



Aggregation and Investment for Nature

A 2023 report

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1. Executive summary

There is an urgent need for large-scale funding of nature-based solutions across many landscapes if the UK is to achieve net zero, environmental, social and health transformations. At present, investment is largely piecemeal, tends to be project-based and scattered rather than place-based and connected and therefore the scope for the systemic change needed is limited.

This report reflects the views of financial sector participants, when asked what they need in order to invest in nature-based solutions, at scale, across a landscape.

We started with two key questions: what do investors want and what do the assets they will invest in look like? We approached this project by asking financial institutions these questions directly, through bilateral conversations and via a facilitated workshop. We believe large-scale landscape funding has a greater chance of success if financial institutions co-create the funding instruments needed.

Our dialogue revealed preferences around revenue streams, costs, risks, financial and operational structure and appropriate governance:

- **Revenues, Costs and Risks:** These are the core considerations for investment committees around which clarity is essential. Four revenue streams were identified; carbon and biodiversity credits, payments for renewable energy, value add from flood management and improved resilience through regenerative agriculture. The risks – from governance to operations - were multiple and some are known, while others are unknown, some are quantifiable and others unquantifiable.
- **Financial Structure:** We tested three models with participants; project finance based, counterparty based or a platform driven hybrid. We summarise the pros and cons of each.
- **Organisational Structure and Governance:** Our dialogue revealed a tension between the need for a well-known entity with a strong credit rating, possibly with equity involvement, to stand behind any project, and the importance of a place-based organisation with strong local ties and a focus on social impact and the public good. The report proposes ideas to resolve those tensions.

The ideas discussed were well received, with general support for a number of foundational principles:

- the overall vision
- the general risk-sharing structure
- the landscape scale
- the ticket size (e.g. minimum investment at a scale suitable for institutional investors)
- the community involvement
- the collaborative approach with other organisations already in the area
- the visual presentation; constructing a ‘straw man’ to draw feedback worked well as a way to engage finance professionals.

This work has established that high-quality, well-structured projects, which address aspects across finance and a fair sharing of the benefits of the monetisation with local communities, are credible tools for investment. However, further work needs to be done to make a landscape-scale transformation into an investable proposition.

Using the intelligence gained from the dialogue, the next step is to address the issues raised through this initial engagement. The process should involve co-production with potential investors with the overall goal to develop an investment structure or vehicle, which can be deployed across a landscape and then replicated across other landscapes.

It is clear that there is an appetite within mainstream financial institutions to participate in the *development* of the tools and products needed to enable landscape transformation. This is an opportunity not to be missed, since financial institutions are rather more likely to regard as credible the initiatives they have co-developed. Such an “outside-in” innovation process contrasts with the “inside-out” process that is at the heart of many existing landscape finance initiatives.

North Star Transition will continue the development process for landscape finance with institutions that are already engaged in the process and new participants as well.

North Star Transition is very appreciative of the support it received from the Environment Agency for this work.

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2. Project Introduction

There is a disconnect between place / environment and the financial sector. And that disconnect is hampering the flow of the large-scale funding that is vital if our economy is to transition to Net Zero.

This disconnect is apparent in multiple ways. There are huge gaps in:

- understanding (bankers don't know what makes a healthy soil or how long that takes, farmers don't know which deals will pass an investment committee)
- trust (farmers don't trust bankers, bankers only know farmers through the media caricatures)
- incentives (most financial institutions have a very short-term outlook due to quarterly results and pressure to increase share prices, many landscape interventions take decades to be impactful)
- communication (each have jargon the other side doesn't understand)

It is relatively easy to accuse each side of being one-dimensional in their thinking. A common response to the perceived need to create a return from environmental actions is to set up a market or platform to monetise ecosystem services. This may work for someone wishing to *buy* ecosystem services but does not help those wishing to *invest* in landscape transformation, who may have rather more sophisticated needs for balancing returns, time horizons and risk profiles.

Another example of one-dimensional thinking is the widespread belief in the efficacy of a Community Interest Company (CIC). A CIC is an excellent vehicle for helping ensure that the local community owns the benefits of the actions being carried out. However, a CIC is relatively difficult to scale up for large financings as it is unlikely to be able to achieve the combination of governance, alignment of interests and credit rating that institutional investors will require.

The finance side of the equation is just as likely to be one-dimensional in its thinking: the focus on buying failing farms for planting trees to achieve net zero completely misses the negative social impacts of breaking up rural communities, the environmental problems caused by monoculture forests, or the food security challenges of losing our farms.

The Approach

We summarised the main outstanding questions in relation to landscape financing thus:

- What are different models for aggregating the supply and demand of ecosystem services at the landscape scale? How can we best bring together buyers and sellers across multiple objectives and multiple sectors?
- What are the benefits and trade-offs of these different ways of bringing people together?
- How do the aggregation and investment models explored in the first point fit with governance structures, and how best to manage risks, liabilities, and equity between actors?

We start from an understanding that there are, broadly, three groups in play:

- Sellers of ecosystem services (e.g. farmers who improve soil and practice regenerative methods that capture carbon and increase biodiversity, and firms that sell renewable energy or put in place natural flood management).
- Buyers of ecosystem services (e.g. corporates looking to offset their emissions or wanting to inset by improving their supply chains / procurement, utilities such as water companies who will pay for cleaner water, and insurance companies who want to reduce the risk of flood payouts. There is also the public good of improved food security, reduced risk of drought, better energy security, etc.).

- Funders of ecosystem services (e.g. pension funds, asset managers, banks, private equity, venture capitalists [see Appendix for glossary]). This group may also be buyers of ecosystem services of a sort, in that part of their motivation to fund nature-based solutions may be to earn a return, but part may be for reputational uplift, regulatory compliance or a need to offset high emitting investments elsewhere on the balance sheet.

For the purposes of this project, we have focused on the first and last set of stakeholders; sellers of ecosystem services and funders of those services. We implicitly address the middle set – buyers of ecosystem services – by making informed assumptions about their appetite to pay for such services and so generate a return for funders.

This report begins with a review of known aggregation methods and proposals to date. It focuses on the work done by Eunomia, in collaboration with the Environment Agency, the Landscape Enterprise Network (LENs) developed by 3KEEL and Finance Earth's work on mobilising private investment in natural capital, commissioned by the Scottish government.

Our aim is to build on this valuable work by establishing - in parallel to the 'landscape interventions' - a set of 'finance industry interventions' or action items, which would shape the necessary cash flow patterns, risk/return profiles and governance structures, among other things, that would enable institutions to commit large sums to landscape transformation.

We go on to outline the process we deployed for this project; our stakeholder selection and engagement and the investment proposition we designed and invited financial participants to critique.

The main body of the report describes the findings and learnings from our dialogue with financial participants. We divide this section into four broad groups:

- Views on the **revenues, costs and risk** thresholds that participants would need to see met in order to make a landscape finance proposition viable;
- A discussion of the **financial structure** most likely to gain traction with financial institutions;
- The **organisational structure and the governance** needed to meet internal and external regulatory thresholds; and
- Other issues of significance such as complexity versus simplicity and the appropriate scale of any fundraising.

The report concludes with suggestions for next steps.

3. Review of work to date

Aggregation methods and proposals

To be clear, North Star Transition and its partners are not the first to explore or develop aggregation arrangements, nor will we be the last. There is much to learn from the ideas developed to-date on the environmental side of the finance-environment interface, from market models that connect buyers and sellers, to governance implications of such models, their successes, and gaps and limitations in attracting large-scale finance.

Eunomia's "Governance of Blended Finance", written with the support of the Environment Agency, dived deep into the reality of governing nature-based solutions. The report lays out the dynamic and complex nature of the undertaking: it takes time, requires learning by doing in an idiosyncratic way, it is driven by relevant partnerships and funding streams, and requires adequate information and engagement of stakeholders throughout. The report helpfully lays out key questions to guide through decisions. Overall, it is an excellent review of the experience and learnings to date.

Landscape Enterprise Networks (LENs) was developed by consultancy 3KEEL as a system for organising the buying and selling of nature-based solutions. LENs creates local trading networks where buyers with a common interest in nature-based solutions are linked up and matched with groups of land managers who can deliver measurable outcomes. LENs is particularly interesting because the approach is being applied in several regions of the UK and Europe. It involves large corporate partners such as Nestle, Cargill or Diageo alongside farmers. LENs has also developed a financing solution with 0% loans from impact bank Triodos in the Lake District. There will be much to learn as the model expands to Wales and other locations, including whether and how institutional investors and lenders can get involved at market rate solutions and scales.

Equally of interest, Finance Earth's "Mobilising Private Investment in Natural Capital" was commissioned by the Scottish Government, in partnership with NatureScot, to explore how voluntary carbon markets can be harnessed to accelerate the delivery of high-integrity peatland restoration across Scotland. The report explores the opportunity to leverage voluntary carbon markets to restore the UK's severely depleted natural capital stocks. The report finds strong evidence to support the launch of a Scotland Carbon Fund as a project finance vehicle to restore Scotland's peatlands. The report also backs a Price Floor Guarantee mechanism to decrease the downside risk of project developers. This approach is valuable for our purposes because it has taken the specific steps of engaging with institutional financiers to assert the benefits and drawbacks of different financing models. From that perspective, it offers a realistic pathway to scaled finance solutions.

We have also identified a number of other interesting models on landscape-related questions.

Green Finance Institute has created a helpful Investment Readiness [Toolkit](#). It guides project developers interested in the creation or restoration of habitat, from scoping to contracting with financiers and stakeholders, with a focus on community engagement and regulatory context.

Meanwhile, consultancy CEPA and infrastructure firm Agilia have teamed up to propose "solutions to developing a commercial and legal model for multi-sector reservoir systems", commissioned by several water companies. The extensive report looked at solving the key challenge of enabling third-party financing of large-scale infrastructure projects like reservoir developments, which rely on funding from a wide range of large and small stakeholders, and considered how such models can be adapted to maximise carbon and biodiversity benefits. The report is insightful in exploring several use cases for such reservoir systems (public

water storage, irrigation, energy, flood storage, etc.), each presenting its own set of risks and opportunities. It also points to the idiosyncratic nature of such structures and their funding opportunities.

At the request of Anglian Water, building on the work of CEPA & Agilia, Mott MacDonald and North Star Transition assessed funding arrangements for large scale landscape transformation when undertaken in conjunction with major infrastructure development. Our work assessed the potential of landscape investments of around £900M alongside investment of £4bn in two reservoirs in the East of England. The significance of this work is that it provides a practical example of the assessment of landscape investments at scale. The work is [summarised](#) as part of the submission to the regulator OFWAT for the development of the reservoirs.

Thinking behind the North Star Transition process

In our view, the end goal with the Aggregation and Investment for Nature project is to oversee the execution of a series of actions that collectively rehabilitate a landscape, while balancing economic, environmental and social or community needs, including health impacts. In our view, landscape transformation is much wider and deeper than just environmental actions.

The prior studies referenced above have surfaced various landscape-centric interventions, and the actions that may be taken by potential investors and lenders. However, the lack of deal flow at the level of hundreds of millions of pounds (and more) tells us that more work needs to be done on the finance end to attract large-scale capital flows, and thereby fund or enable the landscape-specific interventions that have been identified as helpful.

The aim of this project was therefore to establish - in parallel to the 'landscape interventions' - a set of 'finance industry interventions' or action items, which would shape the necessary cash flow patterns (outflows in terms of costs vs inflows of income for repayment/returns), risk/return profiles, fund structures/entities, transaction terms and conditions, due diligence and monitoring processes, and other items, to enable financial institutions to get comfortable with and thus commit large sums to landscape transformation activities.

We proposed that these 'finance industry interventions' should be identified or co-created by a select group of empowered individuals at relevant financial institutions, with the idea that these institutions could eventually also invest in the products.

In sum, the project we envisaged was to engage in a process of 'financial product development' in collaboration with the potential customers - the financial institutions - themselves.

In North Star Transition's view, involving the financial institutions was critical because of the pioneering nature of the process and desired product, which could at a later stage be replicated, at different scales; at the current early stages of development we need individuals who are invested in the process of product development and feel they can influence outcomes.

A common question with regard to large-scale financing of nature-based solutions is this: do we really need large-scale financing? After all, one of the benefits of nature-based solutions is that the costs are relatively lower compared to alternative methods, such as gray infrastructure. In our view, such a limited approach to nature-based solutions belies the systemic issues relating to landscape transformation. If we want to use nature-based solutions to, say, clean up a river, we are unlikely to achieve landscape transformation if we don't address (and resource solutions for) those systemic challenges that prevent rivers from being healthy.

For example, in the Wye and Usk landscapes, the causes of the ecological distress that the rivers are in are manifold: farm run-offs bringing chemicals into the river; slurry from poultry farms being dumped in the rivers, and the water companies feeding untreated sewage into the rivers. Nature-based solutions can be applied to each of these individual problems at the point where they are occurring – farms could, for example, use meadow margins to slow down the rate of soil loss into the rivers. But nature-based solutions would be rather more effective if we could also address the fundamental reasons that are putting chemicals on to our farms, in the first place. But addressing chemical farming would require a massive shift in how farming is done in the UK, given that less than 5% of UK farms don't use chemicals today.

Enabling this larger shift in the root causes of river pollution is rather more expensive than simply implementing nature-based solutions as a point approach to problem-solving. Raising the finance for this scale of transformation is no longer a matter of a few million in a landscape – it may well be hundreds of millions or billions that are needed to enable a systemic transformation.

4. Project process

In order to set the project in motion, we started the following activities:

- Constructed a set of issues to engage financial institutions on the subject of large-scale financing of landscape transformation actions – these discussions focused on the aggregation / investment gap when it comes to unlocking large-scale finance for landscape restoration;
- Identified participants within financial institutions who will want to engage with these issues, share their learnings, and bring their own issues to the table;
- Engaged with these finance sector participants on an individual basis;
- Ensured that we covered a variety of financial institutions: pension funds, insurance companies, asset managers, investment banks, environmental impact focused funds, etc.

4.1. Stakeholder identification

Drawing on this work, North Star Transition identified representatives from a range of over two dozen financial institutions. We chose a mix of institutions based on the size and volume of the assets managed by their institutions, and the alignment of their organisation's stated values and sustainability strategies with the goals and ambitions of this project. Almost all institutions in this engagement, except the impact investors, are regarded as Global Systemically Important Financial Institutions (as defined by the Financial Stability Board).

4.2. Engagement process

North Star Transition carried out an engagement process with each financial institution representative as follows:

- First, we met each participant on a 1-1 basis to assess their interests and specific concerns, as well as socialise the ideas of aggregation and investment in more depth.
- Second, we constructed a collaborative workshop, in which participants:
 - Shared their desired outcomes;
 - Explored a shared vision for potential investment products/processes/transactions/entities (as above);
 - Discussed potential obstacles; and
 - Started the development of a series of interventions or action items to achieve the goals.
- Third, we took the results from the workshop and carried out further engagement with some participants to iterate and develop the emerging findings.

4.3. Sample deal structure

In our conversations, we encountered questions about how landscape transformation deals can be constructed to meet multiple objectives around financial, environmental and social impacts. To help us address such issues, we created a sample scenario upon which our conversations could be based.

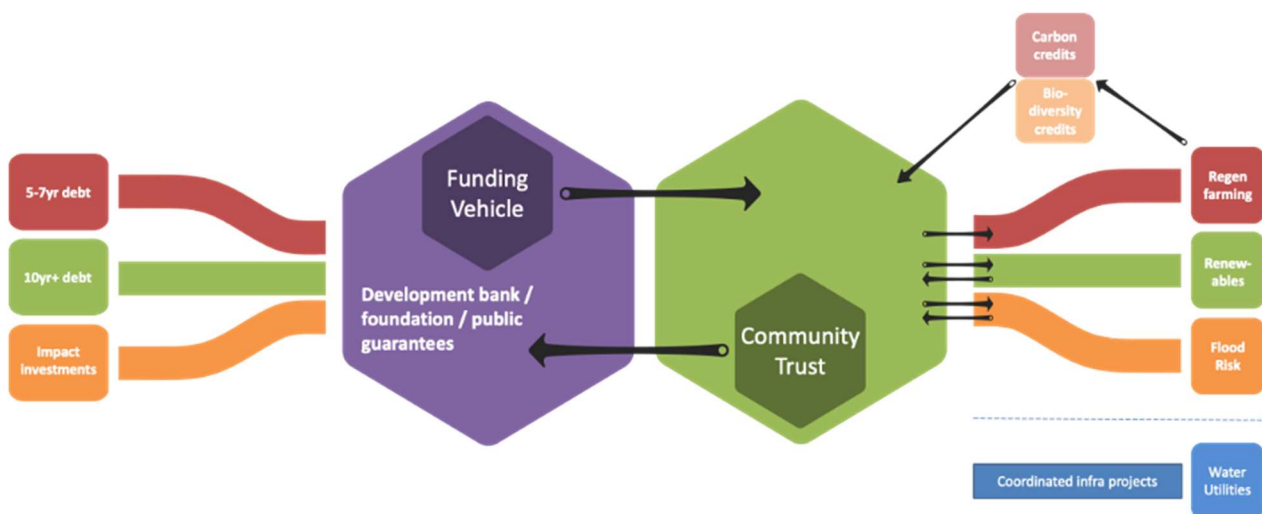


Figure 1: Schematic of the sample deal structure

Assumptions regarding the transformative actions

Our starting assumption was that individual farmers receive loans to transition to a regenerative/organic model of farming. Based on other studies¹, the average outcome for a farm carrying out such a transition over a 10-year timeframe is higher revenues, lower costs, and higher and more stable profits on an annual basis. However, the first three years involve lower revenues and higher costs as the farm transitions to its new model and invests in its soils.

This change in approach will generate carbon and biodiversity credits which may be sold in lieu of individual loan repayments. Small scale renewable energy projects (wind, solar, micro-hydro, biogas) are financed and installed wherever appropriate, generating income streams from the sale of the power. Flood risk mitigation strategies are implemented where needed. Whilst the community and infrastructure benefits of flood risk mitigation are clear, it is less obvious which parties (from among the financial institutions) would share any financial gains. Every effort is made to coordinate the above interventions with other related infrastructure projects which are not being funded through this scheme, such as new reservoirs or factories.

Deal structure

In our sample transaction, funding needs are aggregated and raised by a funding vehicle which is suitably rated and could seek guarantees from development banks, philanthropic foundations and/or other public sources. This vehicle is wholly owned by a common asset trust to enable any asset ownership and long-term financial upside to be retained by the local community. This in turn means that the aggregated funding needs would have to be focused on one specific place, albeit with the *model* replicable for other places. Multiple forms of capital could be raised, but for simplicity the initial assumption is limited to medium-term (5-7yr) debt, long-term (10yr+) debt and impact investments (concessionary returns).

The scale of the investment is in the hundreds of millions of pounds. It is possible to argue that nature-based solutions are inherently cheaper than grey infrastructure and don't need large investments. The other side of the coin is that landscape transformation is more than just a stringing together of nature-based solutions: we need to ensure that the social, health and local economy impacts are carried out, plus the actions are

¹ One example of this is an Ecdysis Foundation study referenced in Forbes which reported that while farms shifting to regenerative systems had 29% lower yields, they were 78% more profitable, due to lower input costs and end markets. Milinchuk, A., "Is Regenerative Agriculture Profitable?" Forbes (Jan 2020) - <https://www.forbes.com/sites/forbesfinancecouncil/2020/01/30/is-regenerative-agriculture-profitable/>

carried out for a long enough time to be impactful. All of these issues contribute to the need for scaling up. Plus, by ignoring these complementary issues, we run the risk of lowering the success of the actions we do carry out, as many nature-based solutions benefit from supportive actions in other spheres. For example, a landscape transformation to drive improved water quality does not need a renewable energy action, but by incorporating opportunities for diversification of farm income, it may be possible to help farmers make the step of shifting away from industrial agriculture methods that are ultimate determinants of water quality in a landscape.

Institutional / governance arrangements

The daily operations of the funding vehicle are outsourced to professional management acting on the instructions of the community trust. The community trust employs an executive team to implement the specific interventions, overseen by a mixed board of experienced professionals and local community members.

5. Findings and learnings

We have several findings from this process – from the one-to-one discussions before and after the group meeting, from the group meeting, and from working through the process itself. In many cases these learnings take the form of direct feedback or insights to our ‘straw man’ sample structure; in other cases, they take the form of existing gaps that force a deeper level of specificity as we explore the questions. We have perhaps also improved our ability to productively engage with financial institutions, evidenced by their interest in continuing to collaborate with us on this issue.

We summarize key learnings below while taking stock of how we have progressed toward the initial problem statements.

We started out framing the problem from two perspectives: first, there needs to be a willing supply of capital from asset managers and owners; second, there needs to be a sufficient supply of investable assets, which can meet the demand from the first group. The financing challenge is essentially one of designing assets in ways that allow decision-makers at asset managers/owners to feel comfortable committing funds for the five, 10 or even 20-30 years needed to effect landscape change. “What do investors want?” and “What do assets need to look like?” are the key questions we sought to answer.

We made important progress towards answering those two core questions. While we do not yet have definitive answers, we do have a better understanding of the gaps, considerations and potential options across key elements.

Overall, the ideas discussed were well received, with general support for a number of foundational principles:

- the overall vision;
- the general risk-sharing structure;
- the landscape scale;
- the ticket size (e.g. minimum investment at a scale suitable for institutional investors);
- the community involvement;
- the collaborative approach with other organisations already in the area;
- the visual presentation, namely constructing a ‘straw man’ to draw feedback worked well as a way to engage finance professionals.

Our conversations helpfully uncovered a number of challenges from the perspective of potential funders / investors. These can be grouped as follows:

- Revenues, Costs and Risks;
- Financial Structure;
- Organisational Structure and Governance;
- Other.

Revenues, Costs, and Risks

A key set of questions that emerged relate to the project’s **source of revenues**. How will these be earned, and what are the associated costs of setting up and operating these activities, and managing the entire project? What are the risks around revenues and costs in terms of the certainty of obtaining those revenues or staying within the cost projections, so that investors can get a sense of how well covered the costs are by

the revenues and thereby some sense of the potential returns? Investors need to feel they have enough information to address these questions before they can advance an idea to investment committees.

Our sample structure suggested four revenue possibilities:

- carbon / biodiversity credits;
- renewable energy;
- payments toward flood risk mitigation;
- improved resilience and therefore food security from regenerative farming.

In general, participants wanted more specifics and certainty around these revenue streams.

Carbon

Participants asked how the project would organize 10,000 farmers to change practices and increase soil carbon.

The underlying question here is around execution and operational risk. Other risks included regulatory and legal risk; specifically, the point was made that there is not yet a fully developed framework in the UK for monetizing soil carbon, and no guarantee whether or how quickly the current nascent attempts will develop. There is also considerable uncertainty as to how any domestic carbon framework might interact with or be influenced by international frameworks.

Biodiversity was recognized by participants as a significant upcoming gamechanger but again there is not yet visibility on a regulatory or legal framework for monetizing credits. Voluntary or international markets might be an option. However, financial institutions indicated a preference for clear policy and regulatory frameworks being in place, and felt that as a potential investment destination the UK was lagging others in this regard.

Renewable Energy

Although not a core part of nature-based solutions in themselves, our contention is that renewable energy projects would be an important part of any landscape transformation. They may help farmers to transition to a regenerative system by providing them with a diversified income (thereby catalysing carbon and biodiversity improvements indirectly) and could also be instrumental in decarbonising the landscape more generally. As such it is a key factor in system change.

With renewable energy (as well as carbon), participants said concrete offtake agreements would be needed to raise project finance. These would show that credit worthy customers were contractually obliged to purchase a certain volume of energy or carbon credits from the project for a specific number of years, at a certain price, thereby allowing a revenue projection.

Flood Risk Mitigation

Insurance is trickier to bring into an investment vehicle, as the benefit to insurance companies is reduced future cash outflows (lower claim payments) rather than increased future cash inflows (revenues). This therefore raises the question of whether insurance firms should be part of the same financing mechanism. Insurers are likely to have interest but what is the best way for them to be involved?

Improved Resilience

As to other potential sources of revenue, participants said they did not value non-monetisable benefits as part of revenue streams. This may include improved resilience to drought and flooding from moving to regenerative agriculture, and hence better food security. This is a key learning as it suggests the need to find

other ways of drawing value from these improvements. One idea was to consider outcome-based payments or grants from local/national governments, to be paid if certain of those non-monetisable benefits are achieved (e.g. payments received if carbon or water-related outcomes are achieved). Another idea was that we find a way to monetise higher land values that might result from the accumulation of positive externalities around nature, water and community.

Risks

Participants identified a number of risks to revenue streams. Investment committees will expect each to be identified in granular detail, scoped, rated and mitigated. Examples cited by participants included:

- **Construction and operational** risks as described above. For example, what is the risk that a certain percentage of farms will not transition to regenerative techniques, are there risks to constructing small scale renewable energy plants, and will both prove too expensive to maintain, therefore reducing the overall revenue streams from carbon and biodiversity credits in the longer term?
- **Regulatory** risks around carbon pricing, emerging biodiversity frameworks or other activities.
- **Reputational or legal** risks. If certain benefits are promised that fail to emerge, or if certain co-stakeholders suffer reputational damage, the risk of reputational contagion is high. Participants cited this as a considerable barrier for Executive Committees.

Participants flagged high set up costs to a landscape finance project as another challenge; the structure being suggested was thought to be relatively complicated and expensive to construct. It would therefore stand a greater chance of success if it was able to be replicated, at scale, multiple times. Larger funding deals would also help as costs would form a smaller proportion of the deal, making it more worthwhile.

Financial Structure

The issue of revenue sources, risks and costs leads to the question of financial structure. Our sample structure posited a funding vehicle which will essentially aggregate all the invested funds, channel them to projects, aggregate all the disparate revenue sources, and distribute these back to investors.

A key question is whether investors have claim at the project level, or at the entity level.

- **Project finance vs ‘counterparty’ vs Platform model?**
 - In a **project finance** model, which is often used for infrastructure or public service projects (such as [the Mersey Gateway Project](#), which one participant pointed us to), project revenues are protected and must go first to paying back investors, before any residual profits can be distributed by the sponsor. However, if the project defaults (runs out of cash) the investors do not have recourse to the project sponsor.
 - **‘Counterparty’** model: Here, a single entity, such as a development bank or corporate, may underwrite the entire project and simply issue their own green bond (to multiple investors). The bond proceeds go to the project, and project revenues go back to the entity’s overall pool of funds. The investors accept the credit risk of a single counterparty (the development bank), which takes the responsibility (and earns the residual profits) for managing the project. If a development bank is able to do this, it might be easier than trying to set up a new project vehicle.
 - **Platform/Fund** model: A hybrid of the two. The difference from a project finance model is that a platform might run a few different projects. This might be helpful if the interventions and cashflows involved are complex enough that more than one mechanism/project is needed. It also enables scale by using the same platform to launch other projects in other landscapes. Investors might invest at the project level, or at the overall platform level.
- **Blended Finance:** It could help to attract commercial investors if there was a subordinated tranche or ‘first loss’ tranche of capital, invested in by the government or a development bank, which bore

the first N% of losses (or, would start to be paid back only after all the commercial investors were fully paid back). Alternatively, the public sector could provide guarantees up to certain level of return (e.g. the government agrees to pay back N% of the invested amount even if the project fails), with similar effect.

- **Securitisation:** Another idea was to securitize the project revenues and distribute them to multiple smaller investors, instead of a handful of large investors. It is not clear yet if this is necessary.

Organisational Structure and Governance

The next key area is organisational structure and governance. Issues raised by participants include:

- Considerations:
 - Investors prefer that the project is sponsored, managed, or outright guaranteed by a well-known entity – either the UK government, a development bank, or even a commercial bank. This suggests a level of professional management and supports any credit rating.
 - However, the project needs to be aligned with and accepted by the local community and other stakeholders. Our original idea of a community trust owning the project vehicle was conceived for this reason, and also so any positive externalities might accrue to the community. But the idea saw pushback, with investors asking if a community trust would be sufficiently incentivised and capable to execute successfully.
 - Involvement of the local government in some way seems advisable. In general, government involvement is positive as it suggests regulatory support.
 - It was suggested that the project is not run by a commercial entity like a bank, as other investors might opt out if the project was seen as ‘owned’ by any particular competitor.
- So there are multiple permutations here for the project sponsor/manager, as well as the ultimate owner. The different actors include:
 - The UK government or agencies such as the EA or Green Finance Institute;
 - Local government, e.g. Greater London Authority, [Greater Manchester Combined Authority](#);
 - Development banks, e.g., Development Bank of Wales, or the UK Infrastructure Bank;
 - Commercial organisations such as a bank or asset manager;
 - Infrastructure owners such as water companies;
 - NGOs.
- One possibility is for the front-end structure to be set up and professionally managed by a development bank or NGO, which would be paid for providing this service, and with local government and EA involvement and oversight. The project could be owned by the local government or a community trust, so that any residual profits are reinvested locally.
- A related question is whether equity investment is relevant here – there might be scope in parts of the project, if not at the overall project level itself.
- Another possibility is that the project is as one part of a bigger infrastructure project, which might cost billions, with this project playing a complementary ‘nature-based solutions’ role. However, a water company, for example, is limited by UK regulation on the amount of non-water related business it can do.

Other issues to consider

- **Complexity:** Participants recognised potential tension between innovation and complexity when designing financial structures. The former is attractive to some investors, but familiarity and simplicity are also highly prized. The choice between the two is not binary but both needs must be borne in mind.
- **Scale:**

- The project needs to be large enough for the potential returns to be worth the cost of due diligence, but not so large that (especially for a new idea) it is seen as unfeasible and requires extra strict diligence due to its size.
- Project size buckets are roughly: Financial institutions have an investment threshold in the hundreds of millions. However, anything £1bn and above would be regarded as extremely ambitious for an investment model that still needs to be validated.
- This suggests it might be viable to aim for a ticket size around £250m – this would be sizeable enough to encourage institutional investors to dip their toes in a structure like this, but not so large that it would attract extra scrutiny.
- **Sustainability and impact considerations:**
 - Measuring impact is important, but investors are still learning and willing to accept qualitative comments or narrative.
 - ‘Additionality’: that said, one complication in the UK might be the need to prove ‘additionality’ – the idea that the positive outcome would not have occurred in absence of the investment (this may only be relevant for specifically defined impact funds).

So, what do investors want? Adequate economic return, real impact, low transaction costs and with risks adequately addressed. If a project can deliver this, there is a willing investor base.

6. Next steps

A number of landscape-centric studies have identified the interventions that need to be carried out to transform landscapes. What has been rather less successful is attracting large-scale capital flows to fund these interventions, or getting the locals in the landscape to enter into such structures given the scale of change they need to be willing to carry out. On the Wye-Usk landscape, our approach has been to create a Transition Lab to bring both local and finance participants into a single collaborative space.

This initiative has sought to establish the finance industry interventions that would shape the necessary cash flow patterns, risk-return profiles, fund structures, due diligence processes, and other actions that would enable financial institutions to be comfortable with investable landscape interventions. We felt it was important for financial institutions to be involved as co-creators in identifying the interventions needed on the finance side of the landscape-finance fence.

What this work has established is that high-quality, well-structured projects, which address aspects across finance and a fair sharing of the benefits of the monetisation with local communities, are credible tools for investment.

What has also been established is that there is much further work that needs to be done to make a landscape-scale transformation into an investable proposition. Some of the work relates to bringing well-established financial tools into environmental propositions, such as seniority of debt or risk-bearing equity. Other components relate to the development of new concepts, such as community asset trusts or regulated markets for biodiversity credits.

There is an implicit assumption among those involved in landscape interventions that the creation of a Community Interest Company addresses a multitude of financing problems. This study finds that entities receiving external finance need to be investable in their own right and demonstrate governance capabilities that address due diligence concerns at the start of the project, and ongoing management issues through the life of the project. Most such Community Interest Companies would fall at these hurdles.

It is also clear that there is an appetite within mainstream financial institutions to participate in the *development* of the tools and products needed to enable landscape transformation. This is an opportunity not to be missed, since financial institutions are rather more likely to regard as credible the initiatives they have co-developed. Such an “outside-in” innovation process contrasts with the “inside-out” process that is at the heart of many existing landscape finance initiatives.

North Star Transition will continue the development process for landscape finance with institutions that are already engaged in the process and new participants as well.

7. Glossary

Term	Definition
Aggregation	Bringing together multiple landscape projects into a single investment portfolio. Such a vehicle has opportunities to reduce transaction costs and due diligence costs for investors.
Blended finance	Bringing together different types of capital from, potentially from a range of private, state and philanthropic sources. Such a model can make it easier to introduce private funding sources to community-based actions.
Capital	While capital is usually thought of as being financial capital, it can be thought of as resources used to produce a return. The resources and the returns can be diverse in their nature. The International Integrated Reporting Framework defines six different types of capital: financial, infrastructure, social and relationship, natural, human and intellectual capitals.
Carbon credit	A tradeable financial product that monetises 1 tonne of CO ₂ equivalent (tCO ₂ e).
Ecosystem services	Ecosystems provide a variety of benefits, including provisioning, regulating, cultural and supporting services. Many environmental actions are planned to be funded by monetising ecosystem services.
Impact	Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return.
Institution	An organisation that invests money or banks money on behalf of clients or members. In this study, we have focused on Systemically Important Financial Institutions (SIFI) as defined by the Financial Standards Board.
Investment	The provision of capital (e.g. debt or equity) for an expected return, including the repayment of capital. This needs to be differentiated from non-repayable capital, such as that provided by grant or philanthropic sources. It is also different from payments made for the purchase of services, such as payments for ecosystem services.
Nature-based solutions	The actions taken in a landscape to manage and restore natural ecosystems in ways that address societal challenges, human wellbeing and biodiversity gains.
Transaction costs	The costs incurred when buying / selling a good or a service. A related issue to consider is due diligence costs, which relate to verifying or validating the appropriateness of the claims made regarding the investment's returns, risks and governance.