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# DELOITTE'S BUSINESS CASE FOR NATURE AND BIODIVERSITY

### WHY DOES NATURE MATTER TO THE FINANCIAL SERVICES INDUSTRY?

Both natural capital loss and climate change pose systemic risks to the financial services industry. Natural capital, ecosystems, biodiversity, and their services are all interrelated and connected and vital not only for flora and fauna to flourish but also for the health of the global economy.



**Q:** I keep hearing my colleagues and clients talk about natural capital. What does it refer to?

**A:** Natural capital is an asset, just as produced capital and human capital are assets. It is from these assets that goods and services are provided to society.



**Q:** Sounds interesting but also quite abstract. Why should I care about it?

A: All business models rely on natural capital as value inputs at countless points along the value chain. Without the proper valuation of these commodities, natural resource depletion has the potential to disrupt supply chains.



**Q:** Okay, but I work for a financial services institutions Does it still impact us if we do not produce physical products?

A Yes. Risks from the shortage or volatility of natural resources pose significant risks to your clients, third-party vendors, and investments, including impacting a client's ability to bring their products to market, which, in turn, impacts their ability to repay, leading to substantial risk to industries, markets, and the global economy. Credit risk, market risk, liquidity risk, and many other types of financial and business risk are directly linked to natural capital.



**Q:** This sounds like just another new fad—I'm still trying to catch up on climate risk. Why should I prioritize this?

**A:** Nature and climate risk are closely intertwined. The good news is that nature risk management will mostly fit into teams, processes, and frameworks that you've put into place for climate and build upon the progress you have already made.



**Q:** Okay, but it seems like a lot to take in. Where do I even start?

**A:** Deloitte can help. By refining the narrative around nature risk for important stakeholders, we can help you build a strategy to identify and address both nature risk and opportunities throughout your value chain. Deloitte offers tools, resources, and guidance to help you better understand the potential value at risk from nature, biodiversity, and climate risks.

### THE BUSINESS CASE FOR NATURE



### **Reappropriation of capital**

Reappropriate capital toward nature-positive activities and behaviors to create a more resilient and sustainable economy.



**Encourage investees and clients** Encourage investees and clients to plot their impact on natural capital, to increase the sustainability of their investments.



**Incentivize nature investments** Incentivize nature investments and help to create a more sustainable and resilient economy that benefits everyone.



**Science-based commitments** Demonstrate the commitment to sustainability by making science-based commitments to reduce FSIs' environmental impact and support the transition to a more sustainable economy.



### **Pushing for global debate**

Drive systemic change and promote a more sustainable economy by engaging in public discussions and debates, and by advocating for the integration of natural capital considerations into financial decision-making.



**Collaboration with organizations** Collaborate with organizations such as the Natural Areas Conservancy, and create new sources of revenue for conservation efforts by financing the conservation and restoration of natural habitats.

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## **DELOITTE'S APPROACH TO NATURE AND BIODIVERSITY**

OUR APPROACH TO NATURE RISK

Deloitte's approach to nature risk is underpinned by the understanding that nature loss poses a looming and pervasive risk to the financial services industry. Approximately \$44 trillion of global economic value is generated by natural capital. As of 2019, there is a total estimated biodiversity protection need of between \$722 billion and \$967 billion per year, which implies an annual nature financing gap of between \$598 billion and \$824 billion.

### Why does it mean to be nature-positive?

A nature-positive approach involves a shift from a "traditional business" approach to more sustainable and regenerative practices that prioritize the health and well-being of the planet and all its inhabitants. It is essential for:



**Protecting biodiversity** 



Addressing climate change



**Ensuring sustainable resource use** 



Improving human health and well-being



Sustainable finance refers to any form of financial service that integrates environmental, social, and governance (ESG) risks or criteria into the business or investment decisions for the lasting benefit of both clients and society at large.

### Key nature concepts



**Biodiversity** refers to the variety of life that can be found on earth, the communities they form, and the habitats in which they live.



Natural capital

refers to the stock of natural resources and ecosystems that provide a flow of valuable goods and services to society.



Ecosystem services are the flows of benefits gained from natural capital that are vital for living organisms to thrive on the nlanet

### \$44 trillion

Economic value generation dependent on nature.2

### \$2.7 trillion by 2030

Estimated annual losses from the cost of inaction with the collapse of ecosystem services.3

### \$2.6 trillion

Loans and underwriting services provided by the world's largest 50 banks invested in 2019, in sectors that are the primary drivers of nature loss.4

In The Economics of Biodiversity,4 nature is described as our "natural capital," arguing it is an asset, just as produced capital and human capital are assets. Natural capital, ecosystems, biodiversity, and their services are all interrelated and connected and vital not only for flora and fauna to flourish but also for the health of the global economy.

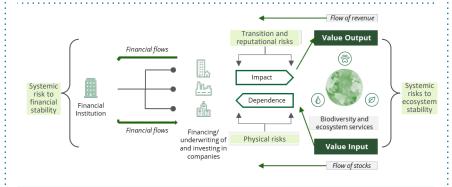
There is a relationship between the financial services industry, global economy, biodiversity, and ecosystem services.1



As of 2019, there is a total estimated biodiversity protection need of between \$722 billion and \$967 billion per year, which implies that there is an annual biodiversity financing gap of between \$598 billion and \$824 billion.<sup>5</sup>

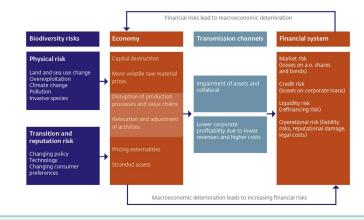
### Financial institutions have a significant impact on the preservation and loss of natural capital:

- Scientists and governments agree that the global food production system, forestry, mining, fossil fuels, infrastructure, tourism, and the relocation of goods and people are primary drivers of natural capital loss.
- Though many of these activities are carried out by heavy industry, banks and insurance companies provide the financial backing needed to conduct these activities.



Financial institutions are directly and indirectly linked to significant nature impacts and dependencies through their direct operations, investments, and business relationships. Economic activity and financial assets depend upon the ecosystem services provided by nature and biodiversity and are vulnerable to loss in natural capital. Loss in natural capital leads to financial risks through two main channels:

- Physical risk: Environmental degradation (e.g., land use change, invasive species, climate change) can adversely impact business operations and can cause loss of capital and the disruption of value chains. Nature-related physical risks are comparable to climate-related physical risks due to extreme weather events.
- Transition risk: Transition to an economy that protects nature creates potential policy, technology, market, and reputation risks. Nature-related transition risks are comparable to climate-related transition risks due to transition to a low-carbon economy



Financial institutions have exposure to these nature risks through the businesses they provide financing and insurance to, or in the businesses and assets in which they invest. Nature risk poses systemic risk to financial and ecosystems stability.

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# **DELOITTE'S NATURE RISK CAPABILITIES**

OUR APPROACH TO NATURE RISK

By integrating nature into climate change initiatives, financial institutions can identify and manage nature-related risks and embed biodiversity considerations into their decision-making processes, while also leveraging climate teams and initiatives that are already in place.

### Mitigation of climate risk and nature risk go hand-in-hand

Climate change, natural resource depletion, and biodiversity loss are closely linked and mutually reinforcing. Extreme weather events cause destruction of species and ecosystems, while degraded carbon stores release more carbon dioxide and accelerate global warming.



financial sector

Both climate change and natural capital loss result in physical and transition risks that can manifest as financial loss.



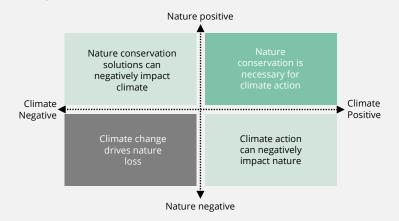
The interaction between climate-related and nature-related financial risks pushes for a comprehensive approach to risk management by financial institutions.

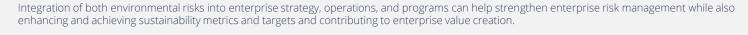


Solutions to conserve and protect natural capital also provide climate change mitigation and adaptation benefits.

### Climate nature nexus Climate change, natural resource depletion, and biodiversity loss are closely linked and mutually reinforcing, making a strong case for an integrated approach. Materiality of nature-related risks, over and above climate-related financial risks Degraded carbon stores Unintended consequences for nature when release more carbon actions focus exclusively on climate mitigation dioxide and accelerate Climate and adaptation global warming change Dangers of disregarding compounding effects from interactions between climate change and biodiversity loss Extreme weather events cause destruction of Potential synergies and cost efficiencies when species and ecosystems addressing climate change and nature risk Potential risks to the stability of the broader

There is no progress towards net zero greenhouse gas emissions without similar action to halt natural capital loss. The answer to both lies in nature-based solutions.





### Use TNFD's LEAP5 method to:

- Locate the interfaces with nature
- Evaluate 2 dependencies and impacts
- Assess risks and opportunities
- Prepare to respond and report

Monitor progress toward goals and determine if targets are still relevant, achievable, and impactful

**Refining Targets** 



# Deepen

Understand impacts and stakeholder opportunities feedback

Reevaluate awareness of and prioritize goals through the lens of rightsholders

Address issues and identify ways to improve

### Stakeholder Engagement

Decide which stakeholders to engage with, when to engage with them, and how to engage with them

### Leadership Support

Obtain leadership buy-in on commitment to disclose and act on findings and allocation of resources for program development, integration and oversight



Assess nature-related risks



Integrate programs to manage risk



**Plan** for disclosure and accountability



Establish governance and oversight

Develop procedures and

risk policy requirements

processes to execute on nature

**Materiality Assessment** 

Identify and assess

the organization's

nature-related risks

and opportunities

most material

**Policy Design** 

nature risk assessments based

on materiality

Design statement of

policy to mandate

**NATURE RISK FRAMEWORK** 



### **Reporting and Disclosure**

Implement a nature-positive reporting process to measure and disclose environmental performance progress



### **Governance of Nature Risks**

Establish a governance framework to manage the various risks related to nature and biodiversity organized by direct operations, supply chain, and financed activities

### **Environmental Risk Due Diligence Program Integration**

Establish clarity and transparency for the environmental and social impacts associated with financial relationships







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# **DELOITTE'S NATURE RISK CAPABILITIES**

### OUR APPROACH TO NATURE RISK





Risk opportunity

ire material & should be disclosed in line with the TNFD

assessment



The first step in developing a nature strategy is to identify and assess the nature-related risks and opportunities of the organizations value chain by using TNFD's LEAP method. LEAP provides a structured approach to understanding an organization's material nature-related risks organized by nature dependencies and nature impacts, two key lenses for assessing an organization's responsibilities and opportunities related to nature.







### INTEGRATING NATURE RISK

Financial institutions can integrate nature risk and biodiversity loss into their risk management processes using a similar framework to the GHG Scope Approach.

Impact Analysis What is the size and scale of



**Direct Operations**: Managing impacts on biodiversity and nature from the institution's own operations.



**Upstream**: Managing impacts on biodiversity and nature from the institution's supply chain.



**Financed Activities**: Managing impacts on biodiversity and nature from the institution's clients, investments, and lending activities.

		Direct Operations	Supply Chain	Financed Activities
Climate	GHG Emissions	Operations, buildings, fleet	Grid, upstream suppliers	Financed emissions
	Impacts	Outputs of bank's business model, i.e., construction, infrastructure, waste	Outputs of supplier business models based on industry and geography	Outputs of industry and commercial business models based on industry and geography
Nature	Dependencies	Economic inputs of bank's business model, i.e., water, office supplies, information technology	Economic inputs of supplier business models based on industry and geography	Economic inputs into industry and commercial business models based on industry and geography
FSI Functions		Corporate Properties	Supplier Sustainability	Environmental and Social Risk Management, Sustainable Finance



# **RELIANCE ON ECOSYSTEM SERVICES**

The significance of depending on ecosystem services? e.g., Dependency on provisioning services, regulating and maintenance of the same



RESILIENCE ON ECOSYSTEM SERVICES

The capacity of the ecosystems in which a company operates to maintain a consistent supply of those services to the company



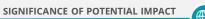
### RISK MITIGATION

What direction is direct resource utilization heading towards? What measures have been taken to enhance the resilience of ecosystems that provide support to dependencies?

Methodology

### MAGNITUDE OF POTENTIAL IMPACT

What could be the impact of activities on the integrity of the ecosystem?



What is the condition and irreplaceability of the environmental resources affected?

**RISK MITIGATION** 

What is the **trend** in relevant pressures placed on nature? What measures have been taken to evaluate, prioritize, and alleviate the impacts?

### TIERED APPROACH TO THE NATURE RISK PROFILE METHODOLOGY

### TIER 1

Assessed at the **company-level** and estimated using sector averages and regional level spatial risk factors.

### TIER 2

Implemented based on data at the asset-level and estimated using spatial resolution computed for the geographical location of the asset.

### ROAD MAP TO UPDATING COMMODITY RISK MANAGEMENT FRAMEWORK WITH NATURE CONSIDERATIONS

Updates to commodity price risk management frameworks are needed to account for future trends in commodity prices driven by nature impacts and dependencies:



**Planning Perspective** 



**Procurement / Sourcing** Perspective



**Sustainable Commodity** Trade and Finance Products

## **DELOITTE'S NATURE SERVICES PACKAGE**

OVERVIEW

We support the development, design, and implementation of a standard nature risk program in three phases. Deloitte's Risk and Financial Advisory also brings in expertise and specific targeted offerings that will support your efforts to address challenges around nature and biodiversity risks, throughout your enterprise and value chain.



### PHASE I: STANDARD AND POLICY SETTING

Outline commitment and vision to execute on nature risks and opportunities through a risk-based approach, aligned to industry best practices and international standards



# PHASE II: TOOLS AND PROCEDURES DEVELOPMENT

Identify champions, establish communities of practice, and launch workstreams to articulate pathways to effectively meet policy objectives, including the tools, processes, and resources required, leveraging existing infrastructure



# PHASE III: SOCIALIZATION, TRAINING, AND INTEGRATION

Integrate policy objectives and outcomes into business procedures, practices, systems, and operations through appropriate socialization, training, and change management, and identifying key performance indicators

9-12 months

**Employees** and business groups affected by policy are trained on policy requirements, and tools and procedures developed for nature

10-12 weeks 10-12 weeks

- List of material, nature-related risks based on industry, geography, and value chain
- Recommendations for addressing, managing, and mitigating said risks
- Analysis of relevant laws and regulations per jurisdiction

List of material nature -related risks with recommendations

- Defined internal policy scope and objectives tied to external reporting and disclosure strategy
- Outlining of a **process for screening** commercial clients and project finance for material nature and biodiversity risks

- Assessment of inherent risks and industry controls for all applicable sectors
- Collection of risk-based tools, procedures, data sets, and resources aligned to industry leading practices and international standards
- Business procedures **tailored to each impacted business** group's location, circumstances, risks, and opportunities
- Ready resources to support organizations in effective and efficient implementation, management, and governance of policy objectives
- l resources
  - Alignment with existing Environmental and Social Risk Management (ESRM) programs
  - Pre-existing administrative operations and systems altered
  - Environmental risk due diligence program(s) implemented
  - Monitoring and enforcement of policy objectives commenced
  - **Framework** ready for publication

Nature risk management policy and business procedures specific to jurisdiction

Nature key performance indicators, reporting plan, and data management plan

Process for remediation based on risks in operations, supply chain, and investments Training materials and facilitation plan

Data management

Reporting plan

Nature Risk Framework publication readiness Technology systems management plan

External stakeholder engagement pla

COE, council, and committee charters

Governance model and escalation protocols

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Nature risk framework with option for public disclosure preparedness

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### SOURCES

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OBJECTIVE

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- 4 Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability, "Financing nature," 2020.
- 5 Taskforce on Nature-related Financial Disclosures, "Guidance on the identification and assessment of nature-related issues: the LEAP approach", October 2023.

6 S&P Global, "Nature Risk Profile", 2022.

### CONTACTS

Due diligence questionnaires, risk

engagement reference materials

scoring card, and client



Ricardo Martinez
Advisory Principal
Deloitte & Touche LLP
rimartinez@deloitte.com
Tel: +1.212.436.2086



David Sherwood
Advisory Managing Director
Deloitte & Touche LLP
dsherwood@deloitte.com
Tel: +1.203.216.8906



Sarah Haley Advisory Sr. Manager Deloitte & Touche LLP shaley@deloitte.com Tel: +1.980.376.4115



Brandon Righi Advisory Manager Deloitte & Touche LLP brrighi@deloitte.com Tel: +1.973.602.5078