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Finance for a sustainable future

A new bottom line: Nature's financial ripples

Alongside effects on the environment, effects of the environment come to the center

A new bottom line: Nature’s financial ripples

It isn’t new to recognize the significance of environmental factors on a business’s operations; companies need to prepare for future impacts and adapt operations because of how their business can affect nature. There is a growing need to quantify the financial implications of nature-related impacts and dependencies and embed that knowledge into enterprise risk and resource planning.

This marks an evolution in sustainability toward understanding the ways nature can shape business outcomes, especially through nature-related financial impacts (NRFIs). Embracing this approach may position an organization to respond proactively and unlock new opportunities for resilience and growth.

Those effects can be more complex than many business leaders may realize and reach into unexpected places. Nature-related risks—such as water scarcity, biodiversity loss, and deforestation—may affect business operations. These phenomena can also influence the availability of raw materials, agricultural yields, infrastructure reliability, and global supply chains. Such forces represent long-term reasons for companies to address nature-related impacts and dependencies.

A more near-term reason to do so is regulatory requirements: The European Union Deforestation Regulation (EUDR), slated to begin taking effect for some organizations at the end of 2025, requires organizations to document that specific commodities are deforestation-free and legally sourced. The EUDR is a regional requirement that governs materials entering or exiting the European market. However, due to the complexity of global supply chains, its impact is expected to be felt worldwide.

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Worldwide requirements and frameworks

Disclosure requirements and frameworks that are important to understand and evaluate as part of a nature-related finance approach:

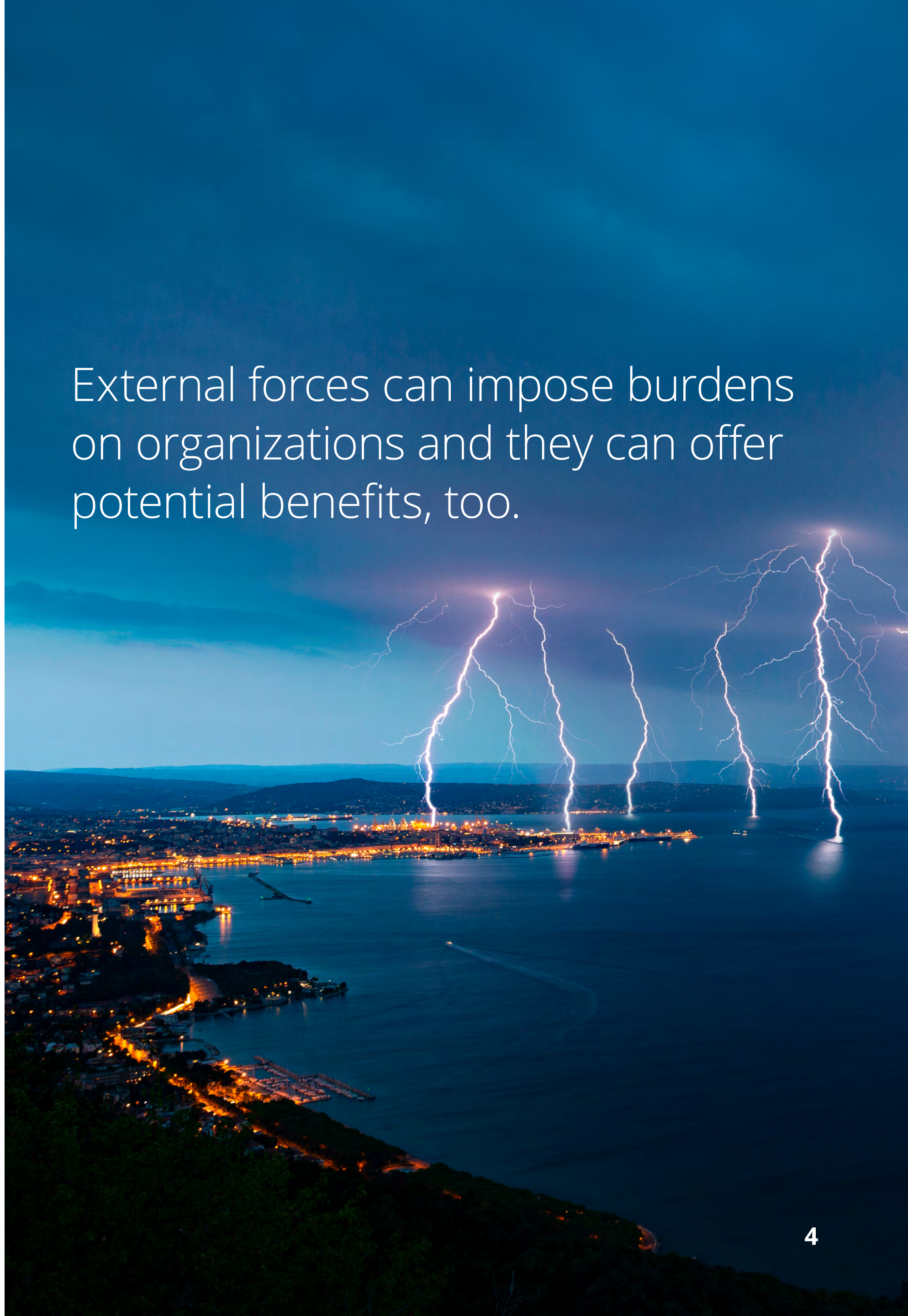
- European Union Deforestation Regulation (EUDR)
- Taskforce on Nature-related Financial Disclosures (TNFD)
- International Sustainability Standards Board (ISSB)
- European Union's Corporate Sustainability Reporting Directive (CSRD) and related European Sustainability Reporting Standards (ESRS)

Why it matters

Some nature-related effects may seem subtle, but their consequences may be significant depending upon the location or market. In its *2025 Global Risks Report*, the World Economic Forum named extreme weather events among the world's top global economic risks, alongside armed conflict and trade wars.[1] It's important for businesses to have visibility into nature-related dependencies across their value chains. This generally means data-driven analysis, modeling, and disclosure—responsibilities that commonly reside within the finance function.

And, like other pressures on business that appear first as obligations, attention to natural impacts often contains the seeds of opportunity. Organizations that understand and manage their dependencies on natural ecosystems may be able to improve resilience, reduce risk exposure, and create long-term value. External forces can impose burdens on organizations and they can offer potential benefits, too.

Deloitte advises organizations in ways to address both the burden and the opportunity, specifically within food supply, manufacturing, and mining and mineral extraction. In this work, we have found it productive to look beyond direct or known effects to consider potential benefits—for example, the ways in which protecting a species of mushroom or algae might one day contribute to a new drug or raw material.



The risk landscape

Considerations such as these have led to a more deliberate focus on NFRIs, which are defined as the ways in which “nature loss” directly or indirectly affects a company’s financial position, including costs, revenues, and asset value.

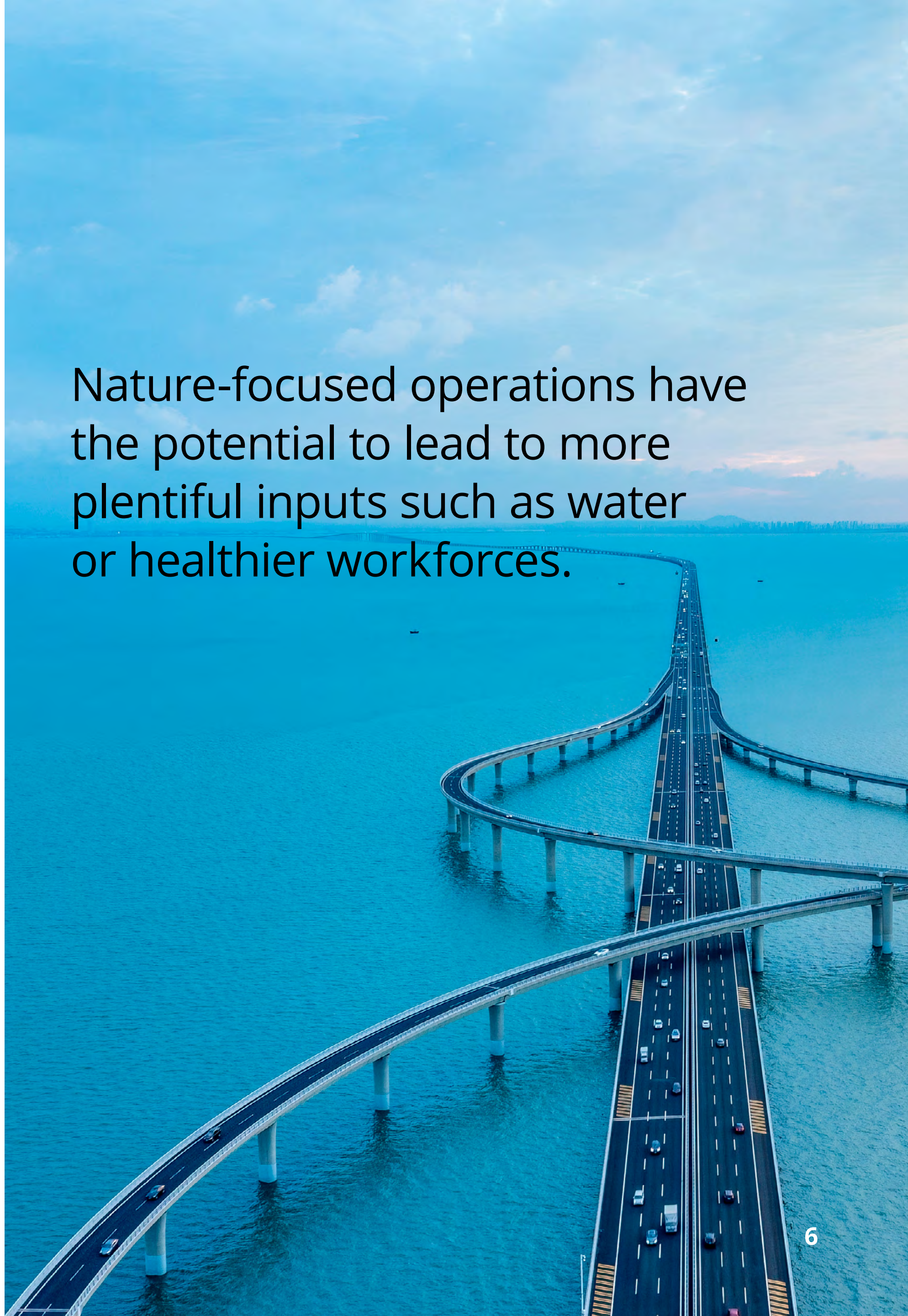
Some of these effects may underpin performance even if they lie outside of “traditional” sustainability thinking. These might include investor expectations, changes in buying preferences, or material financial impacts from changes in feedstock security, water availability, or pollination. Damage to land, waterways, and floodplains may directly affect plant sites or logistics corridors. Additionally, there are industry-specific effects to consider. For example, more than 80% of travel and tourism goods and services directly or indirectly rely on nature resources and functioning ecosystems.[2] Natural conditions such as clean air, water quality, and food safety play an important role in shaping population health and determining health care needs

Part of addressing these risks might involve a new approach to materiality assessments. This is consistent with the requirements of another regulation, the EU’s CSRD, which imposes materiality, assessment, transparency, and methodology requirements that are generally more comprehensive than many current practices within US companies. Additionally, these standards might guide a company on its learning journey about the effects of nature.

The opportunity landscape

As in other areas of enterprise planning, risks often have a way of moving to the head of the line as "today issues" while opportunities tend to await their turn on tomorrow's to-do list. But there are both long- and short-term scales to the corporate calendar, just as there are to the forces of nature. In our experience, companies are more likely to derive value from nature-related factors if they plan with a flexible "NRFI mindset" and a data discipline that is up to the challenge.

For example, an enterprise that understands and aligns with its exposure to nature has the potential to identify and capitalize on sustainability incentives and credits. It is part of the CFO's role to tune a company's use of financial instruments to this new category of signals from the environment. Choices about manufacturing, packaging, and shipping can be more cost-effective or market-friendly if NRFI awareness plays a part in shaping them. In addition, nature-focused operations have the potential to lead to more plentiful inputs such as water or healthier workforces.



There are benefits from nature-related thinking that may be sector- or even product-specific. Regenerative agriculture, which uses sustainable methods to raise crops and animals in ways that enhance the health of the land rather than detracting from it, is intended to increase nutrition in the soil and its power to sequester carbon while simultaneously producing more efficient yields, greater drought resistance, and financial performance. Understanding the factors that surround energy and water use may help a data center operator make decisions with financial and reputational upsides. Passive cooling architectures that mimic natural structures like termite mounds, or the use of native plantings, may protect telecommunications infrastructure and reduce its operating costs. Awareness and protection of important habitats can make pharmaceutical supply chains more resilient. The examples go on.

The data lens on nature

Even if it were not for the new regulations and frameworks in place, there are sound reasons for an organization to voluntarily enhance its capacity to measure and understand nature. The resulting insights may improve stakeholder engagement, strengthen reputation, and reinforce qualification for business, and can also serve as value chain signals that improve enterprise risk management. To achieve that, an organization can combine increased data and analytics capabilities with an accounting approach that takes environmental factors into account as a matter of design. To translate the resulting insights into operational advantages, new tools and dashboards may be used to supplement existing management resources.

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Survive, drive, and thrive

Accounting for nature in enterprise planning and finance is not a complex idea, but carrying it into practice may not happen easily or quickly. Different organizations may find themselves at different levels of maturity as they move toward realizing the potential of this approach. Certain factors can distinguish the ones that are surviving, driving forward, and thriving.

Survive

An organization that measures and manages nature-related dependencies at a low but passable state is likely in a reactive mode. For example, it senses individual threats from the physical environment and responds to each one in turn without a broad view of what lies ahead. That might involve shifting an agricultural supply chain away from a storm-damaged region or moving production facilities away from an area where environmental factors have dampened market demand. Each issue may get addressed, but the larger strategic picture might not, and the company may end up spiraling in a cycle of reactive problem-solving without making any real forward progress. In some cases, nature effects may go unaddressed because company leaders remain skeptical that the effects are real or direct, instead of unrelated outcomes from a larger trend. At this stage, the reasoning behind regulations such as EUDR may be viewed as a compliance exercise rather than a strategic opportunity for many organizations.

Drive

A company that is aware of nature's impact on finance and has begun to form and follow a strategy around it has likely acknowledged both the direct and indirect risks. This may begin in a more traditional area such as operational management for primary industries. Such a company is working to anticipate nature-related effects and get ahead of them rather than simply reacting to issues as they arise. A company in this interim state may also be combining its own sensing and measuring capabilities, its data approach, and a concerted look at the legal and regulatory framework, with the aim of understanding and reducing risks over the long term.

Thrive

To stand ahead of the pack in weaving nature-related risks and opportunities into enterprise, advanced organizations may take data originally intended for regulatory compliance, use it to analyze the materiality of environmental inputs, and extend that understanding to create long-term strategy. Instead of merely satisfying requirements or warding off clearly visible risks, the company may have woven a nature-positive mindset across its planning and operations—recognizing the external environment as a "silent stakeholder" that can drive positive financial impacts and can create value.

Potential steps

It takes an ecosystem to account for an ecosystem. The natural world and its effects are a complex interplay of forces, and an organization should bring a multidisciplinary, systems-based lens to the task of managing those effects.

Yet in many organizations, the current roster of metrics and key performance indicators (KPIs) may not be mature enough to handle that complexity. Ramping up to new levels of proficiency may bring together elements such as geospatial information, climate sensing, macroeconomic data, and commodity pricing with tax, audit, and other disciplines. What turns those disparate pursuits into a coherent strategy is data.

A data-driven approach to NFRIs may:

Enhance the capability to sense, measure, analyze, and act on nature impacts.

- Expand and regularize the collection and handling of relevant geospatial, financial, and other data to use it more effectively in a cross-enterprise way.
- Evaluate and update the tech stack to add necessary capabilities in AI, analytics, data availability, and reporting.

Expand due diligence to bring a natural-impact lens to the supply chain.

- Confirm that products are deforestation-free, protect natural environments and biodiversity, and comply with local production laws.
- Perform risk assessments on products that originate from regions at risk.
- Submit due diligence statements before placing products on the EU market or exporting them from it.
- Implement measures to mitigate identified risks.
- Redirect capital to areas of opportunity.

Understand the immediate regulatory requirements.

- A combination of new regulations and voluntary frameworks has arisen around NRFI and continue to evolve. Organizations should focus on awareness of this landscape.
- Understand which nature-based inputs are relevant. For example, EUDR applies to cattle, soy, palm oil, timber, cocoa, coffee, rubber, and derivatives. Its initial date of enforcement for large organizations is December 30, 2025, and other milestones are likely to follow.
- Noncompliance with EUDR could carry penalties based on a percentage of a company's annual turnover within the EU. Noncompliant entities may be barred from buying or selling in certain markets. Companies that do not adopt EUDR practices may also risk supply chain vulnerability and negative consumer sentiment.

Review environmental exposures with a view to potential benefits.

- Identify and pursue grants or credits that may be available based on sustainable practices.
- Use AI and analytical tools to locate advantages in sourcing or operations that nature-related data brings to light.

Deloitte's NRFI capabilities

Led by the Sustainability team and augmented by the experience of professionals in a variety of disciplines, Deloitte has capabilities that advise organizations on understanding and addressing the specific requirements of EUDR, TNFD, and ISSB standards as well as the broader strategic and operational implications of a nature-focused approach. From reporting to quantifying to operating, there's a wide range of services that can aid you in your journey.

Conclusion

Is it problematic to view the natural world through a financial lens? Or is it irresponsible not to? The World Economic Forum estimated in 2020 that more than half the world's gross domestic product is "moderately or highly" dependent on nature, the resources it provides, and the effects it has.[3]

CFOs can extend the traditional scope of their role and achieve more effective financial outcomes by integrating a broader understanding of environmental factors into both risk and opportunity assessments. This view also considers the ways companies are interconnected with each other as well as with nature. Over time, CFOs who fail to adopt this approach risk falling short of emerging requirements and may face material financial risks and miss out on opportunities. Inaction is one of the possible ways to fall short, along with specific decisions.

Ultimately, accounting for NFRIs can be an extension of priorities and strategies that have consistently guided business: Resources are finite, adapting to the future state is important, and preparing for tomorrow often starts today.

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Endnotes

1. Mark Elsner, Grace Atkinson, and Saadia Zahidi, *Global Risks Report 2025: 20th Edition*, World Economic Forum, 2025.
2. World Travel & Tourism Council (WTTC), "Nature positive travel and tourism," accessed October 2025.
3. World Economic Forum, "Half of world's GDP moderately or highly dependent on nature, says new report," news release, January 19, 2020.