

# IIF Green Weekly Insight

## Tackling Nature-related Risks

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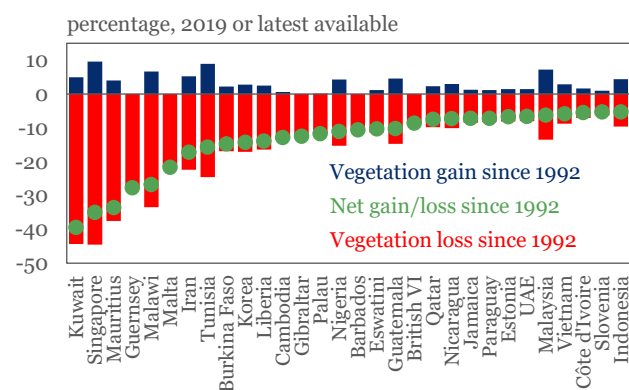
- While climate change tops the global policy agenda, nature-related risks (and opportunities) are a growing focus.
- Nature loss can be addressed by aligning financial flows with nature/biodiversity goals and—on a policy level—reducing government subsidies to polluting industries.
- The new [Taskforce on Nature-related Financial Disclosures](#) (TNFD) supports the shift of financial flows from nature-negative to nature-positive activities by setting out a framework for proper voluntary reporting and disclosures.

**Nature in crisis:** As the global policy debate on [climate change](#) advances, broader [environmental issues](#) such as nature loss and natural capital degradation are coming into [sharper focus](#). As scientists deepen understanding of the critical links between climate change and natural capital, key drivers of nature loss—such as resource exploitation, land and sea use change, pollution and invasive alien species—are being examined as potential physical and transition risks to the financial system and broader economy. With over [half of the world's economic output](#) moderately or highly dependent on nature, finding new ways to assess and manage nature-related risks is emerging as a new action agenda for action by [central banks](#), [ministries of finance](#) and regulators (in some jurisdictions).

### Unlike climate, not a single metric for nature risk:

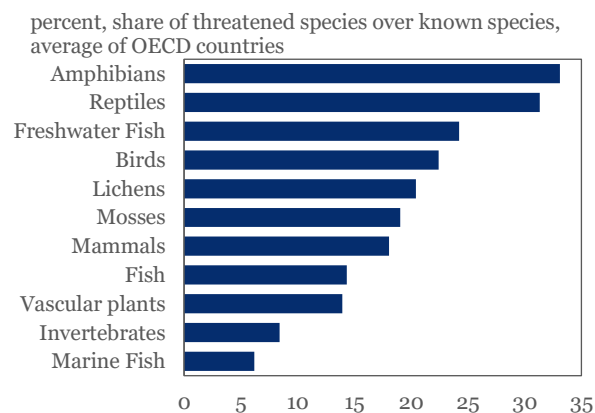
The health and resilience of nature and ecosystems can be measured by looking at levels of biodiversity (e.g. species richness and ecosystems diversity) and natural processes. However, there is no broadly accepted metric for assessing how a given firm may be reliant upon nature, in terms of its 'natural capital/biodiversity footprint'. For instance, there is no equivalent of a widely-acknowledged carbon metric. Current nature-related impact assessment practices focus on a broad range of variables related to land use, water use, climate change, ozone formation, [acidification](#), and [eutrophication](#). Regardless of the choice of variable, biodiversity indicators have [worsened](#) over the years, despite policies in place such as the UN Convention on Biological Diversity (CBD)'s Strategic Plan for Biodiversity 2011-2020, including the Aichi Biodiversity [Targets](#) protecting at least 17% of land area and 10% of coastal and marine areas. Since pre-industrial times, natural ecosystems have declined by nearly 50% on average, while over 30% of forest areas have been lost.

Chart 1: Land cover change: vegetation losses and gains in selected countries since 1992\*



Source: OECD; \*Land cover is defined as the percentage of tree cover, grassland, wetland, shrubland and sparse vegetation converted to any other land cover type.

Chart 2: In highly populated OECD countries, amphibians are the most threatened species\*

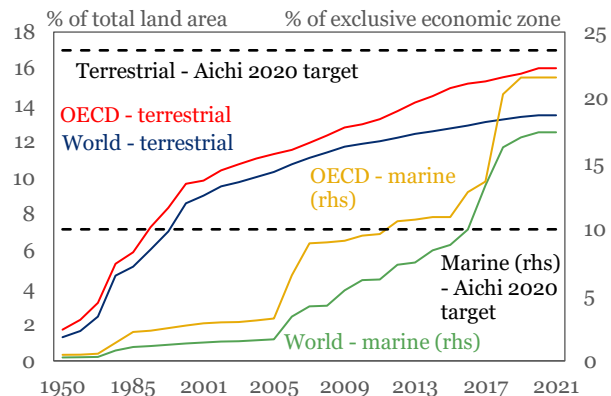


Source: OECD, IUCN; \*The threatened category refers to critically endangered, endangered and vulnerable species, that is those plants and animals that are in danger of extinction or likely soon to be.

More recently, many [emerging](#) and low-income countries have noted large land cover changes since 1992 (Chart 1)—these contribute to terrestrial biodiversity loss. Nearly 25% of assessed plant and animal groups—or an estimated 1 million species—are [threatened](#) by human actions and face extinction within decades. Amphibians are the most threatened species in OECD countries, compared to birds, plants and mammals (Chart 2). While protected areas are growing around the world and now cover 13% of land areas and 17% of marine areas (Chart 3), the international community has failed to meet all of Aichi biodiversity targets. Given the severity of the biodiversity crisis and the lack of progress on expanding conservation areas, the UN CBD is developing a [new global framework](#) to halt biodiversity loss by 2030 (i.e. turn nature-positive) and achieve recovery and restoration by 2050. The framework includes 21 action-oriented targets such as ensuring 30% of global land and sea areas are conserved and reducing pollution from all sources that harm Earth’s biodiversity. The draft version is expected to be [finalized](#) and adopted at COP-15 later this year in China—this could become nature’s equivalent of the 2015 Paris Agreement on climate change in terms of setting a global policy target.

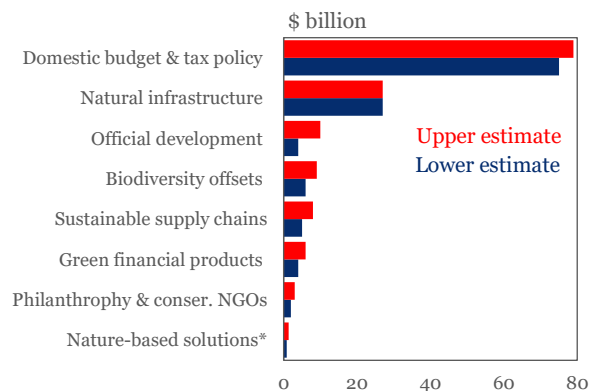
**The vital role of finance in addressing nature-related risks:** There has recently been a surge in the establishment of new biodiversity-related initiatives such as [Finance for Biodiversity](#) targeting financial institutions, highlighting the growing push to factor nature into financial and business decisions (See Table 1). Financial flows—both public and private—play a crucial role in the drive to reverse biodiversity loss and protect nature. As a start, corporations and governments can begin to assess how to align financial flows with nature positive pathways by identifying, measuring and managing risks and impacts of investments on biodiversity; including nature-related risks in their financial decisions (reporting and disclosing both risks and opportunities); mobilizing funding for nature-positive economy; using nature/green financial products and processes such as [blended finance](#) and [debt-for-nature swaps](#); and encouraging the development of national biodiversity financing plans. While [aligning](#) flows with biodiversity goals is a good first step, increasing financing for nature is not enough. There is an urgent need to account for harmful subsidies from governments, particularly towards fossil fuels and agricultural chemicals and practices. Specifically, governments spend over \$500 billion each year on such subsidies (2019 est.)—over 5 times the total spending for biodiversity. In 2019, global public spending for financing nature was about \$124-\$143 billion (Chart 4), while the global biodiversity funding needs are estimated to be \$722-\$967 billion annually (Chart

Chart 3: Terrestrial and marine protected areas\*



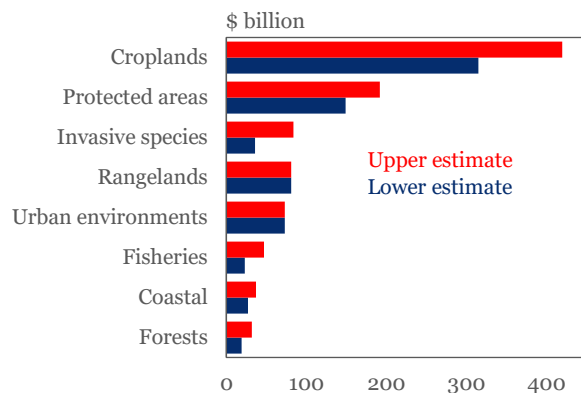
Source: OECD, WDPA; \*Protected areas are clearly defined geographical space, recognised, dedicated and managed to achieve the long-term conservation of nature.

Chart 4: Global biodiversity financing in 2019



Source: The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability; \* & carbon markets

Chart 5: Global biodiversity funding needs by 2030



Source: The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability

5). Thus, the average [global biodiversity financing gap](#) is estimated to be about \$711 billion per year.

**Shifting to Nature-Positive:** First introduced in June 2021, the work of the [Taskforce on Nature-related Financial Disclosure \(TNFD\)](#) supports the shift of financial flows away from nature-negative results and toward [nature-positive](#) outcomes. Similar to the work of the [Taskforce on Climate-related Financial Disclosures \(TCFD\)](#)—which solely focused on climate-related risks and opportunities—the TNFD is intended for global use. In March 2022, the TNFD released its [first beta version](#) of the framework with a [data discussion paper](#). The beta framework defines core concepts like nature and nature-related risks and opportunities, makes draft disclosure recommendations and introduces the voluntary LEAP approach. The TNFD’s draft disclosure recommendations are built upon the four disclosure categories of the TCFD—governance, strategy, risk management, and metrics and targets. The LEAP approach maps how an organization can conduct its own nature-related risk and opportunity assessment: 1) **Locate** the interface with nature, 2) **Evaluate** the dependencies and impacts, 3) **Assess** material risks and opportunities, and 4) **Prepare** to respond and report (see Table 2). In addition to the 17 steps for corporates, the LEAP

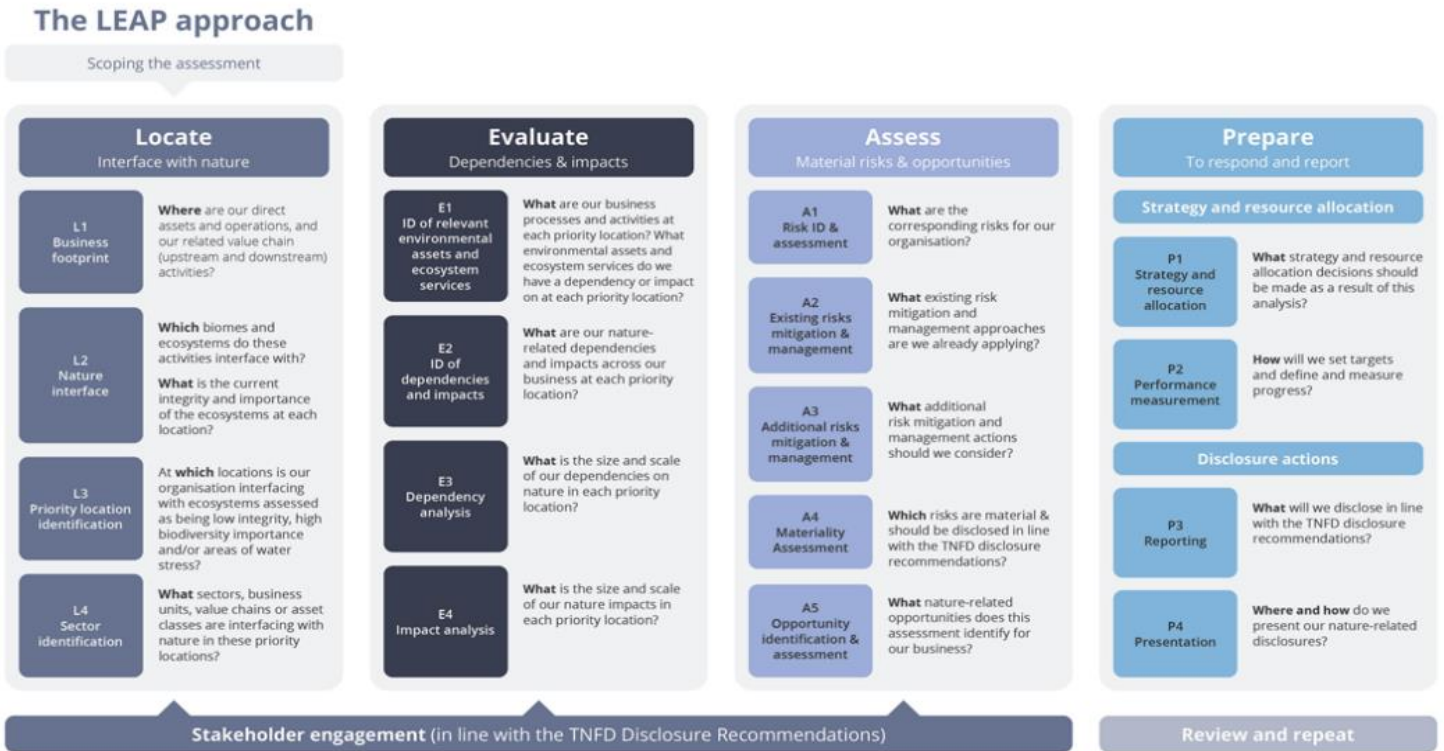
approach for financial institutions asks four questions that considers the type of financial institution, type of product/asset class, level of aggregation and sector in which the firm allocates capital. The data discussion provides a brief survey of available data sources to identify nature-related risks and opportunities along with two case studies to illustrate how data analytics can be applied in TNFD’s LEAP approach. The studies reveal the differing data coverage across nature realms, biomes and ecosystem types; the lack of a standard measurement approach for nature; and limited data accessibility. Pilot testing of the first beta framework started in early June. In the meantime, the group is already working on the second iteration, out by end of June, and focusing on updates and priority areas for further development, like the climate-nature nexus and sector-specific guidance. The final release of the TNFD’s recommendation is in September 2023.

**Table 1: Overview of Biodiversity Initiatives for Financial Institutions**

Name	Target Audience
<a href="#">Finance@Biodiversity Community</a>	Investors, Banks, Insurers
<a href="#">Finance for Biodiversity Pledge and Foundation</a>	Investors, Banks, Insurers
<a href="#">Principles for Responsible Investment (PRI)</a>	Investors
<a href="#">Principles for Responsible Banking (PRB), Principles for Sustainable Insurance (PSI) &amp; Investment Leadership Platform (ILP)</a>	Investors, Banks, Insurers, Corporates
<a href="#">Taskforce on Nature-related Financial Disclosures (TNFD)</a>	Investors, Banks, Insurers, Corporates
<a href="#">Finance for Biodiversity Initiative (F4B)</a>	Banks, Insurers, Corporates
<a href="#">Science Based Targets Network (SBTN)</a>	Investors, Corporates
<a href="#">Aligning accounting approaches for nature (Align project)</a>	Investors, Banks, Insurers, Corporates
<a href="#">Partnership for Biodiversity Accounting Financials (PBAF)</a>	Investors, Banks, Insurers
<a href="#">Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE)</a>	Investors, Banks, Insurers
<a href="#">Consortium for Biodiversity Footprint (CBF)</a>	Investors, Banks, Insurers
<a href="#">Coalition for Private Investment in Conservation (CPIC)</a>	Investors, Banks, Insurers
<a href="#">The Biodiversity Finance Initiative (BIOFIN)</a>	Investors, Banks, Insurers, Corporates
<a href="#">University of Cambridge Institute for Sustainability Leadership</a>	Investors, Banks, Insurers
<a href="#">Conservation Finance Alliance (CFA)</a>	Investors, Banks, Insurers, Corporates
<a href="#">Biodiversity Finance Learning Coalition: Internalize the Externality</a>	Investors, Banks, Insurers
<a href="#">Business for Positive Biodiversity Club (B4B+ Club)</a>	Investors, Banks, Insurers, Corporates
<a href="#">Land Use and Climate Working Group, Biodiversity (by Ceres)</a>	Investors, Banks
<a href="#">Capital for Climate</a>	Investors, Banks, Insurers, Corporates

Source: Finance for Biodiversity

**Table 2: TNFD's LEAP Approach**



Source: TNFD

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- [Scaling Voluntary Carbon Markets](#) (06/02/2022)
- [Climate Collaboration in a Polarized World](#) (05/26/2022)
- [Rising rates, stronger USD spell trouble for EMs](#) (05/19/2022)
- [Global Debt Monitor: Debt in the Time of Geopolitics](#) (05/18/2022)
- [A New ESG Scorecard for Emerging Markets](#) (05/12/2022)
- [Growing risks in corporate debt markets](#) (05/05/2022)
- [The Updated Principles for Stable Capital Flows and Fair Debt Restructuring](#) (04/28/2022)
- [Prevention and Resolution of Sovereign Debt Crises—the Importance of Market-based Approaches](#) (04/28/2022)
- [ESG Flows and Markets – Q1 2022 Chartbook](#) (04/20/2022)
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