversity market (super promising!) while others are still operating on the carbon side only (e.g. Xpansiv, Ivy). I do expect them to enter soon-ish as well.

One could also make an argument that the demand facilitators are not consulted with enough. We're so focused on high-quality supply and end buyers that we almost forget the middlemen (yes, I hate that word too) that help structure and scale these instruments. There are efforts underway to change that though. On the other hand, nobody really knows if instead we'll end up in a market dominated by direct sales. In that case, the market size is bound to be many times smaller.

Biodiversity startups are on the rise

An easy way to verify that the biodiversity finance space is finally hot: the number of top-notch nature tech startups that are eyeing the biodiversity markets. The credit rating agencies and MRV providers are some of the most well-known categories here. They are helping to scale the market by providing the much needed scientific integrity and transparency.

Personally, I'm most intrigued by the nature accounting companies though. Although they're really hyped up already, their work represents a super important VBM demand driver: corporate nature strategy. These nature accounting companies (next to a number of brilliant biodiversity and corporate consultancies) are helping the corporates design their first-ever nature strategies. Without these strategies, we shouldn't expect many corporate voluntary biodiversity credit purchases at scale.

Conclusions

So what's the summary of this deep dive? Well, we're still super early & we're moving at a breakneck pace (at least compared to the historical nature conservation space). Or, in other words, nothing's new. Personally, I think that what the market needs the most right now is cross-industry collaboration. The more the merrier. Thankfully, we're progressing here.

We’re onto something special: we’re in the middle of designing a system that could equitably value nature at scale. It’s not the answer to everything (regulations first, always!) but it can be part of the solution.