



ICGN Biodiversity Action Toolkit

May 2023

In our January 2023 Viewpoint, *Biodiversity as Systemic Risk*, the International Corporate Governance Network (ICGN) advances 10 “game-changers” — concepts, processes, strategies and legal regimes — for addressing the profound and immediate risks to corporations and investors presented by biodiversity loss. This game-changers Viewpoint also includes an extensive list of questions that investor stewardship teams may consider posing when engaging companies on biodiversity loss.¹

Recognising that for many investors biodiversity represents a new set of risks that have yet to be identified and assessed for further action, ICGN offers this *Biodiversity Action Toolkit*. It is published as a companion to the Viewpoint and is designed to: (1) highlight the tools investment institutions can draw upon in order to better understand their risk exposure; and (2) identify the main stewardship opportunities for mitigating these risks.

Assessing the Risks

Before exploring current services on offer for biodiversity risk assessment, investors should seek to become familiar with key biodiversity metrics and terms.

Mean Species Abundance (MSA): expresses the relative abundance of a native species in an ecosystem compared to their abundance in an undisturbed ecosystem. MSA of 0% means that the ecosystem has lost all of its original biodiversity. MSA of 100% means that biodiversity is equal to an original, undisturbed ecosystem.²

Potentially Disappeared Fraction (PDF): reflects the potential extinction of species, within a specific time associated with resource uses or emissions, which are leading to habitat losses or degradation.

Species Threat Abatement and Restoration (STAR): assesses the potential of biodiversity threat abatement and habitat restoration actions to yield benefits for threatened species. STAR enables investors and companies to quantify their contributions to biodiversity preservation.

Corporate Biodiversity Footprint (CBF): approaches used to measure the extent to which a company is contributing to the degradation of the ecosystems which it impacts and upon which it relies. Similar to carbon footprint.

Mitigation Hierarchy: guides corporates and investors towards limiting the negative impacts on biodiversity. It emphasizes *avoiding* and *minimizing* any negative impacts, and then *restoring* sites no longer used by a project, before finally considering *offsetting* residual impacts.

¹ <https://www.icgn.org/biodiversity-systemic-risk-10-game-changers-board-directors-and-stewardship-teams>

² A complete methodology guide can be found here. https://www.icebergdatalab.com/documents/CBF_client_methodological_guide_April_22.pdf. MSA is endorsed by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and IPCC and is the UN’s recommended measure of biodiversity.

Anticipating a Global Disclosure Framework

The Taskforce on Nature-related Financial Disclosures (TNFD) is developing a biodiversity disclosure framework. Modelled on the Taskforce for Climate-related Financial Disclosures (TCFD) but adjusted for the unique challenges of reporting on risks and opportunities associated with biodiversity and nature, the TNFD framework aims to deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks. The ultimate aim is to support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. The TNFD framework uses the four main disclosure categories of the TCFD: governance, strategy, risk and impact management, and metrics and targets. The TNFD framework has attracted the support of major policy-makers and standards-setters in significant markets around the world. In March 2023, the TNFD released its fourth and final beta version; it expects to publish final recommendations in September 2023.³

Open-Source Biodiversity Assessment Tools

LEAP is a methodology introduced by the TNFD for understanding and responding to nature-related risks and opportunities. LEAP allows companies to *locate* their interface with nature, *evaluate* their dependencies and impacts, *assess* risks and opportunities, and *prepare* responses.⁴

ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is a tool developed by United Nations Environment Program's World Conservation Monitoring Centre (UNEP-WCMC). It assesses the biodiversity impacts and dependencies of investment portfolios, based on Excel files that investors can download and employ. This tool helps investors identify priority sectors and rank impacts and dependencies from low to high. By using this tool investors can better understand how their investments are harming nature or building the resilience of biodiversity. ENCORE provides a useful first step as investors start to develop their biodiversity strategy.⁵

The Forest 500 – Powerbrokers of Deforestation is a tool developed by Global Canopy, scoring companies on their overall approach to biodiversity, evaluating varying levels of impacts by commodity (palm oil, soy, cattle, forestry) and examining each company's commitment strength, implementation, and reporting plus any associated human rights abuses. Its scope covers all supply chain segments from producer to processor, trader, manufacturer and retailer, so can be widely used by investors.⁶

The 2022 World Benchmarking Alliance (WBA) Nature Benchmark has assessed close to 400 companies across 8 industries (Apparel and Footwear, Chemicals, Construction & Engineering, Construction Materials and Supplies, Containers and Packaging, Metals and Mining, Pharmaceutical & Biotechnology, and Tires and Rubber), with the goal to increase by another

³ <https://tnfd.global/news/tnfd-releases-fourth-final-beta-framework-v0-4/>

⁴ <https://framework.tnfd.global/framework-and-guidance/leap-the-risk-and-opportunity-assessment-approach/>

⁵ <https://encore.naturalcapital.finance/en>

⁶ <https://forest500.org>

600 companies in 2023. Their focus is on Governance and Strategy, Ecosystems and Biodiversity and Social Inclusion and Community practices.⁷

Trase is a data-driven transparency initiative designed to enhance understanding of how the trade and financing of commodities is driving deforestation worldwide. Its supply chain mapping approach brings together disparate, publicly-available data to connect consumer markets to deforestation and other impacts on the ground. Trase's freely available online tools and actionable intelligence enable companies, financial institutions, governments and civil society organisations to take practical steps to address deforestation.⁸

World Resources Institute Global Forest Watch (GFW) is an online platform that provides data and tools for monitoring forests. By harnessing cutting-edge technology, GFW allow access to near real-time information about where and how forests are changing around the world.⁹

World Wildlife Fund's Biodiversity Risk Filter provides a corporate and portfolio-level screening tool to help companies and investors to prioritise action to address biodiversity risks for enhancing business resilience and contributing to a sustainable future.¹⁰

Paid Subscription Biodiversity Assessment Tools

Forest IQ's database provides financial institutions with market-leading data about corporate performance on deforestation, conversion of natural ecosystems, and any associated human rights abuses. This will enable financial institutions to identify risks and opportunities to help them to deliver deforestation-free portfolios by 2025.¹¹

Iceberg Data Lab provides environmental data solutions to financial institutions, developing metrics and tools to help manage environmental impacts. Iceberg's **Corporate Biodiversity 3Footprint** reflects the extent to which ecosystems affected by a company's business have been degraded from the pristine state. The score factors in land use, nitrogen deposition, GHG emissions, and release of toxic compounds.¹²

Integrated Biodiversity Assessment Tool (IBAT) uses three datasets (IUCN Red List of Threatened Species, World Database on Protected Areas and the World Database of Key Biodiversity Areas) to establish a STAR score for any terrestrial 5x5km grid cell. STAR scores provide an indication of the relative potential contribution to reducing species extinction risk through either threat abatement or restoration activities. STAR scores are derived based on a species' current and restorable Area of Habitat (AOH). Terrestrial scores are currently calculated for species of amphibians, birds and mammals for which current or historical AOH are available.

ISS ESG's Biodiversity Impact Assessment Tool assesses the impacts of corporates on biodiversity by considering a set of environmental pressures on species and habitats, the entire

⁷ <https://www.worldbenchmarkingalliance.org/nature-benchmark/>

⁸ <https://www.trase.earth/about/>

⁹ <https://www.globalforestwatch.org/about/>

¹⁰ <https://riskfilter.org/biodiversity/home>

¹¹ <https://globalcanopy.org/insights/news/beta-version-of-forest-iq-launches-today/>

¹² <https://www.icebergdatalab.com>

value chain, and geographical location. The results are presented in the form of potentially disappeared fraction of species (PDF) or Mean Species Abundance (MSA).

MSCI Biodiversity-Sensitive Areas Screening Metrics enables investors to identify companies that have physical assets located in areas of high biodiversity relevance, such as healthy forests, deforestation fronts, or species-rich areas. The **MSCI Deforestation Screening Metric** indicates companies exposed to deforestation-related risks, including those that may directly or indirectly (via their supply chains) contribute to deforestation. This could be a result of direct operations in areas of risk, such as the tropics, or by the production or reliance on commodities considered key drivers of deforestation, including palm oil, soy, beef, and timber.

RepRisk, in partnership with IBAT, has launched **RepRisk Geospatial Analytics** to facilitate biodiversity risk assessment, showing the proximity of 60,000+ mining and oil and gas projects to 270,000+ protected areas and 16,000+ Key Biodiversity Areas.¹³

S&P Global/UNEP Nature Risk Profile is a new methodology for analysing companies' impacts and dependencies on nature. The Nature Risk Profile is aimed at enabling the financial sector to measure and address nature-related risk by providing scientifically robust and actionable analytics on nature impacts and dependencies.

Stewardship Opportunities

Engaging companies for positive outcomes is enabled by effective collaboration among investment institutions. Below you will find descriptions of established collaborative initiatives with well-established work streams, plus two that are more recently underway.

The **Finance for Biodiversity Pledge** commits financial institutions to call on global leaders to protect and restore biodiversity through their financial activities and investments. As of March 2023, the pledge includes 126 financial institutions in 21 countries representing 18.8 trillion euros.¹⁴ The pledge consists of five steps:

1. Collaborate and share knowledge on assessment methodologies, biodiversity-related metrics, targets and financing approaches for positive impact.
2. Incorporate biodiversity into ESG policies and engage companies to reduce their negative and increase their positive impacts on biodiversity.
3. Assess financing activities and investments for significant positive and negative impacts on biodiversity and identify drivers of its loss.
4. Monitor opportunities to set and disclose targets based on best available science to increase significant positive and reduce significant negative impacts on biodiversity.
5. Report annually and be transparent about the significant positive and negative contributions to global biodiversity goals linked to financing activities and investment portfolios.¹⁵

¹³ <https://www.reprisk.com/campaigns/geospatial>

¹⁴ <https://www.financeforbiodiversity.org>

¹⁵ https://www.financeforbiodiversity.org/wp-content/uploads/2.-Guidance-Finance-for-Biodiversity_Dec2022.pdf

The Finance for Biodiversity Foundation supports signatories specifically in the areas of assessment, corporate and public policy engagement efforts, and disclosure. In December 2022, the Foundation issued an operational guide on how to integrate biodiversity into investment programs and strategies, including regulations and policies, relevant scientific insights, and developments in the field of biodiversity measurement.¹⁶

In December 2022, **Finance for Biodiversity** partnered with other key groups to launch **Nature Action 100**, a new global engagement initiative created to drive urgent investor action on the nature-related risks and dependencies in the companies they own. The initiative will engage companies in key sectors that are deemed to be systemically important in reversing nature and biodiversity loss by 2030. Modelled on Climate Action 100+, **Nature Action 100** aims to drive greater corporate ambition and action on tackling nature loss and biodiversity decline, complementing the UN Global Biodiversity Framework. The initiative will identify the actions companies need to take to protect and restore nature.¹⁷

The **Finance Sector Deforestation Action Initiative** is driven by more than 30 financial institutions managing approximately US\$9 trillion committed to best efforts to eliminate agriculture-driven deforestation from their investment and lending portfolios by 2025.¹⁸ This initiative prioritises four key forest-risk commodities (palm oil, soy, cattle and pulp & paper) and includes active work streams focused on engaging data providers, companies, and public policy-makers.

In mid-2022, a formal investor collaborative initiative engaging a subset of the **Forest 500 on shared investor expectations** was formed in an effort to encourage companies to improve disclosure on the traceability of these specific commodities, ensure deforestation-free sourcing, and disclose statements of how human rights and the rights of Indigenous People (including the right to free, prior, and informed consent) are being integrated into sourcing practices.¹⁹

The **Investor Public Dialogue on Deforestation** is a collaborative engagement focused on engaging with public agencies and industry associations in key supply countries and purchasing countries to halt deforestation. As of December 2022, the IPDD is supported by 70 global investment institutions with almost US\$10 trillion in assets under management. This initiative is open to new signatories at either a lead or supporting level.²⁰

The **Principles for Responsible Investment (PRI) Collaborative Stewardship Initiative on Nature** will support PRI signatory efforts to halt and reverse biodiversity loss by 2030 focusing on forest loss and land degradation.

¹⁶ [FfB-Foundation Act-now Guide-on-biodiversity-integration.pdf \(financeforbiodiversity.org\)](#)

¹⁷ <https://www.financeforbiodiversity.org/at-cop15-investors-announce-nature-action-100-to-tackle-nature-loss-and-biodiversity-decline/>; <https://www.natureaction100.org>

¹⁸ <https://racetozero.unfccc.int/wp-content/uploads/2021/11/DFE-Commitment-Letter-.pdf>

¹⁹ <https://climatechampions.unfccc.int/wp-content/uploads/2022/09/FSDA-Investor-expectations-of-companies-16.09.2022.docx.pdf>

²⁰ <https://www.tropicalforestalliance.org/en/collective-action-agenda/finance/investors-policy-dialogue-on-deforestation-ipdd-initiative/>

Conclusion

As noted in the game-changers Viewpoint, five years ago biodiversity loss did not feature prominently in discussions of investment risk. But, along with climate change, these challenges have now jumped to the top of the global agenda, presenting potentially existential threats to the economy, society, and capital markets. It is challenging to discuss the risks presented without sounding alarmist. But the reality is that the world has now entered an era where humanity has become the dominant evolutionary force and is triggering the greatest extinction of species we have known. Investment institutions have a key role to play. We are hopeful that this Toolkit can help investors get started and come to play a significant role in addressing this challenge.