# The Role of a Landscape Bond in Financing Sustainable Land Use and Territorial Development

ecoagriculturepartners

1000 LANDSCAPES FOR 1 BILLION PEOPLE

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The accelerating effects of biodiversity loss and climate change continue to attract unprecedented global attention. Investors, corporations, agencies, governments, and landscape partnerships are concerned with understanding threats and consequences from ongoing land degradation and climate risks, including the effects on ecosystems and supply chains. These effects also represent systemic risks to global financial stability. Public pressure continues to mount for the financial, public, and private sectors to demonstrate commitment and effectiveness regarding nature-positive and climate-aligned practices.

Unfortunately, the interlinked challenges surrounding biodiversity conservation, landscape restoration, sustainable food systems, and climate change adaptation do not lend themselves to easy solutions. Climate change negatively impacts ecosystems and ecological processes that are inherently dynamic, sector-agnostic, and nonlinear. Furthermore, though local stakeholders play a crucial role in the landscapes where adverse effects are most acute, these groups are typically constrained by limited resources and control. Stakeholder engagement is a vital step to ensure a shared understanding of natural-resource and climate-change issues and ensure that solutions account for how they share benefits and incentives across groups.

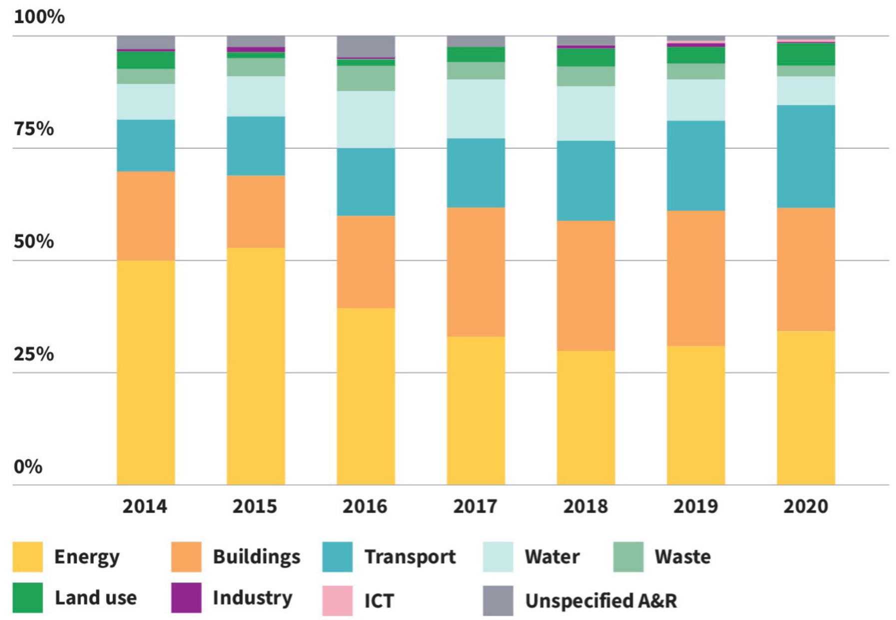
Although the current universe of green bonds is a step in the right direction, research and experience have documented how ecosystems and the landscapes in which they reside are anything but compartmentalized or unconnected – as are the critical challenges to solving these interrelated issues.

However, green bonds have historically funded siloed, sector-specific activities. More than 80 percent of the $500 billion in green bonds issued in 2021 focused on just three sectors: energy, buildings, and transport (see Figure 1). Top-down guidelines and neatly compartmentalized taxonomies have also contributed to the limited use of green bond proceeds.

Single-sector approaches are generally insufficient to produce sustainable land use and territorial development that promotes resilience and helps communities mitigate and adapt to climate change. In their current iteration, green bonds are not designed to address many systemic issues and externalities underlying nature-destructive practices, including climate change's physical and transitional impacts. Engagement and collaboration with stakeholders in local landscapes have also been largely absent in green bonds, as there is limited demand and willingness to pay for this.

This brief introduces the concept of a landscape bond, explains its importance, and outlines the entities that may issue the bond. This brief is not intended to serve as a step-by-step guide on developing and administering a landscape bond. Instead, it seeks to inform considerations for financial institutions, investment professionals, foundations, and other actors, exploring how to effectively shift funding towards multi-sectoral and place-based impact.

**Figure 1: Green bond use of proceeds (UoP), by sector**




Source: Climate Bonds Initiative, 2021

### Why is a landscape bond needed? How would it differ from a conventional green bond?

Investment solutions must transcend the same boundaries as the challenges they seek to tackle. To achieve transformative and sustainable change, restoration efforts must be coordinated and cooperative in accommodating multiple landscape-scale objectives while remaining responsive to local communities. Local businesses, farmers, and other stakeholders may have competing and short-term interests. These critical challenges are ones that landscape bonds seek to solve.

The integrated landscape management (ILM) approach lies at the core of a landscape bond and plays a vital role in the evolution away from conventional green bonds. ILM involves collaboration among multiple stakeholders from multiple sectors to achieve sustainable and resilient landscapes, seascapes, and territories.

There is increasing recognition of the need to think beyond single-sector approaches and, instead, consider the broader spectrum of all sectors and their interactions. This recognition is one reason ILM has significantly grown in importance as a solution for climate change and biodiversity loss and is increasingly resonating with investors, United Nations agencies, and NGOs. In contrast with the sectoral investment orientation of conventional green bonds, landscape bonds have the potential to fund robust engagement with local stakeholders to coordinate activities and agree on objectives.

Landscape bonds would also differ from green bonds in the breadth of funded projects. To ensure sustainability and stewardship, a landscape bond must fund traditional agriculture and infrastructure investments, conservation activities, and activities inherently linked to restoration and conservation, including strengthening resources for stakeholders in landscape partnerships.

These activities might include:

- Resolving governance and land-tenure issues
- Coordinating investment activities across existing strategies and action plans working across sectors and scales (such as jurisdictional or regional investment planning for agriculture, transport, energy, infrastructure, biodiversity, and climate change adaptation/mitigation)
- Providing technical assistance, feasibility studies, and coordination to realize project synergies.

### The integrated landscape investment portfolio concept

A landscape bond would be a critical tool in an integrated landscape investment portfolio (ILIP) by providing funding for essential projects and serving the place-based needs of the landscape or territory. An ILIP encompasses the set of investments that collectively contribute to multiple landscape-scale objectives agreed upon by key stakeholders. A landscape bond would seek to invest in the entire ILIP or a sub-set of investments providing investors with adequate cash flows and risk-return profiles.

This integrated portfolio details cross-sectoral investments and finance needs required for a landscape or territory to reach agreed-upon objectives. Specifically, landscape projects and activities vary in terms of revenue generation and timing of revenues. Landscape bonds would serve as one finance mechanism best suited for certain stages and projects and accommodating different investor risk appetites.

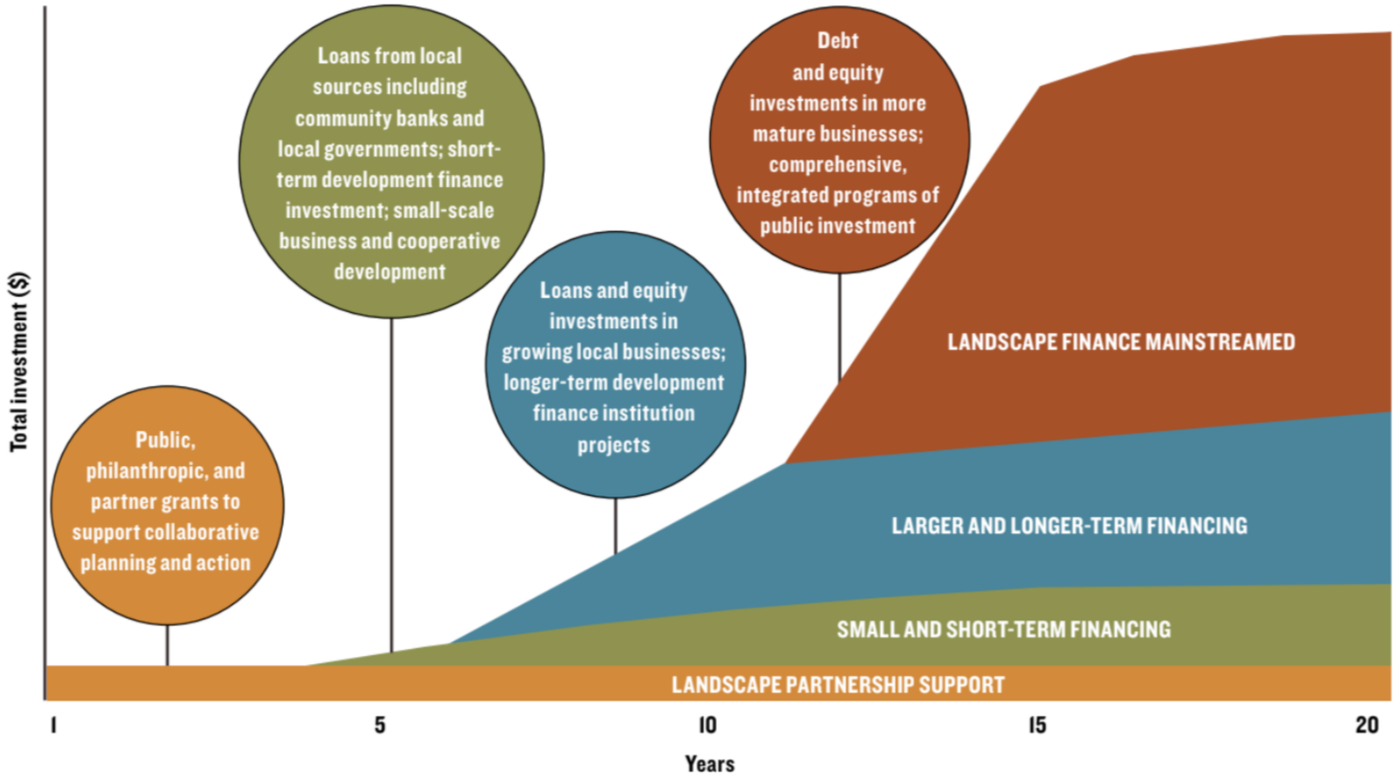
By packaging together lower-return projects with more commercially appealing ones, an ILIP can attract a broader range of investors and accommodate different risk-return appetites and objectives. For example, an integrated landscape finance portfolio may couple commercially accepted projects or investments with more nascent yet essential activities, such as training or securing land tenure to produce a more diversified "whole" that brings together funding sources with different risk tolerances. Accordingly, a landscape bond would enable investors to support transformative impact while achieving a competitive return.

A landscape bond would also build on the formative work of enabling and concessional investments (see Figure 2) by leveraging cash flows from larger, more investable projects (i.e., infrastructure, energy, transport). Compared to other components of an ILIP, a landscape bond provides funding over a longer—and more aligned—time frame.

### Who would issue landscape bonds?

ILM is a potent tool for potential sovereign and regional issuers seeking to reconcile competing environmental, social, and economic objectives. National and regional governments are seeking ways to finance solutions in an institutionalized manner to meet the growing needs of vulnerable communities exacerbated by climate change impacts.

**Figure 2: Evolution of landscape investment and financing over time**




Shames and Scherr 2020, Figure 2.4

NGOs, development banks, and foundations are among other actors incentivized to support the issuance of a landscape bond. Government policies and action plans often depend on adoption on the landscape level to ensure sustainable practices take hold. Relationships between landowners and farmers, local businesses, larger corporations with supply chain exposure to a landscape, local utilities, and government agencies must develop. As a result, NGOs, local governments, and other enabling organizations may be candidates for initial iterations of landscape bond issuance when there are limited experience and track records with these kinds of instruments. Over time, as non-financial costs of climate and biodiversity are expected to be internalized in accounting systems, this would shift to be more commercially attractive to more traditional actors in finance.

## Next steps in developing a landscape bond

The path to realizing landscape bonds is complex. Financial institutions and international programs are now wrestling with how to shift funding towards multi-sectoral and landscape-level impact and how to address complexity and connectivity best. Engaging investors and funders willing to wrangle with this complexity is required. A transformative step is needed.

Multi-sectoral investment through landscape bonds seeks to transcend conventional green bonds by delivering coordinated investment in spatially sensitive projects and businesses and catalyzing ecological and economic synergies that drive regeneration at a landscape scale. Landscape bonds can reduce trade-offs and strengthen synergies for landscape objectives by addressing shared problems or creating opportunities.

To accomplish the above objectives, landscape partnerships must organize long-term coordination for projects to reach sufficient scale. Green projects face an increased risk of failure in achieving desired outcomes and mitigating tradeoffs without adequate coordination. Therefore, a landscape bond's alignment and coordination may reduce systemic risks, increase resiliency, and reduce credit risk for investors.

Building new areas of expertise could bring us a step closer to the first landscape bond.

- Training designated managers skilled at weighing financial and ecological considerations, and identifying synergies and needs, is essential to respond to contextual and adaptive landscape needs and guide the dispersion of funds. These managers can enable aggregation, steer incubation of new businesses and business activities, and design investment models that share responsibility with well-established organizations without taking excessive returns.

- A landscape financial coordinator would engage, evaluate, and monitor how projects and activities are funded on a landscape level. These specialized financial coordinators would be proficient in landscape management and landscape-aligned investment.

- Analysts will need familiarity across several key sectors to recognize these synergies and their potential to deliver impact at scale.

These financial actors, through their collaborative and reporting responsibilities, serve to build a system of trust, accountability, and transparency that enables sustainable investment.

Landscape bonds also would require intermediary organizations to develop a robust pipeline of landscape projects and tools to assess the investment readiness of proposed landscape investments.

Work has begun to test  this concept in a small-scale pilot in Malawi. Such efforts can serve as case studies that shed light on how best to adapt investment to contextual needs.

Developing tools to deliver robust and incisive data is another crucial next step. The technical analysis must demonstrate how non-revenue generating landscape activities act as building blocks for creating new investable projects/revenue streams and scaling up existing ones. Innovative digital landscape tools and resources can strengthen future understanding of what is investible through both ex-ante and ex-post analysis.

More data surrounding transparency and shared risks are also necessary to incentivize actors and recognize interdependencies. Feasibility studies and financial modeling can steer landscape investment. Many institutions are building promising tools. The Natural Capital Lab (IDB), the 1000 Landscapes for 1 Billion People initiative through Terraso, and the Center for International Forestry Research (CIFOR) are developing insightful data, software and capacity building tools that helps landscape partners plan, finance, and track their progress towards the development of ILIPs. LandScale is a tool that uses a holistic assessment framework to generate data analysis, visualization, interpretation, and conclusions in a landscape.

Additional tools are in design to help build this expertise and bring us a step closer to landscape bond issuance. For example, LIFT (designed by EcoAgriculture Partners and Netherlands-based IUCN) and 4 Returns (led by Commonland) helps landscape partnerships understand how they can value landscape-scale transformation and how to develop landscape investment portfolios. The Landscape Finance Accelerator of the 1000 Landscapes for One Billion People initiative is working to bring many of the tools together and to expand upon them.

These next steps, and the innovations taking place, are vital to ensure sustainable land use and territorial development.

Landscape bonds would be uniquely suited to deliver coordinated investment in spatially sensitive projects and businesses with significant ecological and economic synergies to achieve regeneration at a landscape scale. Bond proceeds would support and strengthen stakeholder engagement, landscape assessment, collaborative visioning, and action planning, which reduces risks and realizes synergies across the landscape when done well. These elements can no longer be overlooked or underfunded if we are to deliver nature-positive outcomes for global investors, national and regional governments, local stakeholders, NGOs, global citizens, and the landscapes and ecosystems we rely on.

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## References


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