# Nature on the investment agenda

A portfolio analysis of impacts and dependencies



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# Introduction

It is long past time investors confronted head-on the fact that human activity has caused devastating consequences for the planet, with serious implications for long-term value creation—and destruction. We see this not only from a climate change perspective, but also through the wider lens of nature: the effects of deforestation and land use change, water pollution, disrupted natural habitats and species extinction—to say nothing of the *unknown* impacts yet to arise. These impacts are all-but guaranteed to multiply and intensify, with the systemic risk to investment portfolios growing larger and less diversifiable with each passing day.

Human beings rely on nature in so many ways for so many things—the air we breathe, the food we eat, clothing, shelter, all manner of physical goods, medicines, energy and electricity, and recreation and leisure activities. The World Economic Forum estimates that more than half the world's total gross domestic product—a value of about US\$44 trillion¹—is "moderately or highly dependent on nature and its services."² In most cases, our access to such goods and services is mediated through businesses, and those businesses exist in a dual relationship with nature. Some are highly dependent on nature—think of food production; others cause large impacts—the mining industry would be a good example. Many businesses fall into both categories to one degree

or another—take a pulp and paper company, for instance, or the agriculture industry generally.

Private and public sector actors are coalescing around the importance of nature from an investment perspective. For example, shifting consumer sentiment around individuals' health and ecological footprints have opened new opportunities for business, such as the growth in revenues for organic and plant-based food options.<sup>3</sup> We are also increasingly conscious of the relationship between nature and climate. Deforestation, for example, leads to a loss of biodiversity and causes carbon dioxide that was captured in trees to be released into the atmosphere.

NEI has integrated many nature-related topics into its corporate engagement and policy work, such as biodiversity, deforestation, Indigenous issues, waste, water, and circularity. As the investment community deepens its focus on these and other topics, we are seeking to tighten our approach, understand our exposure, and mitigate risks to our portfolio.

Since 2022 we have reached out to dozens of portfolio companies to gain insight into how they assess their relationship to nature. We have been developing a proprietary framework to define our expectations, especially with respect to sectors with the highest impacts and dependencies. This will help us to better identify and respond to risks and opportunities in our

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<sup>&</sup>lt;sup>1</sup> All dollar amounts in this paper are in U.S. dollars. <sup>2</sup> https://www.weforum.org/press/2020/01/half-of-world-s-gdp-moderately-or-highly-dependent-on-nature-says-new-report/.

<sup>&</sup>lt;sup>3</sup> Loblaw Companies noted that it saw a 16% increase in revenue for control brand products designed to meet shifting consumer nutritional preferences which included organic, gluten-free, plant-based, peanut-free and lactose-free products in its 2022 ESG Report available here: https://www.loblaw.ca/en/responsibility/.

<sup>&</sup>lt;sup>4</sup> See our Q4 2022 Active Ownership Report, https://www.neiinvestments.com/content/dam/nei/docs/en/responsible-investing/reports/NEI-Active-Ownership-Report-Q422-en.pdf, and our article from May, 2023: "Engaging on Biodiversity", https://www.neiinvestments.com/insights/laying-the-foundation-of-an-effective-approach.html.

portfolio while informing our policy work. The framework is not static; it is built to adapt to the rapidly evolving landscape as legislation comes into effect and governments look to enhance policy in the wake of the United Nations Biodiversity Conference (COP15),5 and as new standards for corporate reporting are developed and deployed.

# This paper is made up of three parts

- Part 1: We define key terms and explain why nature is a material consideration for businesses and investors.
- Part 2: We provide a snapshot of our exposure to the industries with the highest impacts and dependencies on nature.
- Part 3: We explain the components and build-out of our assessment framework and share preliminary findings, offering ideas about where to go from here.

<sup>&</sup>lt;sup>5</sup> At COP15 governments around the world negotiated and then adopted the Kunming-Montreal Global Biodiversity Framework. https://www.cbd.int/gbf/.

# Part 1: The importance of nature

Nature, biodiversity, natural capital, ecosystem services—what do these words mean? And why are they important? The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)<sup>6</sup> provides the following definitions:

Nature is... "the natural world with an emphasis on its living components."7

Biodiversity is... "the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part."8

Natural capital is... "the stock of renewable and non-renewable natural resources (plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people."9

Ecosystem services are... "intrinsic to the functionality of the ecosystem, and provide benefits to people such as provisioning services such as food and water; regulating services such as flood and disease control; and cultural services such as recreation and sense of place."10

Over the past few years, as we have increased our consideration of the role of nature in long-term value creation, the financial implications have become much clearer. In 2020, biodiversity loss was identified for the first time as a top five risk in the Word Economic Forum's Global Risks Report, 11 which states that "almost all businesses rely on natural capital and ecosystem services to a certain degree, with dependencies embedded across value chains. Ecosystem services alone—including timber production, crop pollination, water filtration, waste decomposition, and climate regulation—are worth

approximately \$125 trillion every year." 12 In order to deliver long-term sustainable value for our clients, we must be attuned to the risks and opportunities that stem from how the companies in our portfolio interact with nature.

### How business impacts and is dependent on nature

In order to assess corporate performance on naturerelated issues, investors need high-quality and comparable information. The Taskforce on Naturerelated Financial Disclosures (TNFD) has stepped in to fill the gap by developing a standardized disclosure framework, based largely on the more established Task Force on Climate-related Financial Disclosures. The TNFD refers to five drivers of nature change as originally laid out by the IPBES:13

- 1. climate change
- 2. land/freshwater/ocean use change
- 3. resource use/replenishment
- 4. pollution/pollution removal
- 5. invasive alien species introduction/removal

The IPBES also notes indirect drivers of change. These are drivers that are influenced by societal values, population dynamics, trade, and technological innovation. 14 Consider the demand for electric vehicles, which has boosted demand for certain metals and materials, or how growing global populations have fueled demand for housing and food amid concerns over deforestation. These realities can

<sup>6</sup> IPBES is an independent intergovernmental body that works to inform policy regarding biodiversity and ecosystem services. https://www.ipbes.net/about.

<sup>&</sup>lt;sup>7</sup> IPBES: https://www.ipbes.net/glossary/nature. <sup>8</sup> IPBES: https://www.ipbes.net/glossary-tag/biodiversity.

<sup>9</sup> IPBES: https://www.ipbes.net/glossary-tag/natural-capital. 10 IPBES: https://www.ipbes.net/glossary-tag/ecosystem-service.

<sup>11</sup> World Economic Forum (2020), "Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy", https://www3.weforum.org/docs/WEF\_New\_Nature\_Economy\_Report\_2020.pdf.

<sup>12</sup> Sustainalytics (2021), "Nature's Assets: Why Biodiversity is Good for Business", https://connect.sustainalytics.com/scs-ebook-natures-assets-why-biodiversity-isgood-for-business, citing Global Commission on the Economy and Climate (2014), "The New Climate Economy: Better Growth, Better Climate", https://newclimateeconomy.report/2014/wp-content/uploads/sites/2/2014/08/NCE-Global-Report\_web.pdf.

<sup>13</sup> Recommendations of the TNFD at: https://tnfd.qlobal/wp-content/uploads/2023/08/Recommendations of the Taskforce on Nature-related Financial Disclosures September\_2023.pdf?v=1695118661.

<sup>14</sup> IPBES (2019), "Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services" (Version 1), Zenodo, https://doi.org/10.5281/zenodo.6417333.

extend or deepen the impacts of business on nature, which should be considered as important inputs into the investment process. For example, a company that is able to limit its raw material inputs by adopting a more circular approach through reducing, reusing, or recycling could see increased sales from higher consumer demand for more environmentally sustainable goods, while also reducing its reputational and regulatory risks.

Business dependencies on nature are usually tied to the ecosystem services that nature provides. The TNFD identifies a series of ecosystem services that include water supply, pollination, soil quality regulation, and global climate regulation, to name a few. Companies across sectors are dependent on nature in different ways, but also in similar ways that may not be as easy to see. For example, fashion companies, semiconductor manufacturers, the agricultural industry, and the mining industry all require a reliable water supply for their production processes.

Nature dependencies have the potential to expose companies to risks and opportunities. A company with operations in regions with high water stress likely faces a heightened risk of disruptions to its water supply, as well as the risk of developing a tense relationship with the community that is reliant on the same water source. This could drive up operational costs or cause reputational damage. On the flip side, a company could manage these risks by investing in ways to increase the efficiency of its water consumption, and by prioritizing effective engagement with Indigenous communities and other local groups. The TNFD includes a framework for how risks and opportunities such as these can be classified, 15 and these are the kinds of considerations we look at when evaluating companies for our portfolio.

# Agriculture: An example of impacts and dependencies

How should a business determine the ways it impacts and/or is dependent on nature? This will depend on its business model, production processes, and the location of its operations and value chain, among other considerations. The TNFD recommends that companies conduct an assessment of their impacts and dependencies and disclose their findings.

One example we can consider is food and agriculture. The World Wildlife Fund notes the agriculture industry "employs more than one billion people and generates" over \$1.3 trillion dollars' worth of food annually." 16 The impacts from agriculture mostly result from habitat change (especially deforestation), as well as pollution from fertilizers and pesticides. 17 Yet, the agricultural value chain is dependent on the very land that it can harm through its processes. The IPBES notes that land degradation has reduced productivity in 23% of global terrestrial area, and between \$235 billion and \$577 billion in annual global crop output faces risks due to pollinator loss.18

The kinds of impacts and dependencies a company faces will depend on different factors, including its position within the value chain. A food manufacturer or retailer may not be engaging in land use change for the purposes of commodity production through its own operations, but it will have to consider the implications of the activities of its suppliers, and their suppliers. Food manufacturers and retailers can also face considerable reputational risk when their suppliers have been connected to deforestation. For example, Brazil's JBS SA, the largest meat processing company in the world. 19 has been embroiled in deforestation-linked controversies and litigation which could open its downstream customers to public scrutiny.<sup>20</sup>

<sup>15</sup> In alignment with the International Organization for Standardization (IS) 3100 Risk Management Standard, pages 32-36 in the TNFD (2023), "Recommendations of the Taskforce on Năture-related Financial Disclosures", https://tnfd.global/wp-content/uploads/2023/08/Recommendations\_of\_the\_Taskforce\_on\_Nature-related\_Financial\_Disclosures\_ September 2023.pdf?v=1695118661.

<sup>&</sup>lt;sup>16</sup> https://www.worldwildlife.org/industries/sustainable-agriculture.

<sup>&</sup>lt;sup>17</sup> Secretariat of the Convention on Biological Diversity (2014), "How Sectors Can Contribute to Sustainable Use and Conservation of Biodiversity – CBD Technical Series No. 79", https://www.cbd.int/doc/publications/cbd-ts-79-en.pdf.

<sup>18</sup> IPBES (2019), "Global assessment report on biodiversity and services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services" (Version 1), Zenodo, https://doi.org/10.5281/zenodo.6417333.

<sup>&</sup>lt;sup>19</sup> https://www.bnnbloomberg.ca/jbs-deforestation-risk-exposure-tops-meat-rank-study-shows-1.1995724.

<sup>&</sup>lt;sup>20</sup> See: https://www.bnnbloomberg.ca/jbs-deforestation-risk-exposure-tops-meat-rank-study-shows-1.1995724; https://unearthed.greenpeace.org/2022/11/11/jbs-cattle-brazilsbiggest-deforester-amazon/; https://apnews.com/article/brazil-deforestation-jbs-meatpackers-cattle-d393d5915a46e75009e2433b3de3cd33.

Often these risks are heightened because deforestation is so tightly connected to human rights concerns, such as land grabbing and the violation of rights of Indigenous communities. Deforestation can also limit a company (or an entire government) from achieving its climate goals, since forests are carbon sinks that release carbon dioxide when they are reduced or destroyed. For food manufacturers and retailers, this would affect their ability to meet emissions reduction goals.

Legislative developments are quickly progressing. For example, the European Union is moving forward with a proposal that would ban imports of products linked to commodity-driven deforestation, specifically palm oil, coffee, cocoa, beef, soy and rubber.<sup>21</sup> Bans on imports could limit companies' access to inputs and supplies, and could have an impact on revenue generation. Companies could also be subject to penalties such as fines and confiscation of goods. Investors must be mindful of these risks to longterm sustainable value creation.

Global developments

Mitigating risk and protecting nature is now a global priority. Negotiations at COP15 led to the development of the Global Biodiversity Framework (GBF), which called on governments to protect at least 30% of the planet and degraded ecosystems by 2030, and to halt and reverse nature loss by 2050. The goals and targets of the GBF also include the role of the private sector in asking private sources of capital to mobilize biodiversity-related funding, and requiring transnational companies and financial institutions to monitor, assess, and disclose risks and impacts on biodiversity through their operations, portfolios, and supply chains.<sup>22</sup>

There have also been legislative advancements in the U.K. (U.K. Environment Act), the EU (European Union Deforestation Regulation), and the U.S. (the Forest Act), 23 as well as developments in nature-related frameworks, guidance, and expectations. As discussed, the TNFD has launched its final framework; the Science Based Targets Network has developed initial guidance on setting science-based targets for nature, with more to come in 2024; and the Global Reporting Initiative has undergone a review of its biodiversity standard. We are pleased to see these developments, which should lead to more useful and comparable data from companies that can allow us to better assess their performance.

<sup>&</sup>lt;sup>21</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1115.

<sup>&</sup>lt;sup>22</sup> UNEP, "COP15 ends with landmark biodiversity agreement", https://www.unep.org/news-and-stories/story/cop15-ends-landmark-biodiversity-agreement; note Global Biodiversity Framework especially targets 14, 15, 19: https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022.

<sup>&</sup>lt;sup>23</sup> As cited by Global Canopy: https://globalcanopy.org/insights/insight/for-the-first-time-halting-and-reversing-deforestation-makes-it-into-the-final-text-of-a-cop-deal/.

# Part 2: Portfolio exposure

We have conducted an initial assessment of potential nature-related impacts and dependencies using a specialized tool called ENCORE, which stands for Exploring Natural Capital Opportunities, Risks and Exposure.<sup>24</sup> ENCORE is especially useful for financial institutions, as it sets out impacts and dependencies at the sector, sub-industry, and production process level.

ENCORE does not integrate company or entity-level context, and to avoid double counting impacts and dependencies, ENCORE focuses only on the direct impacts and dependencies of the production processes in a specific sub-industry; it does not capture impacts and dependencies that could exist upstream or downstream in the value chain. It is a first step in identifying where exposure could be most acute, with ratings based on potential and not actual impacts and/ or dependencies.

We integrated ENCORE's rating at the production process level, then applied a custom qualitative and quantitative ranking system for the impacts and dependencies of each holding. We are using the analysis to identify risks and opportunities in our portfolio, which we expect to incorporate into the investment decision-making process. The analysis was conducted on portfolio holdings as of December 31, 2022, and includes equities, corporate bonds, real estate investment trusts, and unit trusts. It does not include sovereign debt.

As we progress in our analysis, we will be focused on addressing risks and opportunities where the impacts and dependencies are shown to be the highest. It is likely we will adapt our methodology as we continue to develop our approach. The next step will be to integrate company-specific context into the analysis, using multiple data providers. We are in the process of building out this analysis and look forward to sharing those findings at a later date.

# Exposure to sectors with high and very high impacts on nature

ENCORE defines the potential impact on nature by estimating 1) the frequency of impact, 2) how long it is expected to take for the impact to affect nature, and 3) the severity of the impact.<sup>25</sup> An analysis of these three factors informs the impact ranking for each production process. In applying ENCORE's assessment of impacts from different production processes to our holdings, we are able to identify holdings that may have a high impact on nature.

In Table 1 below we share a few examples of impacts across different production processes. Production processes capture the ways business operations are connected to the environment, regardless of the industry the company is in. This means that the same production process can exist across different subindustries, and one sub-industry can involve multiple production processes.

<sup>&</sup>lt;sup>24</sup> ENCORE Partners (Global Canopy, UNEP FI, and UNEP-WCMC) (2024). ENCORE: Exploring Natural Capital Opportunities, Risks and Exposure. Downloaded October, 2023, Cambridge, UK: the ENCORE Partners. Available at: https://encorenature.org. DOI: https://doi.org/10.34892/dz3x-y059.

<sup>&</sup>lt;sup>25</sup> https://www.encorenature.org/en/data-and-methodology/materiality.

**Table 1:** Examples of production processes and a resulting impact on nature

Sub-industry	Production process	Impact drivers (drivers of nature loss)	Ranking	Description (taken from ENCORE database)
Agricultural products	Large-scale irrigated arable crops	Terrestrial ecosystem use	Very high	Expansion of irrigated arable crops has led to increased habitat modification and conversion of natural habitats to croplands.
Textiles/apparel, accessories and luxury goods	Natural fibre production	Terrestrial ecosystem use	High	Natural fibre production demands vast areas for fibre growth (e.g. hemp, cotton). This results in habitat modification and in some instances loss of natural habitat. Natural fibre production involves intensive agriculture, which may impact species and ecosystems in the surrounding area.
Consumer finance	Financial services	Solid waste	Medium	Waste is produced by offices and service centres, and non-recycling of materials.
Cable and satellite	Cable and satellite installations on land	Freshwater ecosystem use	Low	Laying of cable can temporarily disrupt and modify habitat. This impact can be permanent in habitats with slow growing species.

Based on our analysis, our exposure to high and very high nature-related impacts represented 16.3% of the market value of our 2022 year-end portfolio, of which very high impacts represented 12.8%. The bulk of the assets had impact exposure ranked as very low, low, and medium (Figure 1).

Figure 1: Portfolio market value based on impacts on nature (% of AUM)

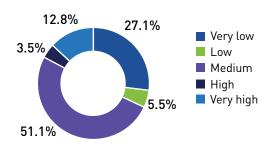
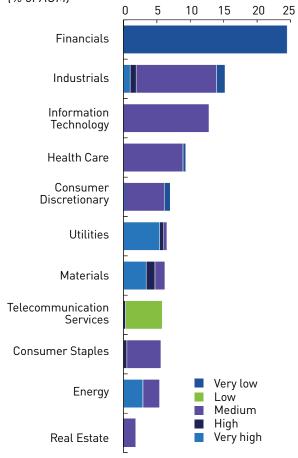


Figure 2 shows the sector breakdown.<sup>26</sup> Exposure to high and very high impacts was concentrated in the utilities, materials, energy, and industrials sectors. Financials represented our largest sector exposure overall; however, in comparison to the impacts of production processes in other sectors, the cumulative impact present in financials was relatively quite low.

Figure 2: Sector market value of impacts on nature (% of AUM)



<sup>&</sup>lt;sup>26</sup> Sources for sector and sub-industry identification used in our analysis: MSCI, FactSet, Institutional Shareholder Services, Bloomberg.

The breakdown of our sector exposure within the 16.3% AUM in high and very high impact rankings is shown in Table 2. The top three sectors representing our greatest exposure were utilities, materials, and energy. For more context, there are certain subindustries in utilities that drove this exposure, such as electric utilities and renewable electricity. The materials exposure was due to sub-industries such as industrial gases and mining, among others, while energy was due to sub-industries such as oil and gas exploration and production, and integrated oil and gas.

**Table 2:** Sector market value for high and very high impacts on nature

Sector*	(% of 16.3% AUM)	
Utilities	36.8%	
Materials	28.7%	
Energy	17.7%	
Industrials	11.3%	
Consumer Staples	2.9%	
Telecommunication Services	1.6%	
Consumer Discretionary	0.9%	

<sup>\*</sup>Sectors with exposure >1.0%.

### Exposure to sectors with high and very high dependencies on nature

ENCORE defines the importance of dependencies on nature and its ecosystem services by considering two dimensions: 1) the loss of functionality in a company's production process if the ecosystem service were to be disrupted, and 2) the relevant financial loss due to the loss of functionality in the production process.<sup>27</sup> Similar to the impact analysis, the dependency analysis is intended to guide further investigation. For example, we may seek to understand the efforts of a company in the agricultural value chain to minimize disruptions that could stem from a deterioration in soil quality that would affect its production process or value chain, leading to financial loss.

Table 3: Examples of production processes and a resulting dependency on nature

Sub-industry	Production process	Ecosystem services	Ranking	Description (taken from ENCORE database)
Agricultural products	Large-scale irrigated arable crops	Ground water	Very high	The production process is extremely vulnerable to disruption. The degree of protection offered by the ecosystem service is critical and irreplaceable for the production process.
Coal and consumable fuels, aluminum, copper and others**	Mining	Ground water	High	Ecosystem service is critical and irreplaceable in production process.
Technology distributors	Distribution	Flood and storm protection	Medium	Most of the time the production process can take place with limited (but not with full) disruption of the ecosystem service due to the resilience of the production process to disruption.
Diversified banks	Financial services	Mass stabilisation and erosion control	Low	Most of the time the production process can take place even with full disruption of the ecosystem service due to the resilience of the production process to disruption.

<sup>\*\*</sup>Many sub-industries are linked to this production process. Others not listed in the table include Diversified Metals & Mining, Gold, Precious Metals & Minerals, and Silver.

<sup>&</sup>lt;sup>27</sup> https://encorenature.org/en/data-and-methodology/materiality.

Figure 3 shows that our exposure to high and very high dependencies represented 19.8% of the market value of our 2022 year-end portfolio, with very high dependencies representing 13.7%.

Figure 3: Portfolio market value based on dependencies on nature (% of AUM)

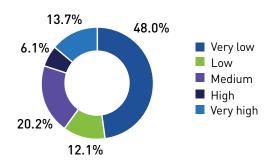
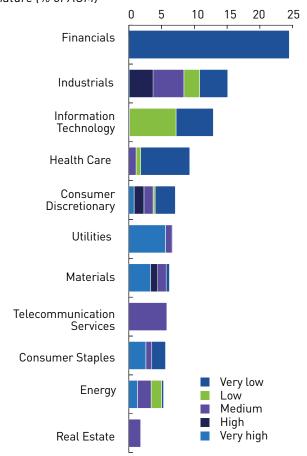


Figure 4 shows the sector breakdown. Similar to our analysis of impacts, while the highest exposure was to the financials sector, the dependencies there are considered very low.

Figure 4: Sector market value of dependencies on nature (% of AUM)



The sector breakdown of the 19.8% high and very high dependency exposure can be seen in Table 4. The top three sectors representing the highest exposure were utilities, materials, and industrials. Sub-industries driving exposure in the utilities sector included electric utilities and renewable electricity. As was the case with our impact analysis, the materials exposure was due to a range of sub-industries, such as industrial gases and chemicals, and paper products. The most significant exposure in the industrials sector came from the agricultural and farm machinery sub-industry.

**Table 4:** Sector market value for high and very high dependencies on nature

Sector*	(% of 19.8% AUM)	
Utilities	28.1%	
Materials	22.0%	
Industrials	18.8%	
Consumer Staples	13.0%	
Consumer Discretionary	11.3%	
Energy	6.8%	

<sup>\*</sup>Sectors with exposure >1.0%.

# Part 3: The framework

Our assessment framework allows us to standardize our approach to addressing nature issues within our portfolio. It is especially useful for defining expectations for companies that have high impacts on and/or are highly dependent on nature. It will continue to evolve along with stakeholder expectations, such as those of investors and global standard-setters, and as we continue to build on our own expectations of companies regarding performance and disclosure. The framework features a subset of deforestation-specific expectations that aligns with our commitment to use best efforts to eliminate agricultural commodity-driven deforestation from our portfolio as part of the Finance Sector Deforestation Action initiative. 28 We will also look to enhance our expectations around other aspects of nature, beginning with sustainable water supply.

The framework is informed by three key inputs: our own assessment of corporate action and best practices, evolving global expectations, and the expectations of the investor collaboratives we participate in.

**Corporate performance:** Our assessment of company performance on nature-related issues is informed by our sector knowledge, as well as research and insight gleaned from company evaluations and engagements. We encourage companies to enhance their strategic focus on nature; develop more robust policies, practices, and procedures; improve disclosure and risk management; set targets; and strive to make progress on sector-wide challenges overall.

In 2022 we embarked on an engagement campaign, reaching out to 27 companies to understand their challenges and the progress they had made in assessing nature-related impacts and dependencies, and to highlight risks and opportunities that we had observed.<sup>29</sup> In 2023 our outreach included solo and collaborative engagements with 31 companies. We

published an article in May 2023 that provided some context on the kinds of insights gained through those engagements.30

Global developments: Global targets set out in the Kunming-Montreal Global Biodiversity Framework make clear the need for investors and companies to evaluate and respond to nature-related risks and opportunities. The 2023 release of the TNFD framework will also lead to enhanced reporting by companies, which will in turn feed into our investment decision-making. Following the negotiations that led to the Kunming-Montreal Global Biodiversity Framework, the International Sustainability Standards Board has indicated that nature will be one area of focus as it continues to research disclosure on risks and opportunities, 31 and the Global Reporting Initiative has recently gone through the process of updating its biodiversity standard. 32 We expect these ongoing developments to continually inform our framework.

Investor collaboratives: Participation in collaborative engagements and policy initiatives has been a longstanding feature of our stewardship program. As we work with investors who share our concern for nature-related challenges, and with the support of organizations with expertise in these areas, we work toward a shared set of expectations. For example, the Finance Sector Deforestation Action initiative has published a set of investor expectations<sup>33</sup> that informs our own deforestation expectations. We also incorporate the expectations highlighted by Nature Action 100,34 an investor collaborative currently underway. Ceres' Valuing Water Finance Initiative<sup>35</sup> is another influential collaboration with clear expectations that we look to as we enhance our framework.

We have built the framework to reflect the need for adaptability and flexibility, and we expect to make

<sup>&</sup>lt;sup>28</sup> https://climatechampions.unfccc.int/system/nature-and-tackling-deforestation/.

<sup>29</sup> NEI Q4 2022 Active Ownership Report, https://www.neiinvestments.com/responsible-investing/responsible-investing-expertise/reports/active-ownership.html.

<sup>&</sup>lt;sup>30</sup> "Engaging on biodiversity", https://www.neiinvestments.com/insights/laying-the-foundation-of-an-effective-approach.html.

<sup>&</sup>lt;sup>31</sup> https://www.ifrs.org/news-and-events/news/2024/04/issb-commence-research-projects-risks-opportunities-nature-human-capital/.

<sup>&</sup>lt;sup>32</sup> An initial exposure draft and a re-exposure draft were both made available for public comment, https://www.globalreporting.org/news/news-center/one-week-to-go-in-biodiversityconsultation/, https://www.globalreporting.org/media/dcdgnnxf/item-07-gri-topic-standard-project-for-biodiversity-re-exposure-draft-of-disclosure-on-access-and-benefit-sharing.pdf.

<sup>33</sup> https://climatechampions.unfccc.int/wp-content/uploads/2022/09/FSDA-Investor-expectations-of-companies-16.09.2022.docx.pdf.

<sup>34</sup> https://www.natureaction100.org/investor-expectations-for-companies/. 35 https://www.ceres.org/water/valuing-water-finance-initiative.

changes over time. Companies are just now starting to explore reporting in alignment with TNFD, and while we expect disclosures to improve, we have yet to see how well and how quickly companies will adapt to meeting the investor need for more quality information.

The framework highlights objectives across five core areas, or "pillars," identified in Table 5. The examples are provided for illustrative purposes only and are not exhaustive. They have informed our requests of companies in past solo or collaborative engagements.

**Table 5:** *Nature assessment framework* 

	Description	Examples of objectives informing past engagements
Policies, commitments, and targets	Company has policies, commitments, and science-based targets in place with the goal of becoming nature positive, or it seeks to minimize or remove contributions to key drivers of nature loss in alignment with broader GBF goals. Given the connections between nature and human rights, nature-related policies should be complemented by human rights policies and commitments to respect rightsholders including Indigenous communities (recognizing free, prior, and informed consent) and workers, and a commitment to human rights due diligence. <sup>36</sup>	Make a deforestation and conversion-free commitment. <sup>37</sup> Integrate free, prior, and informed consent into human rights commitments.
Governance	Company displays transparency around board oversight and management's role regarding nature-related issues. This would include information on board education, expertise, and the type and frequency of information flowing between management and the board.	Disclose the company's approach to board oversight of nature-related issues and related board expertise.
Assessment	Company has conducted a full assessment of nature-related impacts and dependencies, risks and opportunities. This assessment should cover the company's operations and its value chain (if applicable), detailing how the company works with suppliers and other entities to achieve its nature-related objectives.	Conduct an assessment of nature-related impacts and dependencies and risks and opportunities in the company's operations and supply chain.  Conduct a water-related risk assessment of the company's operations and supply chain.
Implementation	Company has an implementation plan detailing how it will achieve its nature-related objectives, including efforts to mitigate nature-related risks and capitalize on opportunities. The plan should detail how the company will action its human rights commitments with reference to approaches to stakeholder consultation, grievance mechanisms, and processes for ensuring remedy. This plan should be complemented by effective metrics and targets for setting and evaluating progress.	Ensure suppliers are incentivized and supported to fulfill nature-related commitments.  Ensure support for smallholder farmers in the supply chain to meet deforestation commitments.
Disclosure	Company publishes meaningful disclosure about the four core areas above. This disclosure would ideally be complemented by intentions (and thereafter action) to align disclosure with respected global standards, such as the TNFD.	Disclose on the company's approach to assessing impacts and dependencies on nature.

<sup>36</sup> NEI's Statement on Human Rights can be found in our Responsible Investment Policy: https://www.neiinvestments.com/content/dam/nei/docs/en/responsible-investing/reports/ NEI-RI-Policy.pdf.

The Accountability Framework defines deforestation as: The loss of natural forest as a result of 1) conversion to agriculture or other non-forest land use; 2) conversion to a plantation; or 3) severe or sustained degradation. Conversion is defined as a change of a natural ecosystem to another land use or profound change in the natural ecosystem's species composition, structure, or function.

While we believe there is a lot that companies can do across multiple core areas, we do expect that for some companies, more robust implementation and disclosure will come after they have undertaken certain key steps with respect to policy, governance, and assessment. For example, in order for a company to develop a robust commitment to change, we expect that they would have to have made meaningful progress in assessing their impacts and dependencies, and as a result they already have a sense of their nature-related risks and opportunities. As a result, we have defined internal timelines for what we expect progress across these five core areas will look like. Iteration and enhancements will be necessary as time goes on.

#### **Deforestation expectations**

We have created a sub-framework on deforestation to align with our existing commitment on that topic, which is to make our best effort to eliminate commodity-driven deforestation from our portfolio by 2025. Our expectations are relevant to companies in sub-industries that face high deforestation risk, such as agricultural products, renewable electricity, and forest products. Our initial assessment was informed by our ENCORE analysis, as well as guidance published by Ceres<sup>38</sup> and Global Canopy.<sup>39</sup> We are especially focused on the high-risk commodities of palm oil, soy, beef, and pulp and paper.

Our assessment is informed by the expectations of the Finance Sector Deforestation Action initiative. We note that human rights expectations are a key feature of our deforestation expectations, given the notable human rights issues that currently exist alongside deforestation concerns, such as respect for customary rights to land; free, prior, and informed consent; and rights of workers and the community. We have also ensured flexibility in the framework to integrate insights from our ongoing assessment of company and sector progress. For example, we note that it is not uncommon for companies to be at different stages of their zero-deforestation commitments for different commodities. A company may have prioritized risk

assessment and traceability efforts in its palm oil supply chain, but may not be as far ahead in assessing risk in relation to other forest-risk commodities. Our framework allows us to acknowledge meaningful efforts to date, while still encouraging consistent progress toward overarching goals to eliminate commodity-driven deforestation.

#### Next steps

Our framework enables us to identify areas where companies in our portfolio can take action on naturerelated issues, and it supports our evaluations to determine investment eligibility. We are hopeful that the data reported by companies will become more readily available, meaningful, comparable, and consistent. As data become more reliable, it is our intention to enhance our analysis by integrating additional considerations around the location of company operations and value chains. This is an important part of any robust assessment of naturerelated impacts and dependencies.

We have also begun to use the framework as a point of reference in making proxy voting decisions, and in determining engagement priorities and companyspecific objectives. We will continue to evaluate how we can use the framework to enhance our expectations of companies and to improve investment decision-making.

<sup>&</sup>lt;sup>38</sup> https://www.ceres.org/resources/reports/investor-guide-deforestation-and-climate-change.

<sup>&</sup>lt;sup>39</sup> https://quidance.globalcanopy.org/roadmap/phase-1/.

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