

Investing in Biodiversity

Markets to finance the protection, restoration and sustainable management of nature offer natural capital investors opportunities to improve biodiversity and generate a positive financial return

Unprecedented global action to address the decline in nature and its causes is underway, and investments in biodiversity will be a critical part of these efforts. The global rate of species extinction is unlike anything the world has seen since the time of the dinosaurs – today, one million plant and animal species are threatened with extinction, many within decades. Because over half of the world’s economy is dependent on nature, these losses threaten the wellbeing and livelihoods of people all over the world.

Human activity is the primary cause of biodiversity loss – land use change is the biggest driver, but other factors such as climate change, pollution and invasive species contribute to biodiversity’s dangerous decline. Addressing this global challenge will require changes in the way we value biodiversity and manage land and will require new private investment along with supporting policies that encourage private landowners and land managers to take action.

Market-based approaches designed to incentivize the protection, improved management and restoration of nature can both expand the reach of policy to private landowners and encourage investment that helps achieve biodiversity conservation targets. Environmental markets put a price on protecting and restoring nature, creating incentives to facilitate private capital into investments that improve, not diminish, biodiversity. And with the right incentives in place, protecting, improving and restoring ecosystems for biodiversity can become a source of return for landowners and not another cost of doing business. Here we highlight several existing and developing market-based pathways for land-based investments to positively impact biodiversity.

U.S. market frameworks

Conservation land sales and easements

Conservation land sales and easements are two mechanisms for public or private sector actors to protect biodiversity and other environmental values on private land through the acquisition of full or partial property rights. A conservation land sale conveys full property rights from the seller to the buyer, and the mechanics of the transaction are not unlike typical private land sales. A conservation easement is a voluntary legal agreement that permanently limits development to protect conservation values. For timberland owners, conservation easement sales can be a way to generate revenue and protect biodiversity while maintaining land ownership and ongoing forest management. For example, a “working forest” conservation easement allows forestry operations and harvesting to continue while prohibiting land development or land use conversion.

Conservation Reserve Program

The Conservation Reserve Program (CRP) is one of the largest private land conservation programs in the U.S., with more than 24.8 million acres enrolled in 2023. This USDA-funded program targets farmland owners of productive cropland where conservation or restoration practices can be implemented on environmentally sensitive land to protect wildlife habitat, improve

Select market frameworks to support biodiversity

	Framework	Market Type	Incentive structure	Source of return	Permanence	Protect	Improve/restore
U.S.	Conservation land sales	Voluntary	Land sale	Payment from public or private sector to landowner for land rights	Varies	+	
	Conservation easements	Voluntary	Partial sale of land rights	Payments from public or private sector to landowner for e.g. development rights	Perpetuity	+	
	Conservation Reserve Program	Voluntary	Incentive payment	Payments to landowner from federal or state agencies to remove environmentally important land from production and establish native species for conservation	10-15 years	+	+
	Mitigation bank credits	Compliance	Tradable certificates	Public or private developer of project impacting wetlands, streams or habitat purchase credits from mitigation bank owner to compensate for unavoidable impacts	Perpetuity		+
Global	Carbon credits + biodiversity co-benefits	Voluntary	Tradable certificates	Payments for nature based carbon credits for measurable and independently verified emissions reductions and removals plus certified biodiversity co-benefits	40 years	+	+
	Biodiversity credits	Voluntary	Tradable certificates	Payments for credits to landowner for actions that result in measurable and scientifically verified biodiversity outcomes (private and public sector programs in development)	Varies	+	+

water quality or conserve soil resources, for example. In exchange for these management changes, program participants receive annual rental payments, partial reimbursement for costs or incentive payments. The contract period for land enrolled in the program is typically 10-15 years.

Mitigation bank credit markets

A mitigation bank is an area of wetlands, stream or habitat that has been enhanced or restored to balance unavoidable impacts from development. This market-based system of credits and debits has developed and grown over the past 30 years, ensuring that there is no net loss of these ecologically important, federally protected areas within the system. The compliance credit market is overseen by state and federal regulatory agencies, which approve mitigation bank projects that earn credits as well as assess unavoidable impacts from development that incur debts. Credits are traded within ecologically defined markets and are performance-based. Buyers of credits typically include public or private developers of infrastructure, industrial, energy, commercial or residential projects.

Carbon market frameworks

Though global voluntary carbon credit markets are designed to primarily support climate action, nature-based projects – approaches that increase carbon sequestration and storage in plants and soil – provide a multitude of co-benefits. Nature-based carbon projects that restore native vegetation, protect wildlife habitat and improve water quality all in addition to sequestering and storing carbon directly benefit biodiversity. Recognizing this potential, carbon credit registries have certifications for projects that demonstrate tangible biodiversity benefits in addition to climate benefits.

For example, projects registered under Verra’s Verified Carbon Standard (VCS) can be certified in conjunction with the Climate, Community and Biodiversity Standard (CCB). The CCB Standard positively identifies land management projects that deliver net positive benefits for climate change mitigation, local communities and biodiversity.

Additionally, several carbon registries also have mechanisms to recognize projects with U.N. Sustainable Development Goals (SDGs) linked biodiversity benefits.

Developing biodiversity credit markets

Biodiversity crediting frameworks are another market-based approach to incentivize investment in nature. Incentives are created through payments for credits from projects that result in measurable and scientifically verified positive outcomes for biodiversity (e.g. species, ecosystems, natural habitats). Interest in this type of nature-focused crediting framework has risen in recent years, in part because of the growth of the voluntary carbon market.

Several independent and government-led biodiversity crediting frameworks are in early stages of design and development, but still face challenges. The future success of biodiversity crediting frameworks currently in development will require advancements on all sides, including:

- Establishing common principles and standards for credits and methods for quantifying benefits;
- Building a robust pipeline of projects and high-integrity supply of credits; and
- Developing viable sources of demand.

What does this mean for investors?

Nearly half of today’s institutional investors are investing in timberland and farmland seeking positive environmental impact. And we know that investments in land-based assets can generate quantifiable biodiversity benefits – e.g., by protecting conservation set-asides, improving management practices and actively restoring ecosystem structure and function. For investors seeking to direct capital toward strategies that benefit biodiversity, there are a multitude of opportunities to access well-developed existing and emerging environmental markets.

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As an asset class, agricultural investments are less developed, more illiquid, and less transparent compared to traditional asset classes. Agricultural investments will be subject to risks generally associated with the ownership of real estate-related assets, including changes in economic conditions, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties.

Timberland investments are illiquid and their value is dependent on many conditions beyond the control of portfolio managers. Estimates of timber yields associated with timber properties may be inaccurate, and unique varieties of plant materials are integral to the success of timber operations; such material may not always be available in sufficient quantity or quality. Governmental laws, rules and regulations may impact the ability of the timber investments to develop plantations in a profitable manner. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance and risks related to leasing of properties.

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