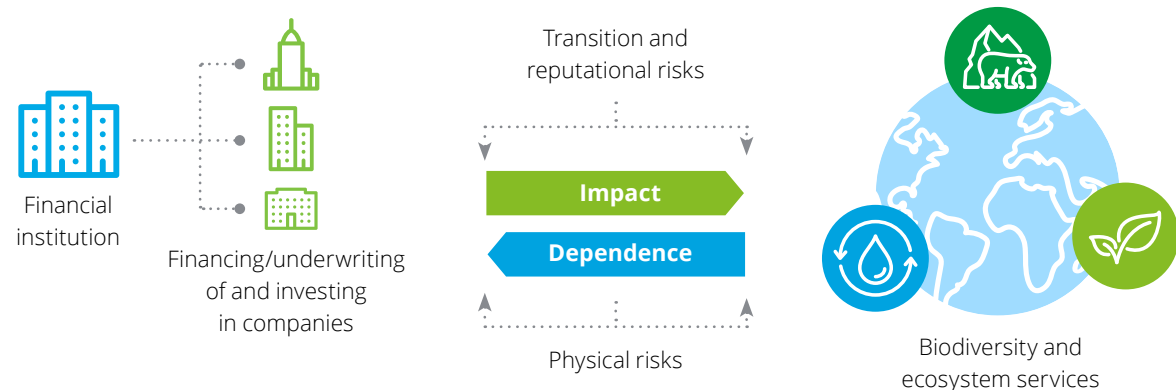


Nature risks and the financial sector

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

Financial institutions have a significant impact on the preservation and loss in 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.



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:

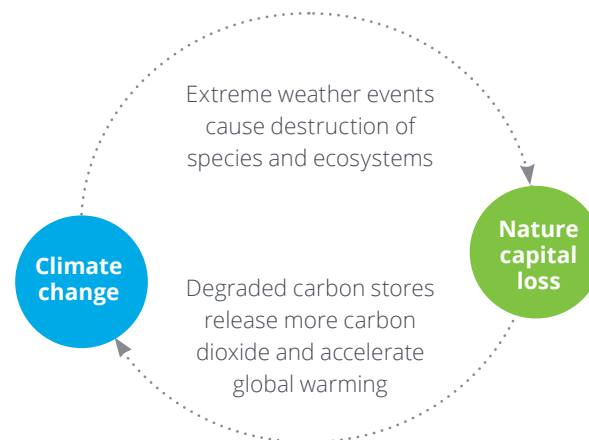
- **Physical risk:** Environmental degradation (e.g., land use change, invasive species, climate change) can adversely impact business operations and can cause loss of capital and the disruption of value chains. Nature-related physical risks are comparable to climate-related physical risks due to extreme 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.

Climate nature nexus

Both natural capital loss and climate change pose systemic risks to the financial services industry.

Climate change, natural resource depletion, and biodiversity loss are closely linked and mutually reinforcing



Mitigation of climate and nature risks go hand in hand.

- 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. Without natural capital, climate solutions do not exist.

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

\$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

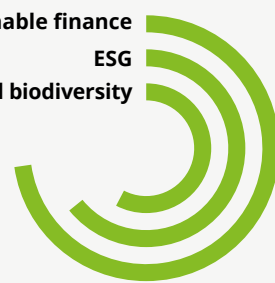
Loans and underwriting services provided by the world's largest 50 banks invested in 2019, in sectors that are the primary drivers of nature loss.⁴

Natural capital presents an untapped market opportunity rooted in truly sustainable returns



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**.⁵

Sustainable finance
ESG
Nature and biodiversity



Sustainable finance

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 concepts



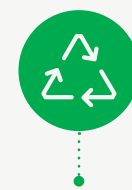
Biodiversity

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

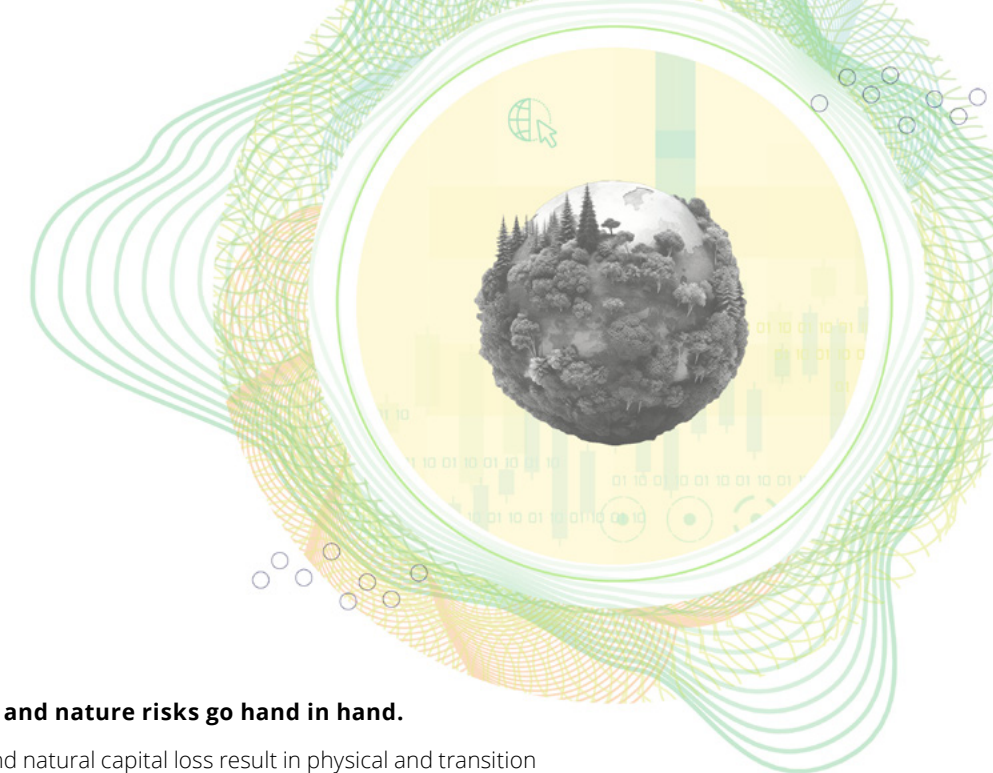
Natural capital refers to the stock of natural resources and ecosystems that provide a flow of valuable goods and services to society.



Ecosystem services

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

In *The economics of biodiversity*,⁵ 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**.



Why does nature risk matter to the financial services industry (FSI)?



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

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.



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

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.



Okay, but I work for a financial services institution, and we do not produce physical products.

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 with substantial impacts to industries, markets, and the global economy. Credit risk, market risk, liquidity risk, and many other types of financial risk are directly linked to natural capital.



This sounds like just another new thing—I'm still trying to catch up on climate risk.

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.



Okay, but where do I even start? It seems like a lot to take in.

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. For more information, please see our contacts.

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The business case for FSI



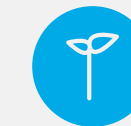
Reappropriation of capital

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.



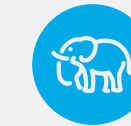
Science-based commitments

Demonstrate the commitment to sustainability by making science-based commitments to reduce FSI's 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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1 De Nederlandsche Bank, "Indebted to nature," June 2020.

2 World Economic Forum, "Nature risk rising: Why the crisis engulfing nature matters for business and the economy," January 2020.

3 World Bank Group, "The economic case for nature," June 2021.

4 Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability, "Financing nature," 2020.

5 Partha Dasgupta, ed., *The economics of biodiversity: The Dasgupta review*, HM Treasury, United Kingdom, February 2021.