



**Biodiversity in
Elo's investment
activities**

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Diverse Nature Supports life and Economic Activities

Biodiversity refers to the variety of life on Earth. It encompasses all forms of life: the number of species, genetic diversity, and their interactions within ecosystems.

Biodiversity affects the processes that support all life on our planet. These processes provide the natural capital and ecosystem services functioning societies heavily depend on. On the other hand, human activities impact nature. Natural capital refers to the natural resources that benefit humans, such as soil, minerals, water, air, and living organisms. Ecosystem services are vital services provided by nature, including food, energy, water purification, medicinal plants, carbon sequestration, and pollination of crops. The **World Economic Forum** (WEF) estimates that over half of the global gross domestic product (GDP) is highly or moderately dependent on ecosystem services. WEF’s annual risk report states that climate-related and nature-related risks have increased both in the short- and long-term.

Identifying Nature-related Risks in Investments

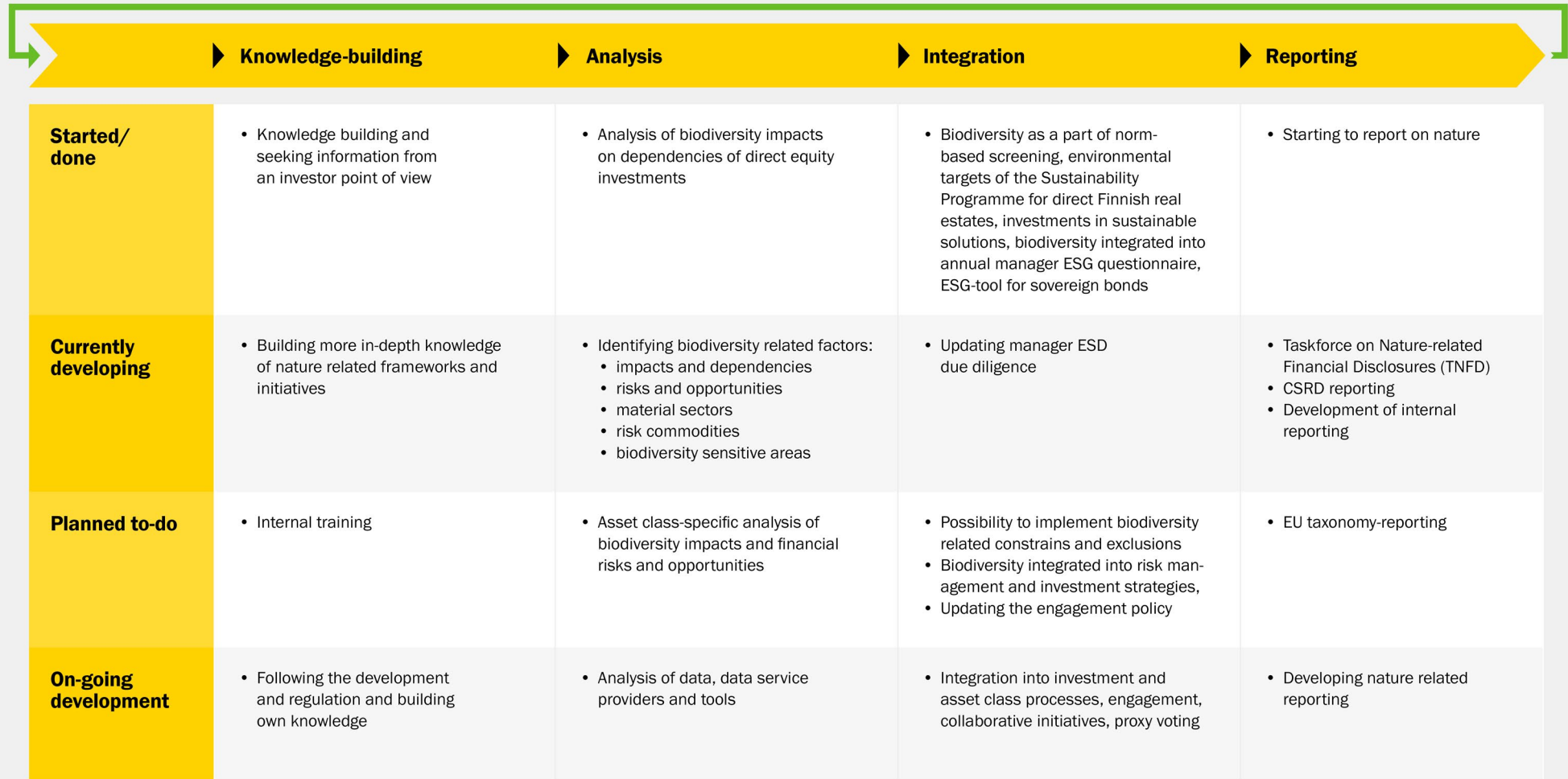
For investors the loss of biodiversity is a similar systemic risk as climate change. Investors need to identify the nature-related risks in their portfolios. Assessing nature-related impacts is needed for investing pension assets profitably and securely. Elo is working on mapping out the nature-related dependencies and impacts in investments and identifying associated risks and opportunities.

Investees can be exposed to both physical and transition biodiversity risks¹ which can affect their business environment. Investees and investors should understand the material nature-related risks that can potentially impact their operations. Physical risks can be short-term acute events, such as forest fires or oil spills, as well as chronic changes affecting nature, such as climate change and pollution. Transition risks may include political, technological, market, reputation, or regulatory risks. The lack of sufficient actions by economic actors to consider biodiversity increases these risks.

Elo’s roadmap for considering biodiversity consists of four phases: knowledge-building, analysis, integration, and reporting. In practice, these steps do not always progress linearly; they often occur concurrently and require continuous learning, self-assessment, and improvement within the organization.

¹ TNFD, PRI and WWF

Biodiversity Roadmap



Knowledge-building and Increasing Awareness of the Topic

Awareness of the loss of nature and its impact on the ecosystems, people, and the economy is rapidly growing. Governments, companies, and investors are increasingly setting broader nature-related goals alongside climate objectives. Globally, a significant turning point was the United Nations Biodiversity Conference (COP15) held in Montreal in December 2022. During this conference, agreement was reached on biodiversity goals to guide global action through 2030 to halt and reverse nature loss.

In the European Union, the EU Biodiversity Strategy for 2030 sets guidelines for member states to reach these objectives. The strategy aims to put Europe's biodiversity on a path to recovery by 2030 and reversing the degradation of ecosystems through 17 key targets. The EU Biodiversity Strategy is a cornerstone of nature protection within the EU and a core part of the European Green Deal and climate neutrality goals.

Double materiality is a common approach used by companies and investors when assessing biodiversity. This concept refers to both the economic dependencies and impacts on nature. These dual perspectives create both risks and opportunities for businesses and investors.

The frameworks and data used by companies and investors to analyze nature-related risks and opportunities have rapidly evolved in recent years. However, analysis tools are still relatively new, and the availability of data remains limited. Elo has initially focused on knowledge-building, researching the topic, and identifying various standards, initiatives, and frameworks. Simultaneously, market's knowledge about nature dependencies and impacts is growing, supporting a continuous learning within the organization.

Elo invests in developing the biodiversity expertise of its staff from an institutional investor's perspective. Additionally, we explore and

participate in collaborative investor initiatives that align with our goals and actions. In 2015, we joined the CDP's climate, water, and forests programs as investor signatory. Companies associated with the programs report their actions to CDP, which investors can use in their analyses. Through CDP, investors also encourage companies to report. In 2023, we participated Nature Action 100 engagement initiative. Initiated by 190 investors, its goal is to support greater corporate ambition and action on reversing nature and biodiversity loss. The aim is to focus efforts on companies in key sectors deemed systemically important in nature loss.

Identification and analysis of nature-related sustainability risks in Elo's investment portfolio

Elo has identified nature-related sustainability risks in its investment portfolio. In 2022, we assessed the dependencies and impacts of direct listed equity investments on biodiversity. We will refine and expand the identification of risks and opportunities related to biodiversity in different asset types and investment strategies.

Material sectors and geographical locations

As with other sustainability risks, the identification of material factors is key. The magnitude of nature dependencies and impacts varies greatly between different operational fields and regions. It is important for asset owners to identify the main nature risks associated with their investments.

According to studies², the priority sectors of biodiversity loss are the forest, chemical, mining, transport, oil and gas and the food, beverage and tobacco industries. Especially biodiversity-dependent sectors include forestry, agriculture, fishing, construction, electricity generation, clothing and luxury goods, as well as the food, beverage and tobacco industries. Elo has started an analysis of its investment portfolio to identify the priority sectors with the greatest impacts and dependencies on nature.



A more circular economy reduces negative impacts on the environment

According to a report published by [the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services \(IPBES\)](#) in 2019, biodiversity is now depleting at an unprecedented rate. Globally, approximately one million of the planet's estimated eight million animal and plant species are at risk of extinction, many already in the next few decades. According to studies, the change is mainly due to the consequences of human activities, such as land use, climate change, pollution, overconsumption of natural resources and invasive species. Humanity is consuming natural resources in an unsustainable way and burdening the environment with waste. However, the circular economy is one way to reduce these negative impacts.

Existing approaches to climate risks can be utilized to assess nature-related risks. However, at this time a few nature-specific frameworks and indicators have been published and a clear market standard is yet to be established. Biodiversity is difficult to measure with a single standard indicator, as the regional and local nature of the risks must be taken into account. Development of clear science-based data is needed to promote the continued sustainable transition.

² Sources: [Nature Action 100](#), [Finance for Biodiversity Foundation](#), [WEF](#), [TNFD](#), [PRI](#), [MSCI](#), [UNEPFI](#)

Some areas are more susceptible to biodiversity loss than others. The related risks will also be investigated in more detail in Elo's investment portfolio as companies increase their reporting on biodiversity and as the available analysis tools develop.

Supply chains

Nature-related impacts and risks are not only directly limited to companies' own operations but are also part of their supply chains. Many companies' business models depend on ecosystem services provided by a thriving nature. Transparency in supply chains helps in their management, i.e. the identification of risks, continuity and predictability. In the EU, regulation is also increasing to cover the transparency and sustainability of supply chains, such as with regard to the Deforestation Regulation and the Corporate Sustainability Reporting Directive.

Biodiversity loss is not only an environmental and economic threat, but also extensively concerns social factors. Deteriorating ecosystems can make it more difficult to obtain food, water and energy, for example, and increase pandemics. Some parts of the planet may become uninhabitable.

Deforestation and risk commodities

Deforestation refers to the permanent clearing of forests for other uses, such as construction or agriculture. Forest degradation, on the other hand, is a more gradual and more difficult-to-measure process in which forests' ability to provide ecosystem services suffers.

Globally, deforestation and forest degradation are particularly affected by so-called risk commodities and products manufactured from them, such as cattle, coffee, soy and palm oil. Regulators are addressing the issue. For example, according to the Deforestation Regulation adopted by the EU in June 2023, only products that have not caused deforestation or forest degradation may be sold in the EU in the future. Elo will

analyse the situation of risk commodities in its investment portfolio in more detail.

Water

Water is an essential part of the planet's climate and biosphere. A diverse and healthy nature provides water circulation regulating services, such as water purification, preventing flood damage and reducing the risk of drought. The diversity of aquatic ecosystems promotes the overall health and resilience of water systems. Ongoing loss of diverse nature threatens a functioning water supply. Especially the supply of fresh water is compromised by increasing loss of nature and biodiversity. There are currently few tools available to measure the financial impact of water risks for companies and asset owners. As data and methodologies develop, we will assess this in more detail.

Objectives and their integration into investment activities

When the situational picture of biodiversity-related dependencies and impacts is clear enough, Elo's next step is to set goals and integrate them into action. Some of the actions are already in use and are constantly being developed.

International norms and standards

International standards and norms include some nature-related standards that are monitored at Elo. For example, principles 7–9 of the UN Global Compact concern the environment: businesses should support a precautionary approach to environmental challenges, undertake initiatives to promote greater environmental responsibility and encourage the development and adoption of environmentally friendly technologies. We monitor how our investments comply with international standards and conventions and expect compliance with them.



The demand and supply of natural capital must be in balance

According to economist **Dasgupta's report (2021)**, biodiversity and ecosystem services are now declining faster than at any time in human history. The report highlights the concept of natural capital, in which biodiversity is taken into account in business and social decision-making. Dasgupta emphasises that the balance of supply and demand is at the heart of the issue also when it comes to natural capital. ●

Sustainable solutions

For listed equity and corporate bond investments, Elo's objective is to double the investments in sustainable solutions compared to the 2021 level by 2030. Sustainable solutions are activities aimed at responding to social challenges. Environmental solutions include topics like pollution prevention, sustainable agriculture and sustainable water use.

Real estate investments

The responsibility program for direct Finnish real estate investments, updated in 2023, also sets objectives related to nature. The climate impact of real estate is reduced by continuing

energy efficiency measures and investing in optimizing the energy use of real estate properties. The share of renewable energy produced in the properties will be increased in accordance with the responsibility program. The goal is carbon-neutral energy use in direct Finnish real estate investments by 2027. Supporting biodiversity is considered in development and construction projects as part of sustainable urban development. During 2024, we will update the environmental criteria and guidelines for real estate development, taking into account the circular economy and green construction, among other things. The properties will continue to include nesting places, such as insect hotels. Risks of adverse impacts to local ecosystems will also be mitigated by e.g., striving for environmental certifications for the majority of commercial properties and by involving and guiding tenants and residents in increasing recycling. We will set clear annually updated sustainability criteria and metrics for Elo's partner network.

Sovereign debt investments

Elo's sovereign debt investments use an ESG tool developed specially for the asset class. The tool's assessment criteria include the protection of biodiversity. Elo's investment team uses the information to survey the progress of countries in protecting biodiversity and achieving nature-related objectives.

Fund managers

Elo studies the responsible practices of its fund managers during the selection phases. The studying is carried out through due diligence analysis and annual surveys. Elo will update the due diligence analysis and surveys to better incorporate biodiversity-related matters. In the 2023 survey, we assessed the biodiversity-related practices of our fund managers for the first time.

Exclusions

Elo has excluded certain sectors from its direct investments. For example, we excluded tobacco manufacturing companies from our direct investments on ethical grounds already in 2017. In addition to health hazards, the tobacco industry also has harmful effects on the environment. Tobacco production requires a lot of land when e.g. trees are felled for tobacco cultivation. We will examine the possibility of additional limitations or exclusions related to excess loss of nature.

Continuous development

Elo continuously develops its investment processes and asset-specific practices. We will increasingly consider biodiversity in our engagement work, and we will update our investments engagement policy. We will further refine our approaches to environmental issues and nature loss in our investment activities.

Reporting

The TNFD (Taskforce for Nature-related Financial Disclosures) is a recently published risk management and reporting framework for nature-related financial disclosures, allowing organizations to report on nature-related risks and opportunities and take action based on the information.

The EU aims to bring corporate sustainability reporting and information on material sustainability factors on a par with financial reporting. Companies should manage their social and environmental impacts while addressing the financial implications of these issues (double materiality). The EU Corporate Sustainability Reporting Directive (CSRD) also sets reporting standards for biodiversity and ecosystems. If this is material to the company, the related impacts, risks and opportunities as well as the sustainability of the strategy and business model must be reported.



Exceeding Earth's ecological carrying capacity creates an increasing risk

The Stockholm Resilience Centre has assessed the sustainability of the planet and set nine limits. The limits can be used to examine biochemical flows (phosphorus, nitrogen), biosphere integrity, biodiversity, ozone depletion, climate change, land use, ocean acidification and freshwater use, among other things. Assessments have been carried out since 2009, when three limits were exceeded, and in the third comprehensive assessment carried out in 2023, six of the limits have already been exceeded. This is not necessarily reflected in radical sudden changes, but exceeding nature's carrying capacity creates an increasing risk to human well-being and the sustainability of ecosystems. ●

We encourage companies to report on biodiversity. Elo reports on biodiversity following the TNFD disclosure guidance for the first time for 2024. ●

Approved by Elo's investment process steering group on 13 December 2023