The Future of Biodiversity Investing & Innovation

A MULTISTAKEHOLDER REPORT BY BRAINFOREST

Why This Report?

Making biodiversity an investable asset

Biodiversity loss is accelerating, and its impact on economies, supply chains, and business resilience is undeniable. Yet, while climate finance has taken off, nature-based solutions remain vastly underfunded, misunderstood, and difficult to scale. To bridge this gap, Brainforest interviewed leading investors, founders academics, and NGOs to understand the current trends, barriers, and opportunities in biodiversity investing.

Across these conversations, a few clear themes emerged: AI is transforming biodiversity tracking, regenerative agriculture is leading investment priorities, and biodiversity credit markets remain immature. But the biggest challenge? Making nature-based solutions financially viable and scalable. This report breaks down the key takeaways from our expert discussions. If you're an investor, startup, or policymaker, this is your roadmap to navigating the future of nature investing.

TLDR: Nature as an Emerging Investment Space

01

Nature-based solutions are underfunded
Despite their proven impact on climate and biodiversity, nature-based solutions receive far less funding than decarbonization efforts. Closing this gap presents a major opportunity for investors and innovators to drive both environmental and financial returns.

02

Regenerative agriculture and AI are on the rise
Farming methods that restore soil health and AI-driven biodiversity tracking are two of the fastest-growing trends in sustainability.

03

Regulations are pushing companies to act
Laws like EUDR and CSRD are making supply chain transparency a requirement, not a choice. While enforcement is delayed, businesses must adapt now to stay ahead.

04

Scaling biodiversity investments is the challenge
For nature finance to work, solutions must be scalable and offer clear financial returns alongside environmental impact. At Brainforest, we're working to bridge this gap, supporting models that make biodiversity investment both viable and investable.

Xavier Lorphelin
Managing Partner at Serena

serena

About Serena

Serena is a Paris-based venture capital fund managing nearly €1 billion in assets. Serena has been investing in climate tech and nature tech startups for the past five years, focusing on decarbonization, regenerative agriculture, water management, and pollution reduction.

Key challenges

There are several challenges currently limiting investment in biodiversity and nature tech.

01 **Fragmentation in Monitoring Reporting and Verification** (MRV) technologies makes it difficult to scale. Startups are offering niche solutions rather than integrated platforms.

02 **Localized complexity limits scalability**. Unlike software-based climate tech, biodiversity and water tech must adapt to specific ecosystems.

Clear opportunities

One of the greatest challenges currently is to measure, analyze, standardize and draw insights from the data we collect on biodiversity and nature. Investors are actively seeking actors who are creating integrated MRV Platforms rather than niche solutions. Additionally, European investment in biodiversity tech is catching up with the US, driven by regulation and mission-driven entrepreneurs creating a favorable landscape for investment at all stages.

Nature-tech investment

What are the sectors with largest share of invesment in nature-tech?

01 **Regenerative agriculture has historically attracted the largest share of nature tech investment**, particularly in the US and Europe. These investments focus on improving soil health and biodiversity.

02 **Artificial intelligence (AI) is helping improve biodiversity measurement**, making it possible to extract insights from vast datasets.

03 **Water and pollution are also quickly gaining traction** in VC investments, from water management and agricultural irrigation to pollution control.

“We believe MRV solutions will converge. Right now, there’s too much fragmentation, but eventually, platforms will dominate.”

Fabienne Bauer
Manager for Monitoring & Climate

Swiss Platform for Sustainable Cocoa

About SWISSCO

Swissco is a multi-stakeholder platform focused on tackling major sustainability challenges in the cocoa industry, including living income, child labor, climate, transparency & traceability, innovation, and gender.

Industry challenges

Cocoa cultivation can be a challenge to biodiversity and nature. However, when practised sustainably, it has the potential to contribute positively to environmental conservation. Agroforestry is a promising alternative to monoculture, but can struggle with weak markets for non-cocoa crops, especially perishable goods.

Many rural communities lack essential infrastructure complicating the implementation of large-scale biodiversity initiatives. Limited coordination among local cooperatives and traders can challenge landscape-scale sustainability efforts' success.
Additionally, there is a disparity in progress between large corporations, which are aligning with net-zero targets, and SMEs, which face challenges with data collection and compliance.

Action is needed

To address some of the critical challenges in the cocoa industry, there needs to be:

01 Trust-building collaborative efforts among all actors.

02 Support for market development of agroforestry products.

03 Investment in infrastructure and services.

The time is now

Regulations like the EU Deforestation Regulation (EUDR) have driven demand for traceability technologies and new companies specializing in supply chain transparency.

“The EUDR has been a huge driver of new companies emerging, especially in transparency and traceability.”

Daniel Naeff
Head of Innovation & Entrepreneurship

ETH AI CENTER

About ETH AI Center

The AI Center at ETH bridges academic research, startups, and corporates, helping to translate cutting-edge AI innovations into real-world applications.

A unique opportunity

"**AI is a democratization engine**." It enables better insights, better processes, and more efficient sustainability solutions especially as we shift toward multi-task AI systems. It will allow us to "not only measure impact but also predict environmental risks."

Key challenges

There are two key challenges to the adoption and innovation of AI:

01 Regulations like the EU AI Act arise to ensure safety but may also create uncertainty around AI applications in sustainability.

02 AI adoption stalls due to human factors like readiness, incentives, and legacy systems, not technological limitations.

Accelerating AI adoption in biodiversity

Key strategies to accelerate adoption in biodiversity and sustainability include connecting biodiversity insights with investment opportunities, as

"the biggest opportunity is combining analytics with sustainability finance to create new models for valuing nature."

Another important aspect is to focus on adaptable applications rather than specific models. Lastly, collaboration between regulators, investors, and innovators will be essential to ensure alignment with clear and transparent regulatory frameworks.

Eva Jaag
Managing Director

somaha foundation

About Somaha Foundation

Somaha Foundation focuses on supporting people in need, promoting an open and diverse society, and protecting nature. They prioritize funding initiatives that do not receive enough market attention.

Shifting trends

Public awareness of biodiversity has grown significantly, moving from obscurity to a trending topic. Meanwhile, stakeholders are increasingly recognizing the link between biodiversity, conflict, and peace-building, spotlighting its role in fostering stability. Cross-sector collaboration and regulatory support hold the greatest potential for impact.

Barriers to financing

Biodiversity faces significant financing challenges. Limited private sector involvement, a lack of universal impact metrics, and a corporate focus limited to climate all contribute to the problem. Companies often lack the resources to prioritize biodiversity, especially without clear financial incentives or regulatory frameworks.

Focusing on impact

Unlocking biodiversity's potential requires clearer impact measurement tools and stronger business cases for investment. Pilot initiatives that align biodiversity goals with profitability will reveal what solutions are a best fit. Adding this to the need for standardized reporting which will help build confidence among corporates and investors.

"The best way to improve collaboration is by doing: testing models, learning from them, and scaling what works."

Yannick Ritschel
Foundation Director

Fondation Valery

About Fondation Valery

Fondation Valery is a Philanthropic Venture Partner dedicated to creating a new economic standard that places positive impact at its core. They focus their support in three verticals: circular economy, biodiversity and renewable energies.

Technology driven trends

Technological advancements in data collection—from eDNA and bioacoustics, to AI-driven MRV—are enhancing the accuracy and scale of biodiversity measurement. This progress supports the urgent need to build trust in this market through empirical data verification, financial instruments, and smart contract-driven accountability.

Key challenges

Biodiversity investment is hindered by the lack of a clear market, creating a "snake eating its tail" funding cycle where data requires investment yet its value is unrecognized. The disconnect between investors and philanthropists leaves proof-of-concept initiatives underfunded, and slow iteration limits scalability. Catalytic philanthropic capital is urgently needed to break this cycle.

Driving investment in biodiversity

There are several ways to drive progress in biodiversity investment:

01 **Strengthen biodiversity valuation with robust MRV** systems and clear impact metrics to build investor confidence.

02 **Increase direct philanthropic funding** for pilot projects and leverage blockchain for transparency.

03 **Foster multi-stakeholder collaboration** to integrate nature into financial frameworks.

"Enhanced measurement and auditing will be instrumental in embedding nature into our economies."

Kristjan Jespersen
Associate Professor and partner

CBS LOH-GRONAGER PARTNERS

About Kristjan

Kristjan Jespersen is an Associate Professor at Copenhagen Business School (CBS) and a partner at Loh-Gronager Partners. He is also an advisor to the Saudi government on biodiversity, forests, and nature-positive strategies.

The state of biodiversity investment

Biodiversity investment is stuck in endless pilot projects, where solutions are tested but never scaled. The future of biodiversity finance must focus on developing structured, long-term investment mechanisms. Real change requires scalable, investable financial models that integrate biodiversity into the mainstream economy.

How Do We Price Nature?

Nature is more complex than climate. At this stage, climate finance has clear metrics (CO_2 reduction), while nature lacks universal valuation models. By embedding nature-related risks and opportunities into financial decision-making, investors can move beyond corporate ESG checkboxes and actively allocate capital to biodiversity-positive projects that yield both financial and environmental returns.

How we fund nature

A shift in incentives and mechanisms is needed to address key challenges:

01 Businesses and investors focus on 5-year cycles, but biodiversity requires long-term investments. We need to align models with impact timelines.

02 Current funding mechanisms rely on financial incentives rather than systemic change, we need to reverse this behavior.

Projects to systems

Biodiversity investment must move beyond isolated projects and fragmented funding models. Integrating nature into financial systems, ESG strategies, and corporate supply chains is essential. Advancing better valuation models, developing scalable business models, and investing in AI-driven nature intelligence are critical next steps to drive this transformation.

Camilla Rizzi
Sustainability and Energy Ventures Associate

PLUGANDPLAY

About Plug and Play

Plug and Play is a global early-stage investor and open innovation platform. The company acts as a bridge between corporates and startups, helping companies access pilot programs, funding, and growth opportunities.

Key trends shaping the market

Sustainability and nature-focused startups are riding a wave of innovation. Corporates increasingly demand solutions that address both climate change and biodiversity loss through digital MRV, carbon credit verification, and predictive risk tools.
AI is enhancing data collection via eDNA, bioacoustics, and satellite imagery, while emerging 'natural fintech' models—such as biodiversity credits—are beginning to reshape valuation.
Overall, connecting biodiversity and environmental data with predictive analytics and financial decision has the potential to unlock real investment potential.

“Corporates need solutions that integrate seamlessly into their systems. Founders should build with this in mind."

Barriers hindering scale

One of the biggest challenges for biodiversity-focused startups is monetizing nature-based solutions. While these solutions deliver environmental and social benefits, many struggle to translate these into financial returns, limiting their appeal to investors. Additionally, greenwashing risks and a lack of regulatory clarity create skepticism around sustainability claims, making transparency and data verification crucial.

Driving future impact

AI and predictive analytics are pivotal for scaling biodiversity solutions and attracting investment. By connecting biodiversity data with predictive tools and financial decision-making, startups can deliver actionable insights that resonate with corporates.

Antony Yousefian
Partner

THE FIRST THIRTY
INVESTING IN NATURE

About The First Thirty

TFT Ventures is an operator-backed, early-stage fund that invests at the intersection of nature and AI. They support transformative technologies that rewire food and health systems, driving economic value while advancing planetary health.

Focus on the food system

AI is driving the next generation of solutions by addressing complexity through predictive analytics and feedback systems. Key areas of focus emerging include regenerative agriculture and soil health, especially the innovation of the soil microbiome and its connection to the human microbiome and our health.

Financing challenges

The nature-tech sector faces significant challenges due to a lack of capital, slowing ecosystem development and startup growth. Misallocation of funds exacerbates the issue, with investors often backing hyped solutions over system-level innovations. Additionally, regenerative solutions demand system-wide changes and cannot scale overnight, making them less appealing to traditional VC models.

“Food” for thought

“Nature’s decline will put the most pressure on food systems. That’s why we’re deploying capital there.”

01 There is an urgent need for investors to move beyond traditional biodiversity and carbon credits, which are seen as inadequate, toward system-level, bottom-up solutions that deliver real-time, measurable impact.

02 The most promising opportunities focus on startups using AI to decode nature’s complexity, generating primary data on biodiversity and soil health, and creating financial incentives that make nature more profitable than industrial alternatives.

03 There are untapped opportunities in areas like water quality and energy solutions where “nature has a competitive edge we don’t fully understand yet.”

Fiona Stappmanns
Synthesis Lead, Policy Outreach

WYSS ACADEMY FOR NATURE

About Wyss Academy for Nature

The Wyss Academy integrates science, policy, and practice to develop scalable solutions for environmental and socio-economic challenges. Through its Hubs in South America, East Africa, Southeast Asia, and Europe, it collaborates with communities, governments, and businesses to test and implement solutions that create positive impacts for both people and nature.

Nature-based Investment Opportunities

A recent analysis identified several critical themes with promising potential across the Wyss Academy's Hubs, which include:

01 Conserving biodiversity.

02 Advancing agroforestry and regenerative agriculture (including tech-enabled solutions and soil health).

03 Assessing nature credits and payment for ecosystem services.

04 Improving market access for Non-Timber Forest Products (NTFP) value chains.

Investment challenges

Investing in nature-focused startups presents unique challenges, including unclear connections to systemic issues and a lack of efficient entrepreneurial support in solutionscapes*.
The market remains underdeveloped and underfinanced, especially in certain regions, with a significant funding gap for early-stage startups.

***Solutionscapes** refers to the Wyss Academy's unique approach that combines five key elements to address complex challenges affecting both people and nature

Accessibility opportunity

Making nature investments more accessible to mainstream investors is crucial to addressing the funding gap.

The path forward is clear:
"Show potential through proof of concept" to demonstrate the impact and attract more capital.

Bertrand Klaiber
Program Founder

TECH 4 REGEN

About Tech4Regen

Tech4Regen supports deeptech startups developing bio-based materials, circular economy solutions, and industrial sustainability innovations, ensuring that environmental impact is incorporated into business strategies.

Local solutions capable of global deployment

Biodiversity loss is not just a global issue; it's deeply local, requiring solutions tailored to specific contexts. In Switzerland, for example, farmers face immense pressure to increase productivity while also safeguarding biodiversity, highlighting the need for farmer-centric approaches that integrate biodiversity protection into cost-efficient agricultural practices.

Adapting industries

Industries are turning to the circular economy to address environmental challenges, focusing on bio-based materials as alternatives to petrochemical-derived products. While these innovations, such as bio-based polymers, hold promise, they often fall short of matching the cost and performance of conventional materials.

The road to transformation

Driving impactful change in sustainability requires a shift in priorities and collaboration across sectors.

01 **Transformative progress needs collaborative partnerships** between industries, researchers, NGOs, and investors.

"Sustainability is not just about compliance—it's about business resilience and long-term profitability."

02 **Startups need support in securing early customers** to build commercial traction, as "investors will follow once they see market demand."

03 **Corporates must be incentivized to recognize biodiversity** as critical to their business strategies, viewing it on par with carbon reduction to mitigate risks and unlock opportunities.

Salla Mankinen
CEO & Founder

orijin

About Orijin

Orijin.io is a B2B SaaS company digitizing the first mile of food supply chains. They help coffee and cacao supply chains achieve operational excellence by providing digital tools that promote sustainability, ethical practices, and EUDR compliance.

Regulations and compliance

New regulations like the EUDR and CSRD are pushing for detailed traceability from farm to final product, requiring companies to collect data that was previously not necessary. With similar regulations being considered in the UK and US, supply chain transparency is becoming a global requirement.

This shift has led to the rise of digital tools for real-time tracking, as companies face increasing pressure to verify deforestation-free supply chains.

"The EU and its consumers need to be able to see where their products come from and whether the conditions in those supply chains are ethical."

Ground-level challenges

Many smallholder farmers lack awareness of EUDR requirements, which leads to low adoption rates. Additionally, unclear guidance from regulators creates inconsistencies in enforcement. While large corporations can absorb compliance costs, smaller suppliers face uncertainty about financial responsibility.

Improving supply chains

01 **Invest in farmer training** to help them understand the long-term benefits of compliance and forest protection.

02 **Encourage the creation of premium markets** for deforestation-free products, making compliance more profitable.

03 **Develop practical, clear compliance** tools with simple implementation steps ensuring actionable regulations.

Joshua Berger
CEO

BioInt

About BioInt

BioInt is a consulting firm specializing in biodiversity, and more specifically in the quantification of biodiversity impacts, dependencies and risks.

Nature-related financial risks

Financial institutions are increasingly focusing on data to assess biodiversity risks and impacts. This helps to establish funds for conservation but current models lack precision. Financial institutions are great allies because they see the risks and opportunities in biodiversity finance, unlike corporations, who mainly seek to cut costs.

Biodiversity credits

Biodiversity credits are becoming a primary focus, with upcoming shifts in pricing, especially differentiating between conservation and restoration efforts. The demand will largely be driven by obligatory markets in regions like the UK and Australia. However, regulations are expected to surpass credits in importance, with 2025 set to mark a significant regulatory change.

Data misconceptions

While new measurement technologies like eDNA show promise, they are often expensive and provide limited indicators, making them less practical for widespread use.
Overall, many startups overestimate the need for real-time biodiversity data, when the real priority is ensuring accuracy, reliability, and the long-term value of biodiversity.

Incentives for restoration

Clear and consistent regulatory frameworks are critical to incentivize biodiversity protection. Alongside this, financial institutions must develop better tools for assessing biodiversity risks, especially for insurance and investment products.

"We need enabling policies, reporting requirements, and financial flows to push biodiversity investments forward."

Alice Segre
Investment Associate

maze

About maze impact

maze is an impact investing company offering financial and non-financial tools to everyone committed to delivering positive social and environmental outcomes.

Community-led trends

A growing shift toward community-led conservation highlights the importance of bottom-up, locally driven projects in biodiversity efforts though scaling these models remains challenging. Deep tech innovations, such as AI and digital twins, offer promising ways to scale proven actions, enabling predictive modelling for deforestation, resource extraction, and ecosystem impacts.

Barriers in innovation

01 Nature-based solutions face challenges in securing customers especially in early stages.

02 Startups in this space need a longer runway because raising funds and generating revenue takes more time.

03 Local specificity hinders the scalability of many biodiversity solutions.

Optimizing tech transfer

Investing in deep-tech solutions like green ammonia, sustainable materials, and plant-breeding technologies can lead to scalable, impactful changes in resource efficiency and environmental sustainability.

To accelerate this progress, there is a pressing need to improve the tech transfer process in Europe, ensuring academic innovations can transition from research labs to the market more effectively.

“Europe needs to optimize the tech transfer proces to improve commercial innovations.”

Additionally, improving biodiversity monitoring and data availability is essential, making it more accessible and cost-effective for investors to track impact.

Biggest Shifts

01 AI & Data Science are transforming biodiversity monitoring

Our experts agree that AI and digital tools are revolutionizing how we measure and value nature.

- AI-powered biodiversity monitoring, regenerative agriculture modelling, and ecosystem risk forecasting are emerging investment hotspots.
- Automated MRV solutions are replacing outdated, manual tracking systems.
- Investors are focusing on startups that generate primary data on nature, rather than speculative biodiversity credits.

02 Regenerative agriculture & soil health are investment hotspots

Soil health is increasingly recognized as the foundation of planetary and human health.

- Soil microbiome health & nutrient density are key focus areas.
- Investors are prioritising startups measuring soil microbiome health, nutrient density, and developing agroforestry models.
- Food systems are particularly vulnerable to biodiversity loss and investors are taking notice.

03 Supply chain transparency is no longer optional

Companies are under increasing pressure to ensure deforestation-free, sustainable supply chains.

- European regulations (like EUDR and CSRD) are pushing companies to invest in traceability.
- AI-driven transparency tools are gaining traction, but smallholder farmers lack the capacity to comply.
- Investors are supporting startups that help corporations navigate compliance and measure environmental impact.

Biggest Barriers

01 Lack of harmonized metrics

- Unlike carbon, biodiversity lacks universal impact measurement frameworks.
- Investors need clear MRV tools to quantify ROI.

"Each biodiversity project has its own set of indicators, and there is no standard way to measure success." – Eva Jaag

02 Monetising nature-based solutions

- Many nature-focused startups struggle to generate predictable revenue streams.
- Finding a payer for biodiversity solutions remains a challenge, as few businesses see direct financial returns.

“We need to translate biodiversity loss into financial risk models that investors can work with.” – Kristjan Jespersen

03 Short-term corporate thinking

- Most companies prioritize short-term financial goals over long-term biodiversity investments.
- Nature-based strategies are seen as secondary, not core business drivers.

"Industries are slowly realising that sustainability is not just about compliance—it’s about business resilience and long-term profitability." – Bertrand Klaiber

04 Challenges with biodiversity credits

- Biodiversity credits are widely criticized as too immature, unscalable, and financially unproven.
- Unlike carbon credits, biodiversity lacks a standardized valuation framework, making it hard to attract capital.

"Biodiversity credits need to mature, just like carbon markets did—standardized pricing and validation mechanisms will be essential." – Xavier Lorphelin

Advice to Investors

Embrace smart risk for bigger impact

Nature-based solutions are still early-stage, but waiting for perfect market structures delays progress.

Blended finance approaches, where foundations take early risk and VCs step in later, can de-risk high-potential solutions.

Be patient and adapt your strategy for nature tech

Nature tech won't look like SaaS or traditional VC. Are you willing to invest in longer time horizons, asset-backed finance, or ecosystem-based models?

Look for solutions that move beyond philanthropy into investable categories.

Support the transition to scalable models

Fund pilot projects, MVPs, and ecosystem trials to bridge the gap between science and commercialization.

Proof-of-concepts don't always yield immediate returns, but they lay the foundation for scalable investment models.

Advice to Founders

Solve for monetisation early

Investors want clear revenue models. Can your solution create recurring revenue, cost savings, or measurable financial returns?

Think beyond grants—can you integrate market-based incentives (e.g., nature-linked finance, premium pricing, embedded services)?

Don’t just measure, monetize

Investors don’t fund dashboards. Can your AI-driven insights unlock financial flows, automate ESG compliance, or power real-world transactions?

If you’re working on biodiversity tracking, regenerative finance, or MRV, ensure your model integrates directly into buyer workflows.

Bridge science & market needs

Deep-tech alone isn’t enough. Successful ventures translate science into commercial solutions with real-world demand.

Who are your early adopters? Can you pilot with corporate supply chains, carbon markets, or ecosystem restoration projects?

Our New Focus Areas

Brainforest Venture Program 2025

Our latest multistakeholder report on the nature startup ecosystem has provided valuable insights into the biggest challenges and opportunities in biodiversity innovation. After engaging with experts, investors, and founders, we've identified four high-impact focus areas for our next venture program—areas where breakthrough solutions are urgently needed and have the potential to scale. This year, we are seeking visionary startups working on:

01 AI & Data for Nature Intelligence

02 Regenerative Agriculture & Soil Health

03 Monetizing Biodiversity

04 Deep-Tech for Ecosystem Restoration

Join Us

Are you a Founder?

The future of nature investing is being built right now. If you're a startup that restores ecosystems, transforms industries, or redefines nature finance—we want to hear from you. The Brainforest Venture Program is designed to help visionary founders like you accelerate, fund, and scale game-changing solutions for nature.

APPLY TO OUR VENTURE PROGRAM

Are you a Funder?

The best solutions for biodiversity & ecosystem restoration need capital to scale. Brainforest is actively identifying and supporting the most promising startups in this space. If you're an investor, foundation, or funder looking to finance high-impact, scalable nature-based solutions—we'd love to connect.

REACH OUT TO US

Thank You

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