



Financing nature's future

How innovation and blended
finance can bridge the
conservation funding gap



Camillus Fitzpatrick

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Earth Finance
Two Union Square, 601 Union Street,
Suite 3525, Seattle, WA, 98101

 [linkedin.com/company/earthfinance](https://www.linkedin.com/company/earthfinance)
 [earthfinance.com](https://www.earthfinance.com)

The global economy is facing a defining moment in how it interacts with nature. As environmental challenges intensify, the traditional view of natural resources as externalities rather than integral components of financial decision-making is becoming obsolete.

Conservation finance—the practice of raising and managing capital to support the preservation of natural ecosystems—has evolved significantly in recent decades, yet a substantial funding gap remains. Closing this gap requires a fundamental transformation in how we value, invest in, and protect natural capital.

The conservation funding gap: Scale and implications

The data is stark: current global biodiversity financing **accounts for roughly 16-19%** of total conservation needs. If the world is to halt biodiversity loss by 2050, **investments in nature must increase by a factor of 5-7x**—a figure that represents both an enormous challenge and an unprecedented opportunity for innovative financial solutions.

Water scarcity exacerbates this growing crisis. **According to the World Resources Institute**, global GDP exposed to high water stress is projected to grow from \$15 trillion in 2010 to \$70 trillion (30% of total economic output) by 2050, underscoring how natural resources directly underpin economic stability.



The hidden economic value of ecosystem services often exceeds visible operational costs by orders of magnitude. The \$70 billion global coffee industry, for example, **depends on natural pollination services** worth approximately \$4 billion annually, a dependency not reflected in traditional economic models. This example illustrates a broader pattern: over 75% of global food crops—including fruits, vegetables, almonds, and coffee—**rely on pollinators for production**. With pollinators now in rapid decline, more than \$500 billion in annual crop production is at risk, **threatening food security** and agricultural economies worldwide.

These hidden dependencies, while most tangible in the food and beverage sector, are having detrimental impacts on business performance across other key industries, too. The textile industry, for instance, **is already losing** approximately \$100 billion annually due to cotton supply disruption from water scarcity and soil degradation.

The misalignment between financial models and ecological realities represents both the central challenge and the primary opportunity for conservation finance.

Standard ROI models often fail to appropriately consider these realities, treating environmental factors like biodiversity loss and water scarcity as external risks instead of recognizing them as core business vulnerabilities.

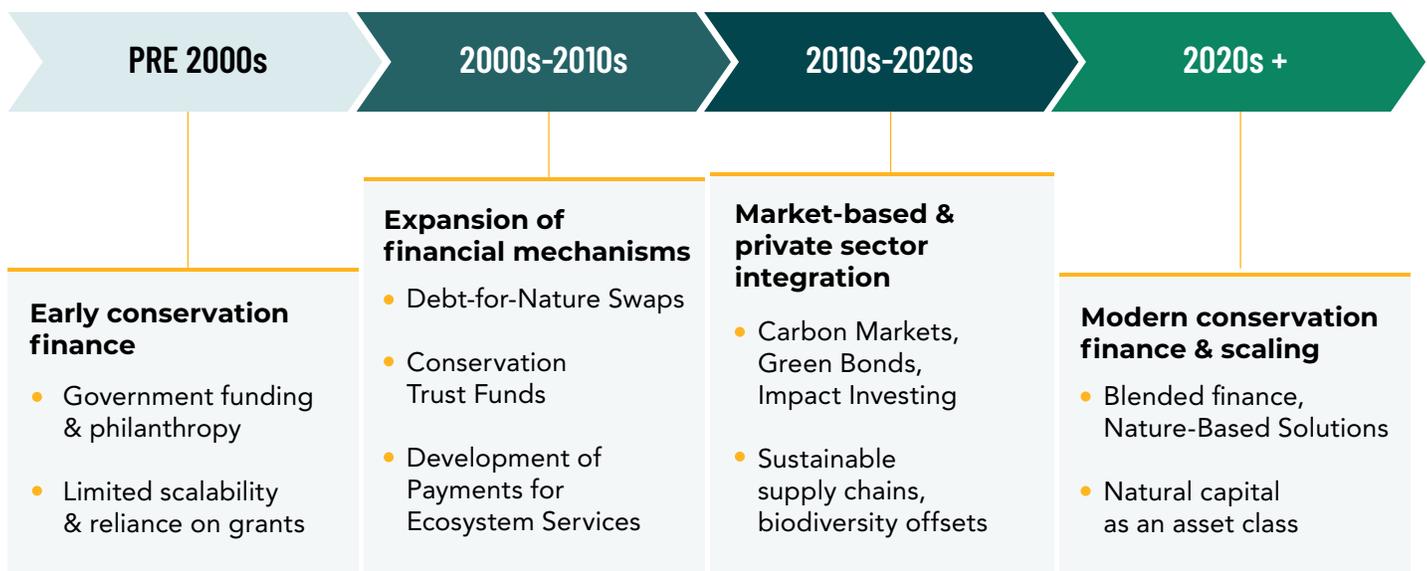
This piece aims to bridge the two, providing a framework for modern conservation finance that generates significant capital for critical ecosystems while delivering sizable returns to corporate investors. Any corporation looking to better incorporate nature into strategic planning should use the pillars and recommendations presented below as a springboard to seize the investment opportunity of conservation finance gap.

The evolution of conservation finance

Conservation finance has evolved dramatically over the past two decades, reflecting a deeper shift in how we value nature's role in economic systems and fund habitat-saving initiatives. The [recent transition from philanthropy to blended finance](#) highlights growing recognition of biodiversity's importance to economic stability and business resilience. As regulations mature and markets expand, natural capital is emerging as a legitimate asset class, offering both ecological and financial returns.

Defined: Blended finance

[Blended finance](#) merges public, private, and philanthropic capital to create investment vehicles with balanced risk-return profiles, thus attracting investors while supporting conservation. It employs tools like first-loss capital, technical assistance, and results-based financing to amplify private investment using limited public and philanthropic resources.



Source(s): [1] [Nature Investment Hub](#); [2] [Grantham Research Institute on Climate Change](#); [3] [WWF Conservation Finance](#); [4] [Biodiversity Finance Factbook \(COP16\)](#).

Traditional conservation finance mechanisms like government loans and philanthropic grants alone won't cut it. Closing the nearly **\$1 trillion** [conservation funding gap](#) requires scaling up private investments, implementing supportive policy incentives, and developing innovative, blended finance mechanisms.

The business case for nature

"We rely on nature for the water we use, and our ingredients, and we understand that the restoration of natural ecosystems is key to the long-term viability of our business."

Joe Franses
Vice-President of Sustainability, Coca-Cola Europacific Partners

The business case for conservation is increasingly clear. Forward-thinking organizations recognize that investing in nature is not merely philanthropy but rather an essential [risk management and business strategy](#). Risk management aside, nature-based solutions can deliver impressive returns—more than **\$20 for every \$1** invested, as demonstrated in a recent [United Nations Environment Programme study](#).

Case study: Wetland restoration in southern Ontario

One compelling illustration of the value proposition of investing in natural capital is [Canada's wetland restoration initiative](#), which delivered over **30 times** the return on investment. After losing over 70% of southern Ontario's wetlands to urbanization and agriculture (with the 2024 Toronto floods alone causing \$940 million in damages), a restoration initiative led by multiple stakeholders has delivered remarkable results:



Flood mitigation

Wetlands reduce flood peaks by **40%**, substantially lowering property damage and insurance costs.



Direct cost savings

The initiative prevents approximately **\$8,800** per hectare per year in flood damage.



Carbon sequestration

These restored ecosystems absorb **2.8 Mt CO₂e** annually, outperforming forests in carbon storage per hectare.



Water quality improvements

Reduced nutrient runoff has enhanced municipal water quality.

This initiative leveraged blended finance and nature-based solutions to scale conservation efforts, successfully positioning natural capital as a valuable asset class rather than a passive resource.

Transforming finance for nature conservation: The 4 pillars

Corporations and other private investors interested in surpassing the limitations of traditional models reliant on public funding and philanthropy should embrace a modern conservation finance approach based on the following 4 pillars:

1 Generate



Cultivate diverse and resilient revenue streams by harnessing innovative financial instruments such as green bonds, biodiversity credits, carbon markets, volumetric water benefits, and payments for ecosystem services.

These mechanisms transform environmental value into financial flows that can attract both public and private capital into blended finance structures.

2 Manage



Optimize financial resources and enhance the impact of each dollar invested through targeted portfolio management, leveraging risk mitigation tools, and implementing cost-effective conservation techniques.

These approaches create the foundation for effective blended finance strategies by managing risk-return profiles for diverse capital providers. Advanced approaches include:

Pooled investment vehicles such as [The Nature Conservancy's NatureVest](#) that bundles multiple conservation projects to attract institutional investors.

Conservation-linked loan facilities where interest rates decrease upon meeting conservation targets, as demonstrated by [ING Bank's sustainability-linked loans](#).

Revolving funds like the [Conservation Fund's Working Forest Fund](#) which buys, protects, and resells forestland—reinvesting the proceeds to safeguard additional forests.

3 Deploy



Channel capital with precision using data-driven decision frameworks, geospatial analysis, and outcome-based metrics (for example, percentage increase in target species population or hectares of intact habitat restored). This pillar emphasizes rigorous monitoring systems, adaptive management protocols, and transparent impact evaluation

methodologies that ensure resources target the highest conservation priorities.

As AI advances, its predictive analytics, automated monitoring, and pattern recognition capabilities can further enhance these systems, optimizing resource allocation and enabling real-time adaptability in conservation

efforts. For example, [SpeciesNet](#), an open-source AI tool developed by WWF and Google Research, is trained on over 65 million images and detects animals with 99.4% accuracy. This allows conservationists to [efficiently process massive camera trap datasets](#), reducing analysis time from months to days and greatly improving wildlife monitoring.



Align

Establish mechanisms that shift behavior toward conservation outcomes by reforming harmful incentives, implementing penalties for environmental damage, and creating rewards for positive actions. This includes corporate advocacy for regulatory reform, participation

in market-based tools like certification and responsible sourcing, and internal policy mechanisms such as [shadow pricing](#) for ecosystem services or implementing a corporate water valuation system.

When successfully integrated, these 4 pillars form a cycle that attracts significant capital for nature conservation while delivering solid returns for corporate investors, as well as financial institutions, family offices, and other private capital providers.

The modern conservation finance approach shifts the narrative from viewing conservation as a cost to recognizing it as a valuable investment with both financial and ecological benefits.

Case study: The Wildlife Conservation Bond

The [Wildlife Conservation Bond \(WCB\)](#)—often called the “Rhino Bond”—is a clear example of the 4 pillars in action. Launched by the World Bank in 2022, this \$150 million results-based investment model funds black rhino conservation in South Africa. Unlike traditional grants, investor returns are tied directly to conservation success, creating alignment between financial and environmental outcomes.

The Rhino Bond represents a breakthrough in biodiversity finance by linking conservation outcomes directly to financial returns. Here’s how it works:

Generate: Mobilizing private capital

The bond taps into private investment markets rather than relying solely on donors. By packaging conservation as a World Bank-backed financial instrument, it attracted **\$150 million** from institutional investors who typically don’t fund wildlife protection, including corporate investors

like [INGKA Investments](#) (the investment arm of IKEA). The World Bank’s AAA rating protects investors’ principal, making conservation investment more appealing to mainstream finance, including forward-thinking corporations seeking both financial returns and environmental impact.





2

Manage: Reducing administrative costs

Unlike traditional grants that require ongoing reporting and monitoring, the bond's pay-for-success model focuses only on the end result: whether rhinoceros

populations increase. This streamlines administration and directs more resources to actual conservation rather than paperwork.

3

Deploy: Directing funding with rigorous monitoring

Funding supports essential anti-poaching efforts and habitat management at 2 South African sites. The bond introduces scientific verification through

ear-notching and regular monitoring of individual rhinos, with third-party calculation and verification ensuring integrity of the reported outcomes.

4

Align: Performance-based returns and incentives

Investors only receive success payments beyond their principal if rhino populations grow by at least 4% over 5 years,

creating direct financial incentives for conservation success and shifting focus from money spent to impact on rhino numbers.

This performance-based conservation finance model demonstrates how financial structures can align private capital with biodiversity goals at scale. Two years into implementation, [the results have validated this approach](#). Black rhino populations in both targeted parks—the Great Fish River Nature Reserve and Addo Elephant National Park—have grown by **nearly 8%**, outpacing the bond's highest target of 4%.

That means investors are [on track to receive](#) their full principal investment back plus the maximum conservation success payment of \$91.73 per \$1,000 invested, potentially reaching **\$13.76 million** at the bond's maturity in 2027.



Blended finance in action

The Rhino Bond's success provides evidence that well-designed conservation finance instruments can deliver both ecological impact and financial returns. Combining World Bank backing with [Global Environment Facility \(GEF\) outcome payments](#), it is a case in point example of the power of blended finance strategies.



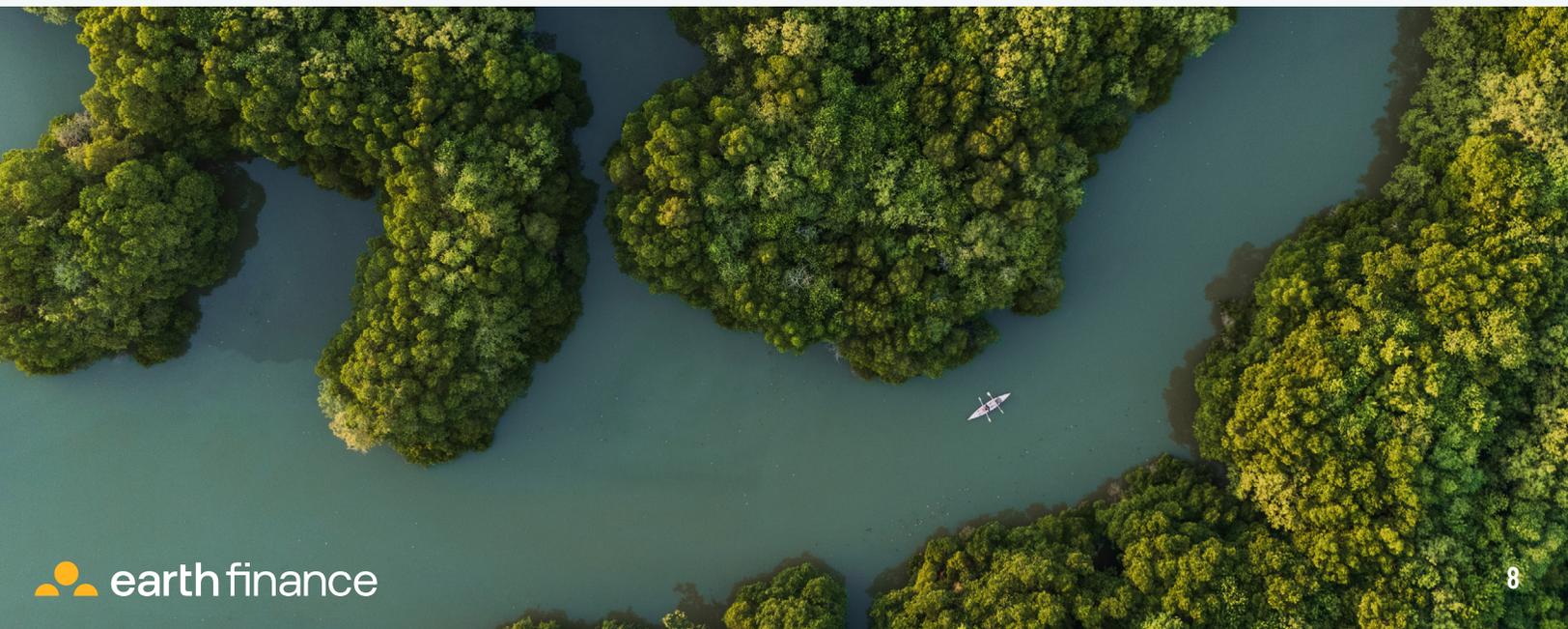
Steps for improvement

To take the Rhino Bond model one step further, investors could tap into conservation-linked loan facilities like [ING Bank's sustainability-linked loan to Sucafina](#), where interest rates decrease as coffee suppliers achieve deforestation-free sourcing targets. Companies with nature-dependent supply chains could participate in similar programs through matched funding arrangements that align conservation outcomes with their sourcing regions, simultaneously protecting biodiversity and strengthening business resilience.

Technological innovation and market growth: Enabling modern conservation finance

Conservation finance is increasingly powered by technological innovation, creating a significant opportunity to address longstanding measurement and verification challenges. The nature tech market [has gained momentum](#), with approximately **\$2 billion** in investments in 2024 and an estimated market capitalization of \$4 trillion. The sector's impressive **52% annual growth** since 2018 reflects its expanding significance in the conservation finance ecosystem.

This growth coincides with increased institutional adoption of nature-related financial frameworks. The Taskforce on Nature-Related Financial Disclosures (TNFD), [now spanning 320 global companies](#), signals the mainstreaming of nature considerations in corporate strategy and reporting. These early adopters are developing standardized approaches to measure, report, and manage nature-related risks and opportunities—establishing the foundation for scaled investment in conservation.



The technological developments driving this market fall along a maturity spectrum that closely mirrors investment opportunities:

Mature technologies

like forest carbon measurement systems have achieved widespread adoption, enabling precise and cost-effective assessments of carbon sequestration in woodland ecosystems. This maturity has directly contributed to the rapid expansion of forestry carbon markets.

Transitional technologies

such as soil carbon verification systems are gaining traction, with recent advancements improving accuracy and reducing costs, though standardization challenges remain.

Emerging technologies

like biodiversity monitoring platforms utilizing environmental DNA (eDNA) analysis, acoustic monitoring, and advanced remote sensing – increasingly powered by AI-driven data processing and pattern recognition – show tremendous promise but require further refinement before supporting large-scale financial instruments.



This technological ecosystem is progressively removing the barriers that have historically limited conservation finance: measurement uncertainty, high transaction costs, and verification challenges. AI-enhanced predictive modeling, automated anomaly detection, and real-time analytics are further streamlining these processes, boosting the scalability and reliability of conservation finance mechanisms.

As these technologies mature, they create the infrastructure needed for a new generation of nature-based financial products that can attract mainstream investment while delivering measurable conservation outcomes.

The path forward: From conservation gap to investment opportunity

Addressing the conservation funding gap requires a fundamental shift in perspective—from viewing nature preservation as a cost center to recognizing it as a strategic investment opportunity. Corporate investors should embrace the following 3 strategic imperatives to capitalize on the conservation investment opportunity:

3 strategic imperatives:

1

Scale blended finance mechanisms

No single funding source can close the conservation gap. Blended finance approaches that strategically combine public, private, and philanthropic capital can create investment vehicles with appropriate risk-return profiles. Key elements of a robust blended finance strategy include:

- > First-loss capital from public or philanthropic sources to de-risk private investment.
- > Technical assistance facilities which provide dedicated funding and expertise to develop conservation projects to investment readiness (e.g. USDA Forest Service's [Innovative Finance for National Forests](#) (IFNF)).
- > Aggregation mechanisms such as The Nature Conservancy's [NatureVest](#) to achieve the scale necessary for institutional investment.
- > Results-based financing tied to verified conservation outcomes.

2

Harness technology for transparency and efficiency

Nature tech innovations can dramatically reduce transaction costs and increase confidence in conservation investments. Organizations can leverage [the following emerging technologies](#):

- > Satellite and remote sensing technologies for cost-effective monitoring and verification.
- > Blockchain and distributed ledger systems for transparent tracking of environmental outcomes.
- > AI and machine learning to optimize conservation interventions and predict ecological responses.
- > Digital twins of infrastructure and natural systems, like digital watersheds to model water flows, assess ecosystem services valuation, and optimize conservation investment allocation across landscapes.
- > Digital marketplaces to connect conservation project developers with investors and buyers.

3

Mainstream natural capital accounting

While more ambitious and longer-term, corporations, financial institutions, and governments must ultimately integrate natural capital accounting into standard financial practices. This requires:

- > Adopting standardized metrics and methodologies for valuing ecosystem services such as the [Natural Capital Protocol](#) developed by the Capitals Coalition.
- > Incorporating nature dependencies and impacts into financial risk assessment and investment decision-making processes, as demonstrated by companies like [BNP Paribas](#), who now screen portfolios for biodiversity risk exposure.
- > Developing natural capital balance sheets alongside traditional financial statements aligned with evolving regulatory and voluntary frameworks such as the EU CSRD and TNFD, which guide nature-related financial disclosures.



The time for action

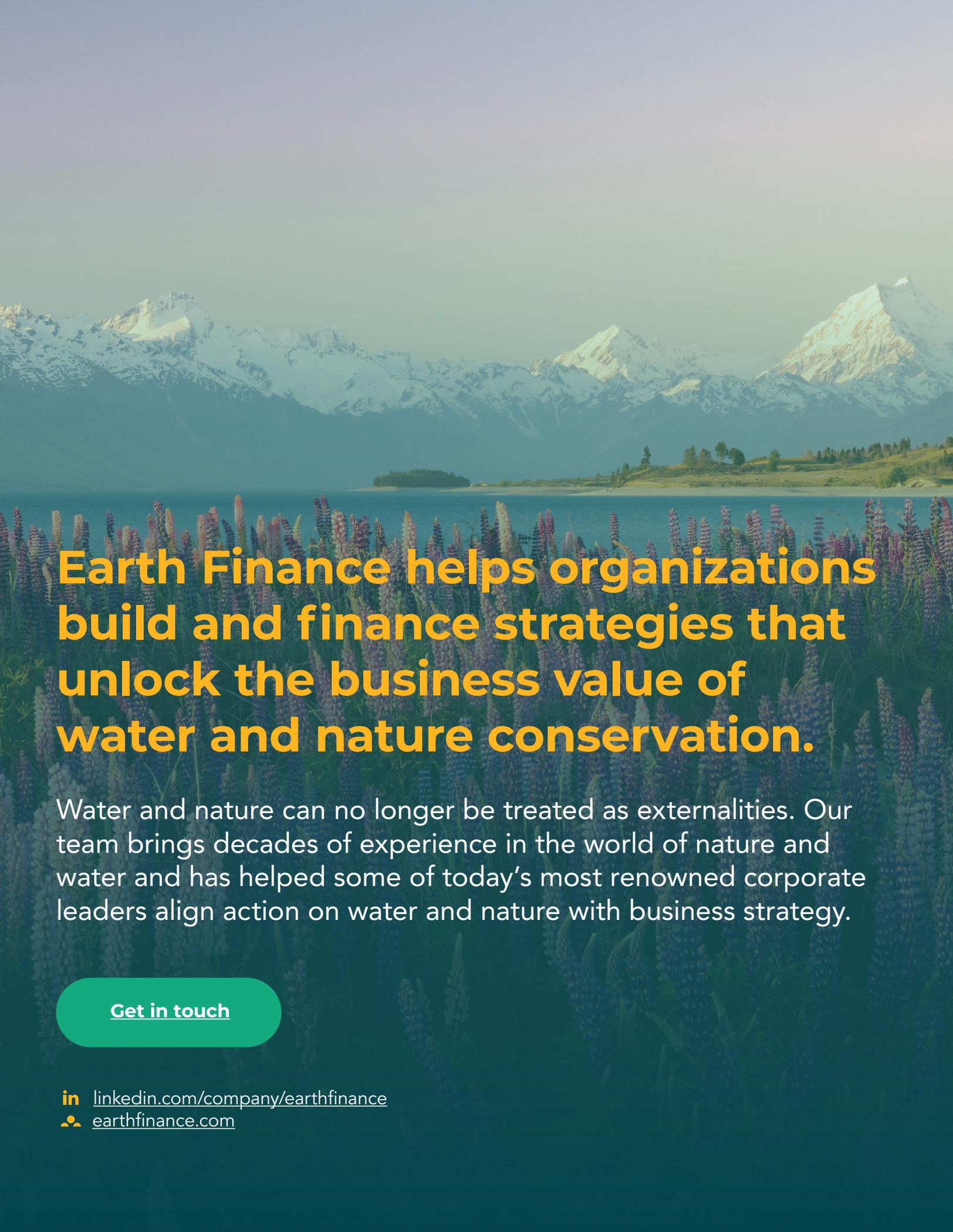
The conservation finance gap represents one of the most significant—yet addressable—challenges of our time. By transforming how we value nature, deploying innovative blended financial mechanisms, and leveraging technological advances, we can mobilize the capital needed to protect and restore critical ecosystems.

From a business perspective, incorporating natural capital into strategic planning is rapidly becoming a competitive necessity, especially for multinationals with global supply chains. Companies that proactively manage nature-related risks [strengthen supply chain resilience](#), mitigate business interruption risks, and ensure operational continuity in the face of resource constraints.

The most successful organizations and investors of the coming decades will be those that recognize nature not as an externality but as fundamental to long-term value creation and risk management.

Forward-thinking executives also recognize that nature-positive investments [often yield substantial returns](#) through reduced operational costs, enhanced resource efficiency, improved stakeholder relations, and access to emerging markets for sustainable products and services. These investments create a foundation for business continuity when competitors may face disruption from ecological system failures.

By positioning natural capital as a core asset class and conservation as a strategic investment priority, corporations can help align economic interests with environmental imperatives—creating resilient businesses, economies, and ecosystems that thrive together.



Earth Finance helps organizations build and finance strategies that unlock the business value of water and nature conservation.

Water and nature can no longer be treated as externalities. Our team brings decades of experience in the world of nature and water and has helped some of today's most renowned corporate leaders align action on water and nature with business strategy.

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