riaa Responsible Investment Association Australasia

NATURE INVESTOR TOOLKIT

Understanding nature-related risks and opportunities and supporting investors to assess, engage and take action

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ABOUT THIS INVESTOR TOOLKIT

This toolkit serves as a primer for understanding nature-related risks and opportunities and supporting investors to assess, engage and take action.

The objective of the toolkit is to:

- help investors identify nature-related risks and opportunities in their portfolios (assess);
- help investors simplify this complex area, informing constructive conversations with stakeholders and companies about impacts and dependencies on nature (engage); and
- unpack the suite of current and emerging tools and products to identify new investment opportunities (take action).

The topic of investing in nature is fast-evolving with a diverse, growing suite of resources becoming available. This toolkit focuses on highlighting key concepts and directing the user to current market-leading industry resources.

This toolkit was prepared by the Responsible Investment Association Australasia's (RIAA) Nature Working Group, which is a collective of representatives from the Australian and Aotearoa New Zealand investment community. RIAA's 550+ members include asset managers, asset owners, trusts, consultants, impact investors, financial advisers, research/data providers and other representatives of the responsible investment ecosystem. RIAA membership accounts for 75% of managed funds in Australia and 73% of managed funds in New Zealand.

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Thanks to the following reviewers who provided valuable feedback:

- **Five Cubed Environmental Indigenous Consultants** – Stan Lui, Owner/Director
- **Pollination** – Matt Cranford, Executive Director
- **Judy Slatyer**
- **EOS at Federated Hermes Limited** – Sonya Likhtman, Associate Director
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Oversight and project management support provided by:

- **Responsible Investment Association Australasia (RIAA):** Estelle Parker, Co-CEO and Jessica Rowe, Manager of Working Groups

With thanks for the following Nature Working Group principal sponsors:

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CONTENTS

FIGURES

EXECUTIVE SUMMARY

All global gross domestic product depends, either directly or through supply chains, on nature: clean air and water, productive land and diverse and thriving flora and fauna. Every investment relies on nature. Business activities not only impact nature but also depend on it, making the degradation of nature a significant financial risk to investors' portfolios.

In light of global agreements and treaties, as well as an increasing array of national, subnational and local regulations focused on halting nature damage and pushing for nature restoration, it is imperative for investors to understand and measure nature-related risks in current and future investments. The global momentum to address nature risks in financial systems and restore natural ecosystems presents unique opportunities for investors to direct capital towards businesses that contribute to or benefit from nature positive outcomes. This also helps align their portfolios with the growing consumer demand for sustainable and responsible investment options.

Nature-related risks and opportunities coincide, impact and interact with other significant environmental, social and governance (ESG) challenges and opportunities, including climate change, human rights, and genuine partnerships with Indigenous People and Local Communities (IPLC). This heightens the potential impact of these risks and opportunities, and strengthens the case for investors to consider them holistically.

Nature is a highly complex area for investors. That said, while the data needed as the basis for informing analysis of nature-related investment risks and opportunities has limitations, there are enough sources already available for investors to start assessing their portfolios (and these sources are provided in the toolkit). As data availability and quality improve, these assessments will become more sophisticated.

This toolkit is designed to be a primer to empower investors by defining key concepts and directing them to current market-leading industry resources. This area is fast moving and evolving, and this toolkit points investors towards the tools that they can explore and implement to manage their portfolios' nature-related opportunities, risks, impacts and dependencies today.

This toolkit provides guidance for investors to:

- identify and assess nature-related risks and opportunities in existing investment portfolios;
- define and identify 'new' nature-related investment opportunities, including nature-based solutions; and
- design nature-related focus areas for stewardship, including company engagement, voting and contribution to policy advocacy.

The toolkit has been developed as a series of sections that present the key topics investors need to consider now and going forward. The **introduction** includes an opening presentation of why investors should care about nature, including the following reasons:

- Underlying investments' **dependency** on nature will impact investment performance.
- Underlying investments' **impacts** on nature will affect investment performance due to regulatory and market changes as governments work to safeguard natural capital.
- Investors are facing increased pressure from their member or clients to assess and address impacts on nature.
- A growing set of tools and data are available for investors to assess nature risks and opportunities.
- There are now strategies that investors can deploy to mitigate nature risks and seize nature opportunities.

A further section covers different approaches investors can take to assessing **nature-related risks and opportunities within existing investment portfolios**, including:

- identifying and assessing nature-related risks in investment portfolios;
- considering the different types of nature-related risk assessments available to investors;
- identifying and assessing nature-related opportunities in investment portfolios; and
- deciding how and where investors can seek to address the novel dimensions of nature-related risks and opportunities.

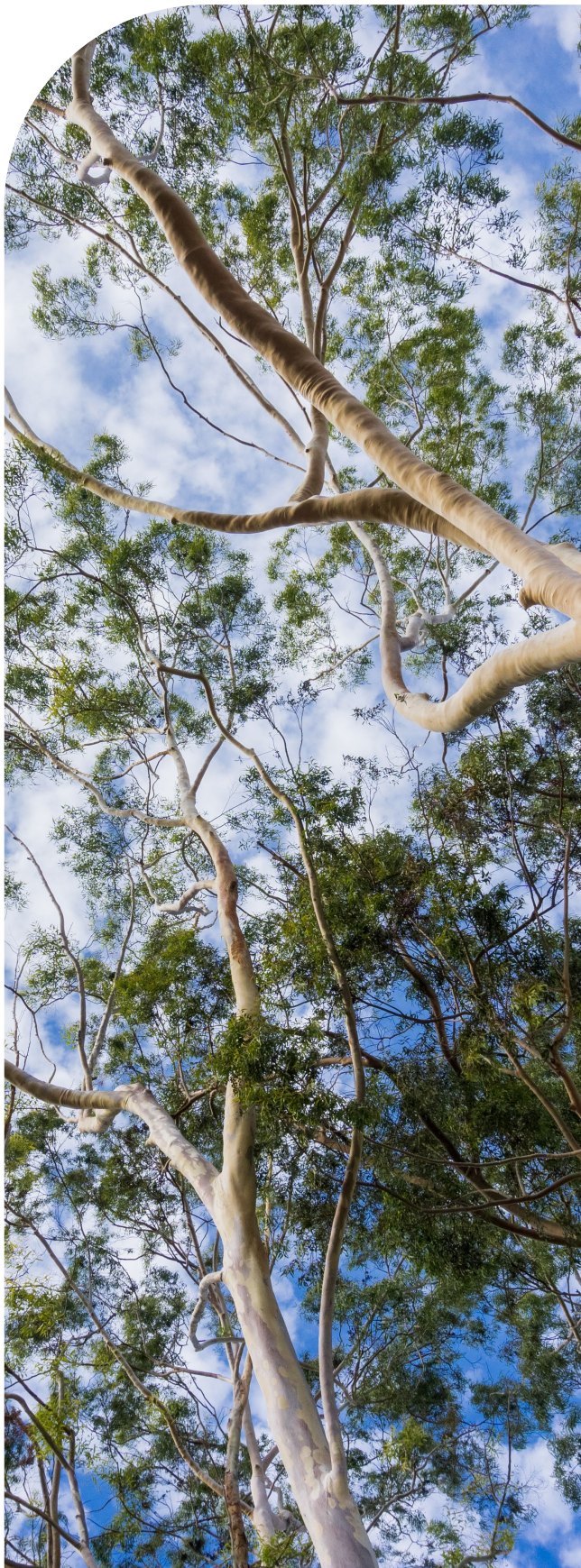
The section on **new nature-related opportunities** provides important insights into the due diligence process for assessing nature-related investment opportunities, including:

- defining and identifying new nature-related investment opportunities;
- including nature considerations (i.e., nature-related risks and opportunities) in new investment opportunities;
- making particular nature-related considerations when assessing 'Pure Play' nature investment opportunities, such as Nature-based Solutions; and
- considering the key challenges associated with new nature-related investment opportunities.

Finally, a section on investor **stewardship (company engagement, voting, and policy) and communication** provides guidance on how investors can influence portfolio companies to reduce nature-related risk, including:

- engaging with companies and setting investor expectations and metrics, collaborative engagement and leveraging existing engagement themes;
- reflecting on nature-related expectations in proxy voting and shareholder resolutions;
- assessing the policy landscape and contributing to policy advocacy initiatives; and
- internal and external reporting on nature-related exposures, metrics and progress.

The toolkit also includes a **resource list** (Appendix A) to provide investors with a comprehensive catalogue of tools, databases, guides and resources designed to facilitate the identification, assessment, management and monitoring of nature-related impacts, dependencies, risks and opportunities.



INTRODUCTION

Why investors should care about nature

Investors should care about nature for these reasons:

- Underlying investments' **dependency** on nature will impact investment performance.
- Underlying investments' **impacts** on nature will affect investment performance due to regulatory and market changes as governments work to safeguard natural capital.
- Investors are facing increased pressure from their members or clients to assess and address impacts on the environment.[1]
- A growing set of tools and data are available for investors to assess nature risks and opportunities.
- There are now strategies that investors can deploy to mitigate nature risks and seize nature opportunities.

Dependency on nature will impact investment performance

Every investment relies, directly or through its supply chains, on the health of the natural world – clean air and water and productive land. The World Economic Forum (WEF) has estimated that US$44 trillion of economic value (more than half global gross domestic product) is "moderately" or "highly" dependent on nature. At the same time, the world is facing significant nature loss.[2]

> "All businesses in all sectors depend on nature and its ability to provide the flow of ecosystem services on which core business processes rely. Investing in the health and resilience of nature is good business practice both as effective risk mitigation and as a source of business opportunities."
>
> *Tony Goldner, Executive Director of the Taskforce on Nature Related Financial Disclosures (TNFD)*

Decades of unsustainable practices have led to widespread and growing degradation of nature. The destruction of natural capital has received less investor attention than climate change but threatens companies in a range of industries. The degradation of nature has contributed to a dramatic increase in the rate of species loss and depletion of environmental assets such as fresh water supply, productive land, and raw materials.[3]

The degradation of nature can reduce the capacity to provide the resources and services companies rely upon, with as much as US$10 trillion in financial costs expected to be incurred through nature loss by 2050[i][4]. This presents a material financial risk to the long-term viability of businesses, investors and the broader economy, through shortages of supplies and increasing costs. Each investment will be impacted differently by nature loss – it will be the investor's responsibility to understand how nature loss may impact each investment.

[i] The expected costs to be incurred are between 2011-2050 under a business-as-usual scenario.

FIGURE 1 The twin crises of nature and climate

The Climate Crisis

The latest IPCC report shows that emissions of greenhouse gases from human activities are responsible for approximately 1.1°C of warming since 1850-1900.

Unless there are immediate, rapid and large scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach.

CLIMATE AND NATURE - RELATED FINANCIAL RISKS

Climate and nature-related risks are systemic risks to the global financial system, and companies are coming under increased pressure from regulators, financiers and shareholders to disclose on their exposure and management of these risks

The Nature Crisis

Nature loss is currently occurring at an unprecedented rate. Humanity has caused the loss of 83% of wild mammals by mass, and 1 million species of plants and animals are at risk of extinction.

At the same time, biodiversity loss and ecosystem collapse has been identified as one of the top 5 global risks to the global economy in 2020 and 2021.

Nature loss is rapidly emerging as a global priority alongside climate change. Transitioning the economy to address climate change and nature loss will require transformative change.

SOURCE: Pollination 2024

Impacts on nature will affect investment performance

Business activities also impact nature, including through deforestation, pollution, resource extraction and land degradation. Moreover, climate change and nature impacts are connected. Figure 1 outlines how climate and nature risk impact on financial risk. According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the rate of nature loss has accelerated to unprecedented levels over the last 50 years.[5] Human activity has put a growing number of species at global extinction risk, with around one million plant and animal species already facing extinction. Seventy-five per cent of the world's land surface has been significantly altered by human development, 66% of the ocean area is showing signs of cumulative impacts, and over 85% of the world's wetlands areas have been lost.[6]

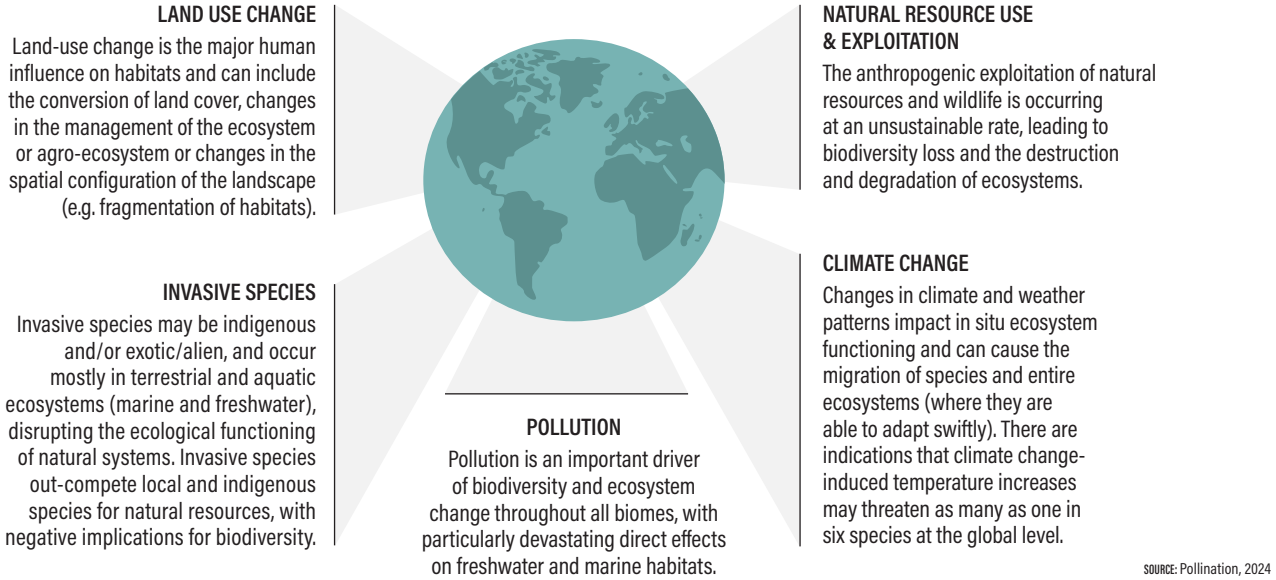
Figure 2 outlines IPBES' five direct drivers of nature change, with companies potentially contributing to any or all of these direct drivers through their activities.

Regulators are recognising that increasing the cost attached to degrading nature is core to demonstrating its inherent value. As a result, investors will experience financial repercussions related to these impacts. Regulation and market dynamics related to nature could influence investment performance, with tougher regulation requiring businesses to reduce their impacts nature or face fines or loss of licence to operate. At the same time, growing client and customer interest in protecting nature may mean that companies with large, negative impacts on nature face reduce demands for their products and services. Finally, nature-related legal and policy frameworks can also accelerate assessments and benefit businesses that avoid harming nature.

Recent nature-related regulatory developments (both within Australia and Aotearoa New Zealand and globally) with potential impacts for investors are set out below. Some of these laws see increased costs for business activities that pollute or harm nature in other ways or incentives for positive nature outcomes:

- The Australian Government has committed to reforming the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) following the 2020 Samuel Review's finding that the Act was "outdated and require[d] fundamental reform."[7] In April 2024 the Australian Government announced further planned reforms, including the creation of a new federal environment regulator, Environmental Protection Australia, and a new national independent body for environmental data, Environment Information Australia. These reforms are part of the Government's Nature Positive Plan.
- The Nature Repair Act 2023 came into effect on 15 December 2023, establishing a framework for a legislated, national voluntary biodiversity market in Australia.[8]
- In New Zealand, at the time of writing, major reviews and reforms are planned for the keystone 1991 Resource Management Act (RMA), as well as amendments to relevant National Environment Standards (NES) and National Policy Statements (NPS), e.g., on Indigenous Biodiversity. The Ministry for Environment consulted on an NZ Biodiversity Credit System for New Zealand in Oct 2023. As of July 2024, outcomes in both areas have not yet been announced.

FIGURE 2 IPBES drivers of nature loss



SOURCE: Pollination, 2024

- New Zealand is a signatory to the Convention on Biological Diversity (CBD) and the New Zealand Government made a commitment under the Kunming-Montreal Global Biodiversity Framework to protect 30% of the planet for nature by 2030. The national response is framed by the Te Mana o te Taiao / Aotearoa New Zealand Biodiversity Strategy (ANZBS).
- Environmental law and policy in Europe have been strengthened in some areas and may impact the way investments operate. In June 2024, the European Council formally adopted the Nature Restoration Law, which pledges to restore at least 20% of the EU's land and sea areas by 2030 and all ecosystems in need of restoration by 2050.[9] It sets specific, legally binding targets and obligations for member states for nature restoration in each of the listed ecosystems – from terrestrial to marine, freshwater and urban ecosystems. Furthermore, the EU Deforestation Due Diligence Regulation will require commodities traded on the EU market to be traceable and demonstrated to be deforestation-free.[10] Under the new European rules, "private investment could be... incentivised through public investment schemes, including financial instruments, subsidies and other instruments."[11]
- The EU taxonomy for sustainable activities aims to help investors select sustainable investments. The EU Sustainable Finance Disclosure Regulation (SFDR) requires investors to report activities negatively affecting biodiversity-sensitive areas.[ii] The taxonomy classifies economic activities as environmentally sustainable if they significantly contribute to, or enable other activities to significantly contribute to, at least one of six environmental objectives listed in the EU taxonomy. Several of these objectives focus explicitly on nature, including "the protection and restoration of biodiversity and ecosystems."[12] Other sustainable investment taxonomies, including those of Australia and New Zealand, are likely to include references to nature.
- In the US, the Inflation Reduction Act allocates US$15 billion towards nature conservation initiatives, including US$300 million for research needed to understand nature-based climate solutions.[13]

Strengthened company disclosure requirements for nature-related risks or impacts include the following:

- The EU Corporate Sustainability Reporting Directive (which entered into force on 5 January 2023) requires businesses to not only report on nature-related impacts, risk and opportunities, but also develop transition plans to ensure their strategies and business models refrain from causing significant harm to nature.[14] Guidance on reporting is provided by the European Sustainability Reporting Standards. Standard E4 focuses on biodiversity and ecosystems, outlining the disclosure requirements necessary for businesses across all sectors. Disclosures required include a "transition plan on biodiversity and ecosystems", information on impact, risks and opportunities, and metrics and targets. While this most clearly impacts European companies, it will also affect an estimated 10,000 non-European companies[15], including an estimated 625 Australian companies.[iii]
- The European Corporate Sustainability Due Diligence Directive, published on 5 July 2024 in the Official Journal of the European Union and entered into force on 25 July 2024, introduces the obligation for companies to conduct appropriate human rights and environmental due diligence with respect to their operations, operations of their subsidiaries, and operations of their business partners in companies' chains of activities. The European Parliament notes that the impacts will include those relating to biodiversity loss.

The potential exists for standardised nature-related financial risk reporting:

- International Financial Reporting Standards (IFRS) announced in April 2024 that the International Sustainability Standards Board (ISSB) will commence projects to research disclosure about risks and opportunities associated with "biodiversity, ecosystems and ecosystem services", drawing on existing Sustainability Accounting Standards Board (SASB) Standards and the Taskforce for Nature-related Financial Disclosures (TNFD)'s work.

These developments place pressure on investors to understand and measure nature-related risks and opportunities in current and future investments.

Increased client/member pressure on investors to assess and address nature-related investment risks and opportunities

Asset owners such as super funds have a fiduciary duty to ensure the management of ESG risk in their investment processes in the best interests of their members. Research and knowledge about the vital role nature plays in the global economy, as well as the regulatory developments described above, have strengthened the case for investors to assess and nature-related risk and opportunities to their portfolios. In the near future, given the release of the TNFD recommendations, nature-related reporting is likely to be essential for investors, and may lead to portfolio-level target-setting in the same way that the climate reporting has led to the proliferation of portfolio-level net zero targets for investors.

In turn, asset owners are beginning to expect their investments managers consider nature-related risks and opportunities in their investment decision-making. Over time, nature – like climate change – is likely to become an essential area of due diligence when asset owners assess prospective managers.

ii This is the SFDR's biodiversity-specific 'Principle Adverse Impact'.

iii Companies that are in scope are: Companies that have listed securities, such as stocks or bonds, on a regulated market in the European Union; Companies that have annual EU revenue of more than €150 million, or about US$163 million, and an EU branch with net revenue of more than €40 million; Companies with an EU subsidiary that is a large company, defined as meeting at least two of these three criteria: more than 250 EU-based employees, a balance sheet above €20 million or local revenue of more than €40 million. (Dieter Holger, 2023)

Tools and data are available for investors to assess nature risks and opportunities

Many investors are unsure where to start when measuring the nature-related risks and opportunities within their portfolios. This toolkit aims to address this problem by providing some examples of different approaches and strategies other investors are already using. It is important to note, though, that while data relating to investments' impacts and dependencies might not always be neatly labelled and packed for immediate use, there are a lot of tools and resources already available to investors. While this toolkit provides a full list of resources in Appendix A, some of the most prominent ones include:

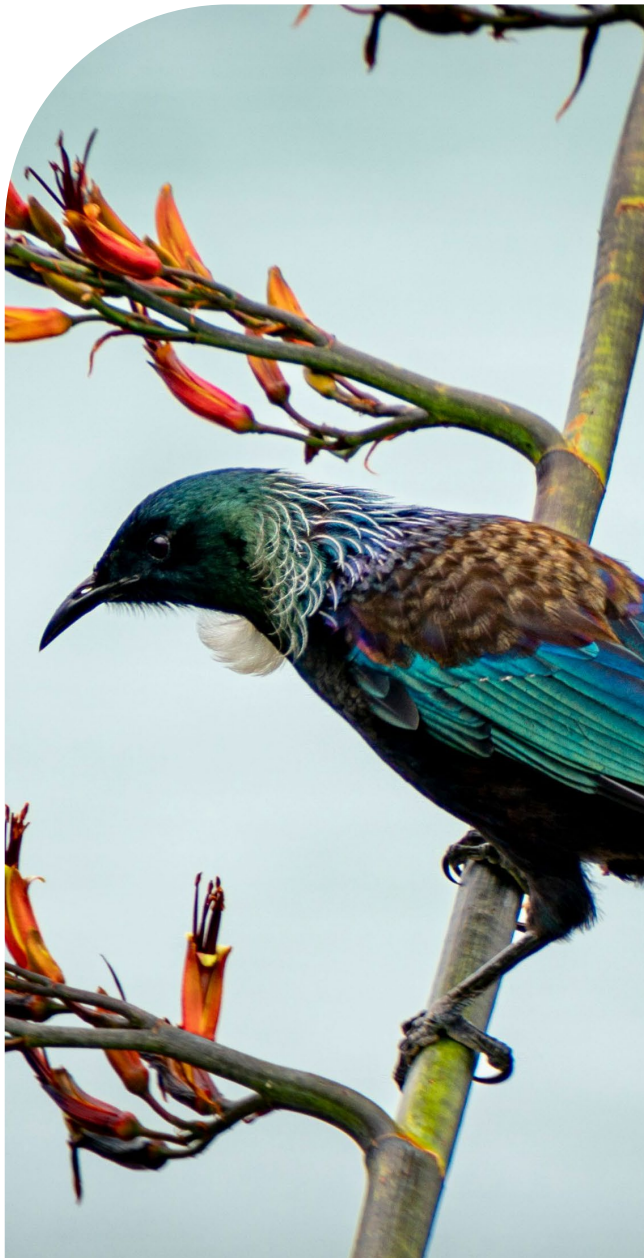
1. Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE): This tool, developed by Global Canopy, UNEP FI, and UNEP-WCMC, helps financial institutions understand their exposure to natural capital risks. It provides insights into how environmental changes can impact economic activities.
2. Taskforce on Nature-related Financial Disclosures (TNFD): The TNFD framework aims to provide a comprehensive approach for companies and investors to report and act on nature-related risks. It includes tools and guidelines to help integrate nature-related considerations into financial decision-making.
3. Handbook for Nature-related Financial Risks: Developed by the Cambridge Institute for Sustainability Leadership (CISL), this handbook provides a framework for identifying and understanding nature-related financial risks. It explains key concepts and offers a structured approach to assess these risks.
4. Integrated Biodiversity Assessment Tool (IBAT): This tool helps organizations identify sensitive locations and assess biodiversity-related risks. It is particularly useful during the initial stages of project planning and risk assessment.

These tools collectively enable investors to better understand and manage the financial risks associated with nature loss and environmental degradation.

There are strategies available to investors right now to mitigate risks and seize nature opportunities

This guide sets out a range of strategies that investors may use to address nature risks and opportunities in their portfolios. It covers different approaches to risk assessment; approaches to identifying opportunities within investment portfolios to 'transition' existing investments to more nature positive business models; ways to identify new or pureplay nature-related investments; and examples of nature-themed stewardship (company engagement, voting and policy advocacy) to improve investment outcomes over the long term.

Natural capital is emerging as an increasingly popular positive screening theme amongst Australian investors, with 46% of institutional investors screening for biodiversity preservation and conservation.[16]



SECTION 1 – ASSESSING NATURE-RELATED RISKS AND OPPORTUNITIES IN EXISTING INVESTMENT PORTFOLIOS

This section covers:

- identifying and assessing nature-related risks in investment portfolios;
- considering the different types of nature-related risk assessments available to investors;
- the importance of identifying and assessing nature-related opportunities in investment portfolios (and how this can be done through the nature-related riskassessment process); and
- deciding how and where investors can seek to address the novel dimensions of nature-related risks and opportunities.

1.1 What is nature-related investment risk?

Nature-related risk is defined by the TNFD as potential threats posed to an organisation that arise from its and wider society's dependencies and impacts on nature.[17] These risks in companies can manifest through their exposure and/or vulnerability[iv] to:

- physical risks[v] (e.g., water scarcity),
- transition risks[vi] (e.g., increased financial liabilities for polluting), or
- systemic risks[vii] (e.g., deforestation in the Amazon affecting water patterns and rainfalls in the whole region, disrupting the agriculture industry).

Nature-related risks are present in the cashflows, balance sheets and capital portfolios of organisations across sectors and geographies. Companies that fail to adequately identify and manage their impacts and dependences on nature could therefore face financial, reputational, legal and other consequences which can pose large financially material risks to investors.[viii]

Assessing nature-related risk in investment portfolios helps investors to:

- understand how these risks impact portfolios' financial performance;
- take appropriate actions to mitigate or reduce nature-related risks - through screening, divesting from risky investments, and stewardship (discussed in Section 3); and
- prioritise these actions (e.g., by identify the specific assets, regions, or sectors that are most exposed).

Understanding portfolio nature risk hot spots (sectors and/or locations) is useful to guide the selection of priority companies for due diligence, research and engagement. Some investors may choose to focus on key nature topics, based on their investment exposure, expertise and interests. An example of an output of a risk assessment could be a heatmap which is helpful to identify sectors with greatest exposure to nature-related risks, impacts and dependencies. The TNFD recommends that companies assess and disclose the material risks that could affect their business model, value chain, strategy and financial position, and how these arise from their dependencies and impacts on nature.

Investors will typically have well-established governance systems and processes covering risk assessment and management of both investment and enterprise risks. However, integrating quantitative and forward-looking nature-related risks into the existing processes requires understanding the exposure to such risks and the financial impacts of the risks alongside the incorporation of Indigenous Peoples and Local Communities (IPLC) views, knowledge and input under the principles of Free, Prior and Informed Consent (FPIC).

iv For organisations following the TNFD Locate, Evaluate, Assess, Prepare (LEAP) approach, exposure is determined in the Evaluate phase and connected to exposure to nature-related dependencies and impacts, whilst vulnerability is determined in the Assess phase, considering the likelihood of the risk arising and the organisation's ability to mitigate the risk.

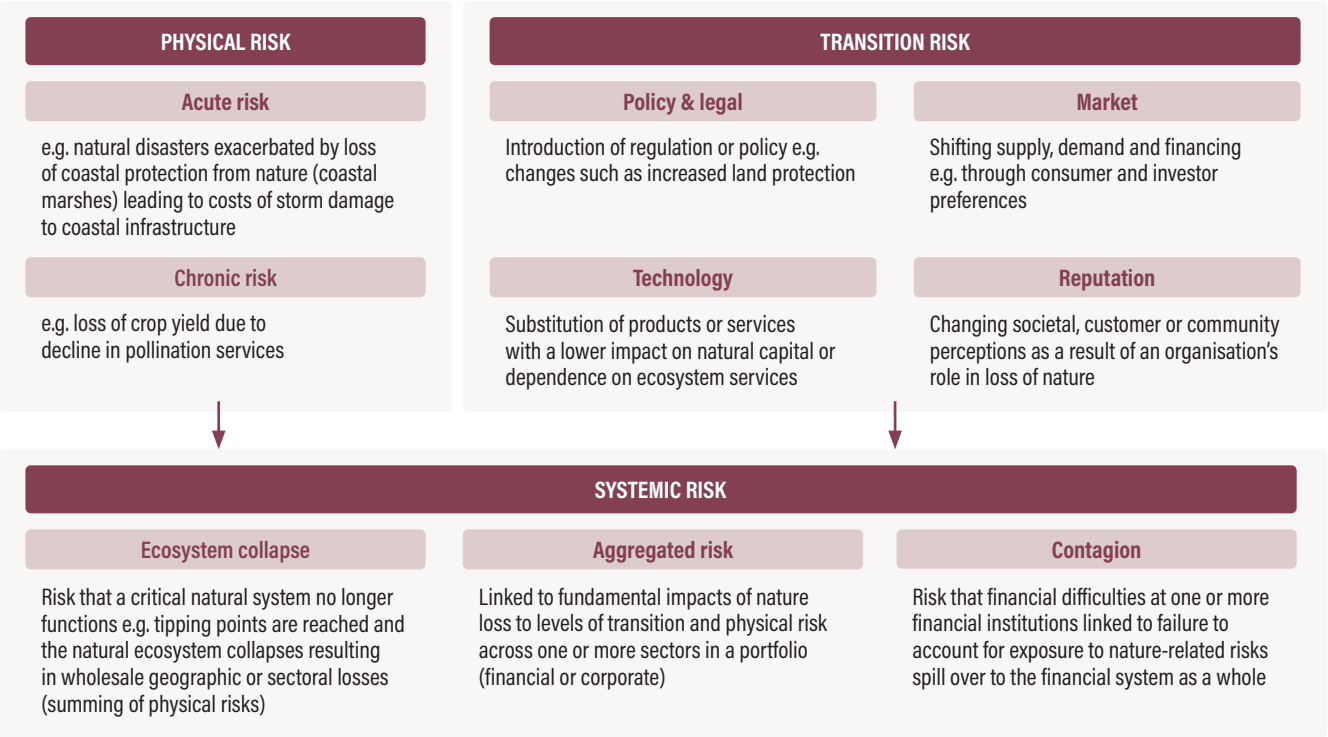
v According to the TNFD, nature-related physical risks stem from the degradation of nature, such as changes in ecosystem equilibria like soil quality and species composition, and the consequential loss of ecosystem services that economic activities depend upon. These risks can be chronic, such as a gradual decline of species diversity of pollinators resulting in reduced crop yields or water scarcity, or acute, such as natural disasters or forest spills.

vi According to the TNFD, nature-related transition risks stem from a misalignment of economic actors with actions aimed at protecting, restoring and/or reducing negative impacts on nature. These risks can be prompted, for example, by changes in regulation and policy, legal precedent, technology or investor sentiment and consumer preferences. They can also arise from activities aimed at restoring nature that no longer align with, for example, revised policies.

vii According to the TNFD, nature-related systemic risks are risks that arise from the breakdown of the entire system, rather than the failure of individual parts. These risks are characterised by modest tipping points combining indirectly to produce large failures, where one loss triggers a chain of others and prevents the system from reverting to its prior equilibrium.

viii Please note, Appendix C provides information on how the TNFD defines scope 1, 2 and 3 impacts/dependencies.

FIGURE 3 TNFD's definitions of nature-related risks



SOURCE: The TNFD, 2022[18]

Availability and access to appropriate nature-related data is a common initial concern for investors. However, data constraints are comparable to related issues in the investment industry and need not be a major barrier to progress. Investors are able to draw on decades of data from robust physical sciences and environmental economics approaches, methodologies and outputs. Much of this nature-related data is often readily available and at least as credible as many conventional finance and economics metrics and modelling.

If there is a key, enduring gap, it is a lack of funding and collaboration across the public and private sectors in establishing the necessary infrastructure for robust, widespread ecological health status monitoring and data-sharing at local, regional and national scale.

Need help finding Tools or Data? Toggle to the 'Tools & Toolkits' tab or 'Data & Databases' tab in Appendix A. Filter by 'spatial capabilities' and 'level'

Note that not all tools and databases are free to access. For tools and databases that offer at least a free version, filter by the 'tick' icon in the 'Free Version' column of the 'Data & Databases' or 'Tools & Toolkits' tabs in Appendix A

EMERGING NATURE-RELATED DATA: STATUS, CHALLENGES AND OPPORTUNITIES

New technology and tools to source, analyse and interpret nature-related data is fast emerging and investors now have access to a range of new applications.

An example is the construction of biodiversity metrics from a combination of remote sensing data and global and local nature-related data. Remote sensing is used to monitor nature and biodiversity patterns, with satellites, drones, and aerial photography monitoring habitat changes, vegetation cover, and land use patterns. **Remote sensing** helps establish broad patterns and trends, meaning data exists even for some areas that are remote and inaccessible. However, remote sensing is unable to capture the nuanced conditions of specific locales due to its broad scope and lack of granularity, meaning it is limited in detecting and quantifying detailed, localised biodiversity.

Environmental DNA (eDNA) has also emerged as a rapidly growing field in biodiversity monitoring and ecological research. It involves detecting DNA fragments shed by organisms into the environment (water, soil, air) to assess biodiversity elements of nature. Its strength lies in that it is much cheaper and quicker than traditional field surveys, and its ability to detect rare and cryptic species, and multiple groups of organisms at once. However, eDNA remains fairly limited in reliably determining species abundance.

Information about asset/company level risk is improving as methods evolve, disclosure requirements mature, and data providers continue to improve their offerings. However, data service provision remains patchy, with products often focused on a certain type of nature-related risk and with limited company asset coverage.

1.2 Undertaking nature risk assessments

Investors can use several approaches to undertaking an assessment of portfolio nature risk. For example, a risk assessment can focus on identifying hot spots (sectors and/or locations), to identify priority companies for due diligence, research and engagement. Alternatively, a risk assessment may focus on one or two nature topics (like 'water' or 'deforestation'), based on the investor's investment exposure, expertise and interests.

This section discusses some of the approaches, tools and datasets that could support investors in qualitatively assessing their investment exposure to both physical and transition nature-related risks across:

- sectors;
- locations;
- companies; or
- a combination of these.

An example output of a risk assessment could be a heatmap highlighting sectors with exposure to nature-related risks, impacts and dependencies.

Sector-level exposure assessment

A sector-level exposure assessment provides investors with an understanding of their exposure to sectors with significant impacts or dependencies on nature. It can also provide insights into specific risks and level of exposure associated with each sector. Being a relatively high-level assessment, this can be applied to listed securities, direct/private equity/debt portfolios, systemic quant-based strategies or more concentrated portfolios with a relatively small number of assets/securities.

This approach requires investors to map their investment portolio's sector exposure to impacts or drivers of nature loss (e.g. pollution or freshwater use), or dependencies on nature (e.g. protection from disruption or surface water). Investors can determine sector exposures by using off-the-shelf resources published by the TNFD[ix] and Finance for Biodiversity. The Finance for Biodiversity list of most nature dependent/impactful sectors is set out in Figure 4.

FIGURE 4 Finance for Biodiversity sectors and value chains

Managing dependencies and risks	Managing impact
When it comes to measuring and optimising dependencies and risks, sectors (and associated value chains) most often flagged for being dependent on biodiversity include: a. Agriculture, forest products & fisheries b. Fashion, incl. textiles, apparel & luxury goods c. Food, beverage & tobacco d. Electric utilities	When the focus is on mitigating negative impact or creating positive impact, sectors (and associated value chains) most often flagged for having the largest impact are: a. Agriculture, forest products & fisheries b. Food, beverages & tobacco, incl. packaging c. Infrastructure & mobility, incl. housing, public infrastructure and vehicles d. Energy & mining, incl. fuels, power, and other commodities e. Fashion and related FMCG, incl. luxury goods f. Other sectors, incl. pharma, cosmetics and consumer electronics

SOURCE: Finance for Biodiversity, 2022[19]

The TNFD recommends visualising the results in a heatmap[20], an output of which can be seen in Figure 5:

ix The TNFD has provided a sector list and mapping for core financial institution metric on exposure to sectors in the Annex 1 in the Sector guidance Additional guidance for financial institutions

FIGURE 5 Example output from a heatmapping exercise

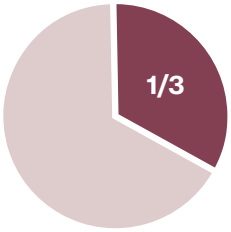
	Dependencies		Impacts						
			Land use	Water use	Pollution				Low – High
SASB Sectors	Soil quality	Water quality	Land use	Water use	Air pollution	Solid waste pollution	Soil pollution	Water pollution	AUM (% of total)
1 Agricultural products and tobacco	High	High	High	High	Low	Low	High	High	2%
2 Consumer goods	Low	Low	Low	High	Moderate	Low	Moderate	Moderate	5%
3 Extractives and minerals processing	Low	Moderate	High	High	High	High	Moderate	High	14%
4 Financials	Low	Low	Low	Low	Low	Low	Low	Low	16%
5 Food and beverage (ex. agriculture and tobacco)	Low	Moderate	Low	High	Low	Moderate	Low	Low	11%
6 Health care	Low	High	Low	High	Low	Moderate	High	High	6%
7 Infrastructure (ex. utilities and generators)	Low	High	High	Low	Low	High	Low	Low	2%
8 Renewable resources and alternative energy	Low	High	Low	High	Low	Low	High	High	3%
9 Resource transformation	Low	Low	Low	High	Moderate	High	High	High	6%
10 Services	Low	Low	Low	Moderate	Low	Low	Moderate	High	12%
11 Technology and communications	Low	Low	Low	Low	Low	Low	High	High	15%
12 Transportation	Low	Low	Moderate	High	Moderate	Moderate	High	High	5%
13 Utilities and electricity generators	High	High	High	High	High	High	High	High	3%

AUM: Assets under management

SOURCE: The TNFD, 2023[21]

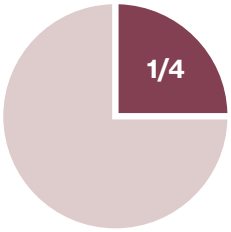
FIGURE 6 Sector-based Locate analysis using the ENCORE tool - Robeco

Robeco, the Netherlands-based international asset manager managing over €176bn of ESG-integrated assets, conducted a heatmap assessment using ENCORE data to understand the exposure of its investments to sectors with a high or very high impact on nature and dependency on ecosystem services. It focused its LEAP assessment on two asset classes – fixed income and equities. This analysis allowed Robeco to identify sub-industries with the highest exposure to dependencies on ecosystem services and impacts on key drivers of biodiversity loss. The results were compared to the findings from research by the Dutch and French central banks and other peers in the industry and found to be broadly in line. The insights from the team's ENCORE analysis are highlighted below.



AuM in sectors with high/very high impacts on key drivers of biodiversity loss:

- Airlines and airport services
- Marine ports
- Agricultural products
- Oil and gas



AuM in sectors with high/very dependency on at least one ecosystem service:

- Agricultural products
- Forest products
- Electric utilities
- Water utilities
- Packed foods and meat
- Apparel

SOURCE: The TNFD, 2023[21]

Other tools that investors can use to undertake a sector exposure assessment include the following:

- Nature Sector Materiality Tool,[22] which presents materiality ratings for 12 'pressure categories' based on the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) categorisation.
- ENCORE[23] (Exploring Natural Capital Opportunities, Risks and Exposure) provides evaluations of significance of impacts/dependencies across a range of nature domains for 271 subsectors. Figure 6 illustrates how an asset manager used the ENCORE tool to understand investment exposure to nature.
- The TNFD Guidance on Engagement with IPLCs[24] provides tools for incorporating IPLC views, knowledge and input to inform the assessment especially where IPLC are typically involved in or impacted by the activities of these sectors.
- Commodities-focused tools: Some of the sectors with material impacts on nature are closely linked to producing, procuring or processing soft and hard commodities, such as beef or metals. Sectors such as food and beverage, consumer goods, apparel and textiles and pulp and paper tend to utilise soft commodities that may contribute to deforestation. If a linkage to commodities is identified, investors can use other tools such as Trase[25], which focuses on beef, soy, and palm oil in tropical forest risk countries.

Need help finding Tools or Data? Search by 'Level' in the relevant Appendix A tab to identify tools or data with sector level assessment capabilities

Location-based exposure assessment

Location-based exposure assessment focuses on the conditions in specific geographical location and can help investors identify location-specific risk. Location-based assessment of assets related to investee companies is critical because nature-related dependencies and impacts - and the risks arising from these - are highly location-specific. Location assessment may be based on where a company is headquartered, where is has operations, or key value chain locations upstream (e.g., source farm) and downstream (e.g., a major retailer). An increasing number of ESG data providers are offering such location data or offering impact and dependency data based on companies' physical locations on a subscription basis (see Appendix A).

Location-based exposure assessment can help investors understand how a company's activities can impact nature, including biodiversity, in target areas (e.g., pollution), which may be closely related to transition risk if relevant regulations apply or there is a likelihood of impacting highly sensitive areas such as the UNESCO World Heritage Sites[27]. Working together with IPLC can help to further inform this assessment including local knowledge of the ecosystem in that area.

Location-based exposure assessment can also support investors in understanding investee companies' dependencies on nature, for example water basins where companies withdraw water or pasturelands where companies source milk or other dairy products needed for production. Such a location-based exposure assessment on dependencies is key to identifying risks and areas of potential risks, including physical nature-related risks such as water scarcity or flooding risk.

One example of this kind of assessment metric is the Activities in Biodiversity Sensitive Area metric as part of the Sustainable Finance Disclosure Regulation's (SFDR) Principal Adverse Impact indicators. Investors can use company reports or third party ESG data to understand which companies have activities in or near biodiversity-sensitive areas (e.g. key protected areas) and use that information to assess potential risks resulting from negative impacts on biodiversity and habitats.

- Site specific (If an investor has access to operation/ supply chain locations of investee companies):
  - The Integrated Biodiversity Assessment Tool (IBAT)[28] can be used to map the locations to geographical areas that are important to biodiversity.
  - Tools like WWF's Water Risk Filter[29] or World Resource Institute's Aqueduct[30] can help investors map physical locations to different types of water risks (physical, transitional and reputational).
  - Global Forest Watch[31], developed by the World Resource Institute, provides real-time data and tools to monitor forest loss.
- Country level: There are also country-based risk assessment tools that investors can use, such as water or forest risks. Understanding in which countries investee companies are operating and how these countries are vulnerable to nature-related risks (both present and forward-looking) can be a helpful starting point for investors with relatively concentrated country exposure.

Need help finding Tools or Data? Search by 'Level' and/ or 'Spatial Capabilities' in the relevant tab of Appendix A to identify tools or data with location level assessment capabilities

Company-based risk assessment

A company-based risk assessment approach examines each company across portfolios to understand specific company-related nature risks. While this can be done for a few priority companies, the assessment results can be also aggregated to a portfolio-level. In order to do this, however, investors need robust company data with a comprehensive coverage. As noted above, data is improving, but still tends to focus on specific types of risks or is limited in company coverage.

Company-based risk assessment may provide the most granular way of assessing nature-related risks for investments. However, since this type of risk assessment is more detailed it can be time-consuming for investors with a large number of holdings. A suggested way to overcome this challenge is by using sector-level and country-level assessments to narrow down the scope of target companies first, then work on assessing the most risk-exposed companies in depth (e.g. companies with the highest impacts on water resource or land use, operating in countries with high water scarcity risk or deforestation risk).

Types of data/approaches:

- Reputational risk flags: This assessment could include checking for controversies (e.g. oil spill incidents) or a company's revenue exposure to certain red flag operations or activities (e.g. deep-sea mining), by using databases like RepRisk[34]. Controversies and red flags can be helpful to check against relevant regulations, which is a proxy for transition risk.
- Governance disclosure: Investors can also assess the disclosure of policies and certifications (e.g. deforestation policies or Roundtable on Sustainable Palm Oil[35] (RSPO) certification status).

CASE STUDY 1: DETERMINING SENSITIVE AREAS, EVALUATION OF NATURE-RELATED RISKS, IMPACTS AND DEPENDENCIES

INVESTOR: Colombian-based investment management consortium Grupo SURA.

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: Grupo SURA, which has exposure to agricultural companies in the food and beverage sector across North, Central and South America, selected two agricultural/food and beverage companies that they were indirectly exposed to via their subsidiary companies. They identified two companies within their value chain through reporting requirements from the subsidiary companies and selected companies which represented the highest aggregated financial exposure. Due to challenges with accessing detailed location information for each company, the assessment relied primarily on publicly available company information.

The pilot projects were executed through a series of five workshops with Grupo SURA which were hosted and led by environmental geospatial consultancy Frontierra, and which aligned with phases of the TNFD's Locate, Evaluate, Assess, Prepare (LEAP) approach. For the assessment of sensitive locations in line with the Locate phase, no information was readily accessible internally and Frontierra undertook research of publicly available information to identify the business footprint. For one of the assessed companies, the locations of the business footprint were publicly available on their website and the accuracy of this data was later verified through information subsequently provided by Grupo SURA which they requested from the subsidiary. For the second company Grupo SURA and Frontierra utilised the Trase platform[32], using the municipality of the location as a proxy for the assessment,

OUTPUT: Achieved a location-based exposure assessment in circumstances where location-based data is not readily available.

LIMITS: a number of assumptions and proxies were used in this assessment, and investors should aim to achieve greater certainty over data over time.

SOURCE: Frontierra, Grupo SURA, and Global Canopy (2023)[33]

- Commodities: CDP's company datasets also provide a good basis for checking site and commodity level financial risks and disclosures associated with climate, forests, and water.
- Company performances: Some think tanks and non-governmental organisations (NGOs) provide rankings and scorecards to support investors with assessing a company's performance on addressing nature-related risks, such as Forest 500[36] or Forest IQ[37] (deforestation risk). The World Benchmarking Alliance also provides rankings for over 380 companies relating to their performance and disclosure of contributions to halting and reversing nature loss through its Nature Benchmark.[38] Tools such as Nature Action 100's Benchmark indicators can be helpful to assess corporate ambition and action on nature. These tools are helpful to assess transition risk related to nature, as they focus on companies' policies, processes and the level of transparency.
- IPLC: Investors could understand, analyse and assess company relationships with IPLC. This could include looking at the companies respect for and upholding of IPLC rights to FPIC.[x] As IPLCs often serve as custodians/kaitiaki of protected areas and sites of significance, companies with exposure to biodiversity sensitive areas can be further assessed against their engagement with these communities and related policies to safeguard their rights and interests.[39]
- Controversies in specific locations: In the presence of company location data, investors can combine controversy flags with the location-level data to conduct location-specific nature risk assessments. For example, RepRisk's Geospatial tool, developed jointly by RepRisk and IBAT alliance, provides nature due diligence data, showing the proximity of 60,000+ mining and oil and gas projects to 270,000+ protected areas and 16,000+ key biodiversity areas.[40] Such tools are helpful to assess physical risk related to nature.

Need help finding Tools or Data? Search by 'Level' and/or 'Spatial Capabilities' in the relevant tab of Appendix A to identify tools or data with company level assessment capabilities

Practical examples of investor risk assessments

There is no one-size-fits-all solution, and investors will be choosing the assessment type that is the most appropriate for them on a case-by-case basis, depending on portfolio-type and size, strategies, asset classes, timeframe and internal resources.

CASE STUDY 2: FIRST SENTIER INVESTORS' NATURE AND BIODIVERSITY TOOLKIT

INVESTOR: First Sentier Investors (FSI) is a global asset management company with over US$157 billion in funds under management[xi].

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: FSI's Investors Can Assess Nature Now[41] (ICANN) Guide is a step-by-step toolkit to help investors start assessing nature-related issues, particularly freshwater and deforestation, in portfolio companies. FSI honed in on these two sub-topics as posing material risks, given both are intrinsic to ecosystems required to sustain human life and because of the economy's dependency on water and forests. The guide maps a due diligence framework for appraising and engaging on three critical issues:

- identification of sector exposures and understanding of material nature pressure areas;
- prioritisation and assessments of companies, including due diligence, metrics to look for and country-level assessment; and
- company engagement, outlining how to interpret the data and questions to ask.

The guide highlights how to layer different nature data points to overcome the challenge of insufficient data. This includes data on sector/country exposure and respective nature-related risks company policies, commitments, scorecards and rankings, direct operation and supply chain locations. In addition, investors can consider modern slavery risks for a more holistic assessment, by adding high modern slavery risk data mapped across countries and sectors. For example, companies in the fishing industry in certain South Asian countries could be negatively impacting the ocean, as well as contributing to deepening modern slavery problems. Once flagged as a potentially high-risk company, investors can conduct further research to understand company approaches and performance.

OUTPUT: Investors can use this guide to not only identify, assess and prioritise nature-related issues in the areas of freshwater and deforestation, they can also use the engagement framework to gain insights on company disclosure and practices around addressing nature-related risks, and to develop their own policy or position on nature.

LIMITS: Limited use of location and supply chain data as it is an initial exploration; the guide itself does not include FSI's actual engagement examples yet but proposes ways to prepare for the work.

SOURCE: First Sentier Responsible Investment Team, (2023)[42]

[x] This can include where IPLC are involved in the assessment and management of nature-related issues. FSI has shared an example in their latest 'State of Nature-Related Disclosures report,' where one firm has a dedicated stakeholder engagement team who facilitate consultation with IPLC impacted by firms' forestry operations. Through these dedicated teams, one firm engaged 100% of Indigenous tribes located in its forest concession areas, totalling 6,000 individuals. These tribes are engaged in an ongoing manner and are actively involved in the development and implementation of forest management strategies, including the selection of trees for harvest.

[xi] as of Q1 2024

1.3 Risk assessment differences by asset class

Publicly listed equity and debt

Since assessing nature-related risks is a relatively new task for investors, many asset managers and owners have focused on publicly listed securities (listed equities and corporate debt). Many of the tools and datasets mentioned in Section 1.2 initially target these asset classes, as publicly listed companies tend to disclose more data on nature and are better resourced in-house to implement nature strategies or targets than non-listed companies. The reliance on company voluntary disclosure, however, could also mean that data may be inconsistent, unverified and incomplete. Data on asset location is still quite limited. Depending on data availability, all three types of risk assessment can be used for these asset classes.

Need help finding Tools & Data? Filter by 'Asset Class' in the Tools & Toolkits tab of the Appendix A

Private equity and debt

The lack of quality data tends to be more challenging for private equity and debt investments as private companies don't have a requirement to disclose data publicly. However, private equity/debt investors, through their ownership, tend to have access to location data of the assets owned and/or operated by the investee company. Sometimes these investors have board membership, which enables access to more detailed company data. For example, Manulife Investment Management[xii] published its nature disclosure in 2023 using information from 2022, focusing on timberland and agricultural lands they own/manage.[43] They identified countries, managed farmland locations, commodities grown in each location and assets under management. They used this information to assess the investment's risks, opportunities, dependencies and impacts in their direct operations. This approach can be applied to other privately held investments in property/real estate and infrastructure.

[xii] Manulife Investment Management had CAD 804 billion in assets under management (as of March 2022) and provides public and private investment solutions across equities, fixed income, multi-asset, alternative, and sustainability-linked strategies, such as natural capital.

CASE STUDY 3: ASSESSING DEFORESTATION RISK IN CORPORATE HOLDINGS, REAL ASSETS, ANNUITIES AND SOVEREIGN DEBT

INVESTOR: Aviva Investors with GBP233 billion (as at 31 March 2024) assets under management

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: In 2022 Aviva conducted its first deforestation risk assessment across investment and underwriting activities and published the results within a Biodiversity Report. The assessment included real assets, annuities and sovereign investments. In the absence of accurate data reflecting actual deforestation linked to companies, Aviva used datasets based on proxy indicators of how strong a company's policy is on deforestation. Due to the lack of deforestation performance data, Aviva used policy indicators as an initial step towards understanding exposure to companies with high deforestation risk and how to prioritise action on agricultural commodity-driven deforestation. Aviva combined these datasets to better understand deforestation risk more comprehensively. A summary of the datasets chosen is below:

Source	How is deforestation risk considered within this data set?	How has this data set been used for our deforestation risk assessment?	What scope does this data set cover for our deforestation risk assessment?
CDP Forests	Provides company information of policies, volumes, traceability and certification	Specific indicators have been used to identify whether a company is strong, medium or weak in regard to their deforestation policies	Corporate debt, equity, multi-assets
Forest 500	Provides information on 350 companies and 150 financial institutions on their zero deforestation commitments, commodity-specific policies, traceability and whether progress has been reported transparently		
SPOTT	Provides information on public disclosure of policies, operations and ESG commitments split by palm oil, pulp and paper and rubber		
Global Forest Watch	Provides satellite imagery to provide near-real time monitoring of deforestation across the globe	Provide country-level tree cover loss to identify greatest areas of loss and the dominant drivers	Real assets, annuities, sovereign debt, general insurance activities

OUTPUT: This case study is useful guidance on initial steps that investors and insurers can take to understand exposure to companies with a high deforestation risk, in the absence of site-specific data.

LIMITS: To fully identify deforestation risk, the use of site-specific data is required. Investors and insurers should seek to collect, streamline and disclose this data over time. This is consistent with Aviva's future plans.

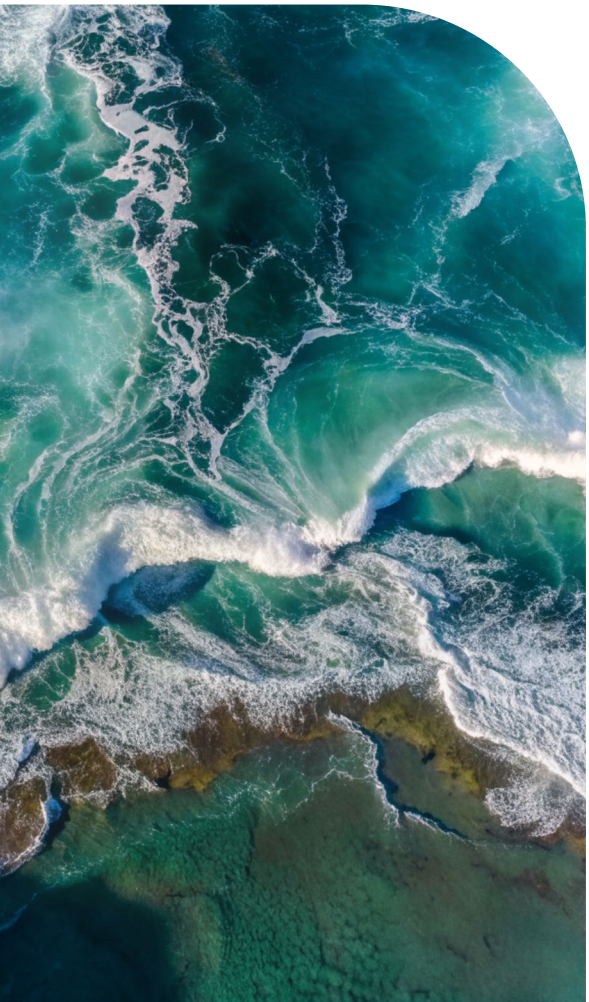
SOURCE: Aviva (2022)[46]

Sovereign bonds

When analysing nature-related risks for sovereign bonds, risk assessment can focus on a country's physical exposure or vulnerability to nature-related risks, such as reduction of pollinator populations or climate change stress testing results affecting a country's GDP. An example of this is the Climate and Nature Sovereign Index[44] developed by WWF and NinetyOne. This 2020 pilot used real-time and forward-looking indicators to assess long-term risks relating to climate change and nature loss at a country level.

Investors can also check for country-level targets and roadmaps on nature. As part of the Convention on Biological Diversity, signatory countries are meant to make submissions of National Biodiversity Strategies and Action Plans (NBSAPs)[45], providing an indicator on a country's vision and commitment to protecting nature. In addition, signatory countries to the Kunming-Montreal Global Biodiversity Framework will be required to submit their national nature-related strategies ahead of the COP16. There are other government agreements investors can check relating to specific issues, such as the Global Treaty on Plastics.

Various country-level risk datasets (see Section 1.2 in location-level assessment) can support investors understand nature-related risks across different countries, which can be useful for assessing sovereign bonds.



1.4 Risk assessment as part of a broader ESG risk assessment

Nature-related risks are not separate from other ESG risks. If companies pursue one ESG goal at the expense of harming others, that would not be conducive to supporting sustainable development. As investors conduct assessments of nature-related risks, they should consider potential trade-offs and synergies between other types of risks so that the assessment and its following actions are not conducted in a silo.

Investors should consider the linkages with climate change where the importance of nature for climate adaptation and mitigation can go hand in hand with the ability to address issues simultaneously through action on topics such as deforestation and sustainable agriculture. Also, when investors urge companies to focus only on reducing carbon emissions, they may not consider how companies' responses may harm natural habitats or biodiversity around them or harm to local community livelihoods (e.g. converting forest lands to mount solar photovoltaic panels that would generate electricity).

This should also include consideration of social risks, including interactions with IPLC and affected stakeholders. See section 1.8 for further discussion on this. The overlap between human rights risks and nature-related risks are also being recognised in regulation, for example within the EU Deforestation Due Diligence Regulation.

Need help Integrating IPLC into nature assessments? Filter by colour in the IPLC column of any tab in the Appendix A

1.5 Metrics for disclosing risk assessment results

Nature-risk assessments on a sector-level, location-level and company-level can provide useful information to pinpoint material sectors, physical assets or companies and estimate financial impacts resulting from nature-related risks. For example, by applying all three levels of assessment, investors can estimate a potential systemic risk arising from prolonged droughts in a landscape (e.g. forest) by measuring the financial impact the physical risk (droughts in this case) could have on certain commodities that are key to portfolio companies' businesses. Investors can also estimate a potential reputation or liability risk by understanding companies' involvement in certain controversial activities (e.g. depleting the watershed).

The output of an exposure-focused risk assessment is generally absolute or percentage of assets owned/managed exposed to a certain level of impact/dependency/risk. Other metrics include a percentage of revenue exposure of portfolio companies (that can be flagged for further research), financing, or insurance activities exposed to material physical risks (absolute volume or percentage) or the size of exposed land base. These metrics are in line with the TNFD's global core disclosure metrics.[xiii]

Investors can prioritise material countries/regions, sectors, company/assets, or by General Partners (for Limited Partners) to measure the exposure. For example, they can assess private equity exposure to high flooding risk locations, with an output metric of percentage of the asset class exposed to the risk, or the hotel sector's exposure to waste generation in a portfolio, expressed as a percentage of the hotel sector creating negative impacts on nature through pollution and waste. When such data becomes more robust, or in the presence of good data coverage in place, investors can assess portfolio-wide financial exposures across the entire portfolio to sectors and geographies.

Assessing exposure as a percentage of assets owned/managed does not necessarily mean that an investor with such a level of exposure will be at the risk of incurring certain financial costs. This introduces the challenge of incorporating negative externalities (impacts) into financial statements. For example, if 20% of investment portfolio AUM is said to have an exposure to biodiversity sensitive areas, that could indicate that the assets in the portfolio have a potential to disrupt the ecosystem services or natural habitats in specific areas.

However, unless all the flagged companies can clearly establish the linkage between their business/financial performance and the disruption or damage on nature (e.g. reduced bee population causing lower crop yields for the company), or unless there is a regulation on this, such exposure will not likely manifest as a financial risk to companies and investors. Using such metrics, however, investors can compare different investment solutions/products in terms of the exposure percentage, which could serve as a high-level indicator of potential risk. Such data on exposure may remain as a flag for investors to monitor companies and encourage them to make an action towards no disruption of local biodiversity in the areas.

Need help identifying or calculating relevant Metrics? Filter by 'Target Setting, Metrics & Indicators' under the 'Relevant Toolkit Section' column in any tab of Appendix A. Alternatively, search by 'Monitoring' within the 'Relevant Capabilities' tab

[xiii] Specific sector guidance and metrics are available for 14 industry sectors which should give an indication of the sort of information investee companies should be reporting.

1.6 Nature-related opportunities in investment portfolios

At the same time as assessing nature-related risks that exist within investment portfolios, investors can also turn their minds to unrealised nature-related opportunities in their portfolios. The TNFD defines nature-related opportunities as activities that create positive outcomes for businesses and nature through either the mitigation of negative impacts on nature or through positive impacts on nature.[47]

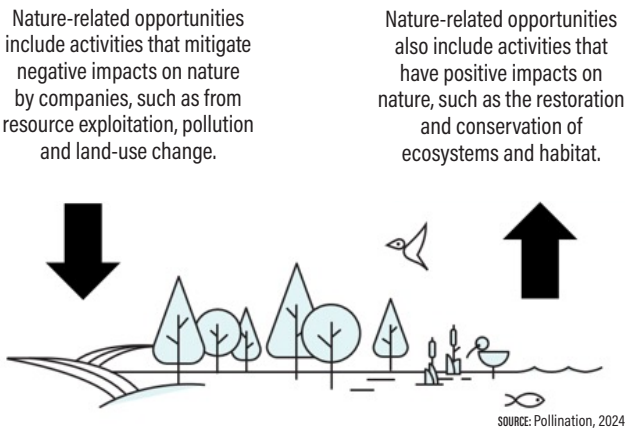
The identification of nature-related risks can, by extension, lead to the identification of opportunities for change, with improved commercial outcomes, including financial and reputational, over the long-term. The most immediate and apparent opportunities may arise from allocating additional investment, effort and capital to addressing existing nature-related risks present within the portfolio. Opportunities may also arise from supporting investees with unlocking new value creation opportunities separate to business as usual (BAU). As outlined in Section 1.4, investors can identify these opportunities through their nature-related risk assessments and engage with portfolio companies to realise these opportunities.

Importance of pursuing nature-related opportunities for investors

Nature-related opportunities, when pursued successfully by businesses, create clear value for investors:

- **Build portfolio resilience to increasing nature risk exposure:** Pursuing nature-related opportunities can build portfolio resilience. If a portfolio company takes steps to mitigate exposure to nature-related physical risks which pose commercial implications such as increased costs and disrupted supply chains, this in turn builds resilience within the portfolio. Further, pursuing nature-related opportunities (by addressing nature-related risks) can also help investors manage changing

FIGURE 7 Risk mitigation and new value creation



SOURCE: Pollination, 2024

stakeholder expectations (a type of transition risk) and capture market shifts, with corresponding reputational benefits and market access opportunities for investees. This includes strengthened existing relationships and loyalty, that flow from supporting portfolio companies to take advantage of nature-related opportunities.

- **Provide financial returns from pursuing new nature-related product opportunities:** Companies are increasingly leveraging opportunities to unlock new value creation separate to BAU as the world continues to shift towards economies with positive outcomes on and for nature. This includes creating new streams of revenue or revenue growth from nature-friendly products, customer segments with sustainability preferences, or income related to environmental markets. For equity investors, there are clear benefits in opportunities which result in increased financial returns. Similarly, there are distinct financial advantages for lenders who back companies that are successfully executing on nature-related opportunities, as such companies often demonstrate improved risk profiles, enhanced reputation and long-term sustainability. Further, emerging government-backed incentives to invest directly in nature (such as biodiversity credits) or opportunities which can have a nature component (such as critical minerals and renewable energy incentives) are likely to provide new product opportunities for lenders.

- **Meet expectations under international standards:** This includes standards of responsible business practice and human rights due diligence including but not limited to those covering the rights of IPLC.
- **Show leadership on nature:** Strategic identification of nature-related opportunities by investors shows leadership on nature in line with responsible investment. The identification of the opportunities done hand in hand with IPLC through their perspectives "can create opportunities of value to the organisation that contribute to the restoration and protection of nature and benefit these groups"[48]. By identifying and managing nature-related opportunities, investors can align themselves with global goals, including the Kunming-Montreal Global Biodiversity Framework (GBF) and its apex mission to halt and reverse biodiversity loss by 2030.[49] The United Nations Environment Programme (UNEP) Finance Initiative, Principles for Responsible Investment (PRI), and Finance for Biodiversity Foundation (FfB) have released guidance on what the GBF means for responsible investors, to support investors in managing associated risks and opportunities, and preparing for anticipated policy developments.[50]

1.7 How to identify and address nature-related opportunities within existing investment portfolios

As a general rule, investors should first identify and consider existing nature-related opportunities. This is because, as outlined in Section 1.6 of this toolkit, pursuing nature-related opportunities is a key part of addressing exposure to nature-related risks and building portfolio resilience. Pursuing exclusively new nature-related opportunities (as explained in Section 2 of this toolkit) won't address or mitigate risk exposure related to existing impacts and dependencies on nature within the portfolio.

Identifying and responding to nature-related opportunities within existing investment portfolios follows a general three step approach.

1. Identify nature-related opportunities via the nature risk assessment

An investor must first understand the impacts and dependencies on nature within their investment portfolio to then understand the corresponding nature-related opportunities. Refer back to earlier portions of Section 1 on the different types of risk assessment frameworks investors can utilise. Investors can adopt the same approach for assessing opportunities as has been selected for assessing risks, ultimately determined on a case-by-case basis.

[xiv] Nature-based Solutions are actions to protect, sustainably manage and restore natural and modified ecosystems in ways that address societal challenges effectively and adaptively, to provide both human well-being and biodiversity benefits" (IUCN, 2016)

Further, most of the nature tools outlined in Section 1 also support the identification of nature-related opportunities, in addition to nature-related risks. Specifically, many of the nature tools support the identification of risks which then informs the risk mitigation opportunities that should be pursued (such as ENCORE and WWF's Water Risk Filter and World Resource Institute's Aqueduct). In addition, available nature tools also help with the identification of locations for positive impacts on nature (such as IBAT and the World Resource Institute's Global Forest Watch, which identifies areas of global deforestation and forest degradation).

An example of how a risk assessment and nature tools can be used to identify opportunities is in relation to water supply. A risk assessment for a portfolio company, using tools such as ENCORE, may reveal that the company is highly dependent on the supply of water for its processes and activities to take place. Tools such as WRI's Aqueduct Water Risk Atlas or WWF's Water Risk Filter may reveal that the company's relevant site is located in any area which is highly water stressed and prone to seasonal variability and drought events, identifying that the company's risk exposure in relation to this dependency is high. Armed with this information, an investor can consider opportunities to engage with the portfolio company to reduce the dependency (such as via water recycling technology) and/or co-invest in nature-based solutions (NbS)[xiv] to bolster water provisioning services with co-benefits for nature and local communities. By supporting portfolio companies to realise this and equivalent opportunities to reduce impacts and dependencies on nature, investors can enhance portfolio resilience and increase financial returns through promoting sustainable business models while improving their market position by showing leadership on nature with tangible benefits to portfolio companies and communities.

At the time of writing, there are a limited number of nature tools focused solely on supporting the identification and assessment of nature-related opportunities. One resource of note however is the World Business Council for Sustainable Development (WBCSD)'s Nature-Based Solutions Map.[51] The map has been created by WBCSD to help businesses integrate NbS into their sustainability strategies. The primary function of map is to organise different types of NbS in terms of the outcomes they can offer to businesses. The output of this map is intended to help users, as a first step, shortlist the most suitable NbS to resolve their business' specific challenges and/or opportunities in question.

2. Assess identified nature-related opportunities for prioritisation

Once the long-list of nature-related opportunities have been identified, the next step is to assess which opportunities within the portfolio offer the most material benefits to the investor and therefore should be prioritised.

This assessment generally involves weighing up ease of implementation against the size of positive impact. Often, the opportunities within the existing portfolio that offer the most material benefits to the investor will be those that most effectively address the highest exposures to nature-related risks. However, there may be nature-related opportunities not related to or addressing areas of risk which present material benefits.

Investors should take into account the potential to engage, co-design and partner with IPLC in delivering particular nature-related opportunities (particularly at the investment level). This is a particularly important consideration in the context of nature-related opportunities, given the strong interconnection between IPLC and nature, and the critical role IPLC have historically played and continue to play as stewards/kaitiaki of nature.

Depending on resources, it may also be possible to pursue "quick wins" (i.e., opportunities which can be easily and quickly acted upon) at the same time as pursuing opportunities addressing the most material risk exposure areas, which may take longer to implement.

3. Engage to realise nature-related opportunities

The next step is engagement to act on prioritised nature-related opportunities.

If sector-level nature-related opportunities have been identified, engagement could be undertaken with relevant portfolio companies on an individual basis or collectively. Engagement with industry associations may also be useful avenue for engagement.

If company-specific nature-related opportunities have been identified, then individual engagement with these companies should be pursued. As referred to in Section 1.2 of this toolkit, Nature Action 100 (NA 100) has recently published benchmark indicators for assessing corporate ambition and action on nature[xv]. These could be applied to existing investees within the portfolio as a high-level screening pre-engagement to inform approach to engagement.[52] Finance for Biodiversity has also published a guide to engaging with companies on biodiversity,[53] which builds on the PRI discussion paper 'Investor action on biodiversity'[54]. That Guide includes two annexures that provide an additional detail to the guidance – one providing an overview of ongoing and past nature-related collaborative engagements across key sectors, and nature realms,[55] and the other engagement templates for investors setting up an engagement and tracking and monitoring that engagement as it progresses.[56]

Section 3 of this toolkit goes into detail in relation to active stewardship, comprising company engagement, proxy voting, policy advocacy and reporting.

Need help assessing opportunities? Type 'Opportunities' into the search function of the 'Relevant Toolkit Section' filter in any tab of the Appendix A to identify relevant tools, guides, and case studies

[xv] Companies within the NA 100 initiative will be scored against the benchmark.

CASE STUDY 4: JGP ASSESSMENTS OF MATERIAL NATURE-RELATED RISKS AND OPPORTUNITIES

INVESTOR: Brazilian asset manager JGP Gestão de Crédito (JGP), with US$ 1.7 billion in AUM.

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: JGP manages different strategies, including high growth and high yield, structured credit, Special Situations and ESG markets in Brazil and abroad. Between April and October 2023, JGP undertook a TNFD-aligned assessment of the nature-related risks and opportunities associated with two key clients.

JGP developed a longlist of nature-related risks and opportunities, informed by its identification of the two key clients impacts and dependencies on nature.

OUTPUT: Working closely with Frontierra, JGP developed a risk and opportunity register. The register included ratings and covered existing mitigation measures, while also suggesting additional actions to mitigate risks and maximize opportunities.

SOURCE: Frontierra, JGP Gestão de Crédito Ltda (JGP), and Global Canopy (2023)[57]

CASE STUDY 5: GREEN CENTURY CAPITAL MANAGEMENT'S ENGAGEMENT WITH PORTFOLIO COMPANIES

INVESTOR: US-based Green Century Capital Management with US$1 billion AUM.

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: Green Century has a clear approach to engagement with investee companies as part of its biodiversity and broader ESG agenda. In circumstances where a portfolio company has been identified by Green Century as falling behind on specific nature-related issues (incl. deforestation, soil degradation, or plastic waste), Green Century will engage with the company.

Green Century may also take the action, if felt required, of filing a resolution, either in collaboration with other shareholders or independently, urging the company to commit to specific improvements. After obtaining such a commitment, the firm regularly checks in with the company to offer support and monitor progress.

OUTPUT: In 2023, Green Century successfully used this approach to persuade Kraft Heinz to implement a comprehensive global forest protection policy.

SOURCE: PRI (2023)[58]

1.8 Working with IPLC in understanding nature risk and opportunities in existing portfolios

Companies' impacts on nature through their activities or value chain may infringe or otherwise affect the human rights and interests of IPLC. Simultaneously, as successful stewards/kaitiaki of nature, IPLC' traditional knowledge is critical to not only advancing NbS to reverse nature loss but may also be imperative to identifying nature-related impacts and risks.[59] The critical role of IPLC in the ongoing stewardship of nature also means that they should be considered key partners when companies identify and design the implementation of nature-related opportunities (particularly at the investment level).

As part of their assessment of nature-related risks and opportunities in existing portfolios, investors should consider if companies are co-designing with IPLC in line with relevant best practice standards or relevant legislative rights which in some cases, exceed best practice, including their engagements throughout companies' human rights and environmental due diligence and whether IPLC' rights to FPIC are respected and applied in relation to activities affecting nature.[60] Investors may want to proactively build relationships, co-design and engage with IPLC where investments in their portfolio affect these rights holders' relationship with nature.

Recognising that, 'Indigenous, traditional and local knowledge systems constitute one of the largest bodies of human knowledge about nature and ecosystem values and services'[61], the right to indigenous data sovereignty should be upheld in line with Article 31 of United Nations Declaration on the rights of Indigenous Peoples (UNDRIP)[62]. The CARE Principles (Collective Benefit, Authority to Control, Responsibility and Ethics)[63] used alongside the FAIR Principles (Findable, Accessible, Interoperable, Reusable)[64] provide the foundations and best practice approach to data ownership and management.[65]

Need help Integrating IPLC into nature assessments? Filter by colour in the IPLC column of any tab in Appendix A to identify relevant guides, tools, case studies, and resources

SECTION 2 – NEW NATURE-RELATED OPPORTUNITIES

This section provides insights into the due diligence process for assessing nature-related investment opportunities, and covers:

- defining and identifying new nature-related investment opportunities;
- nature considerations (i.e. nature-related risks and opportunities) for investors for new investment opportunities;
- particular nature-related considerations when assessing 'Pure Play' nature investment opportunities, such as Nature-based Solutions (NbS); and
- key challenges associated with new nature-related investment opportunities.

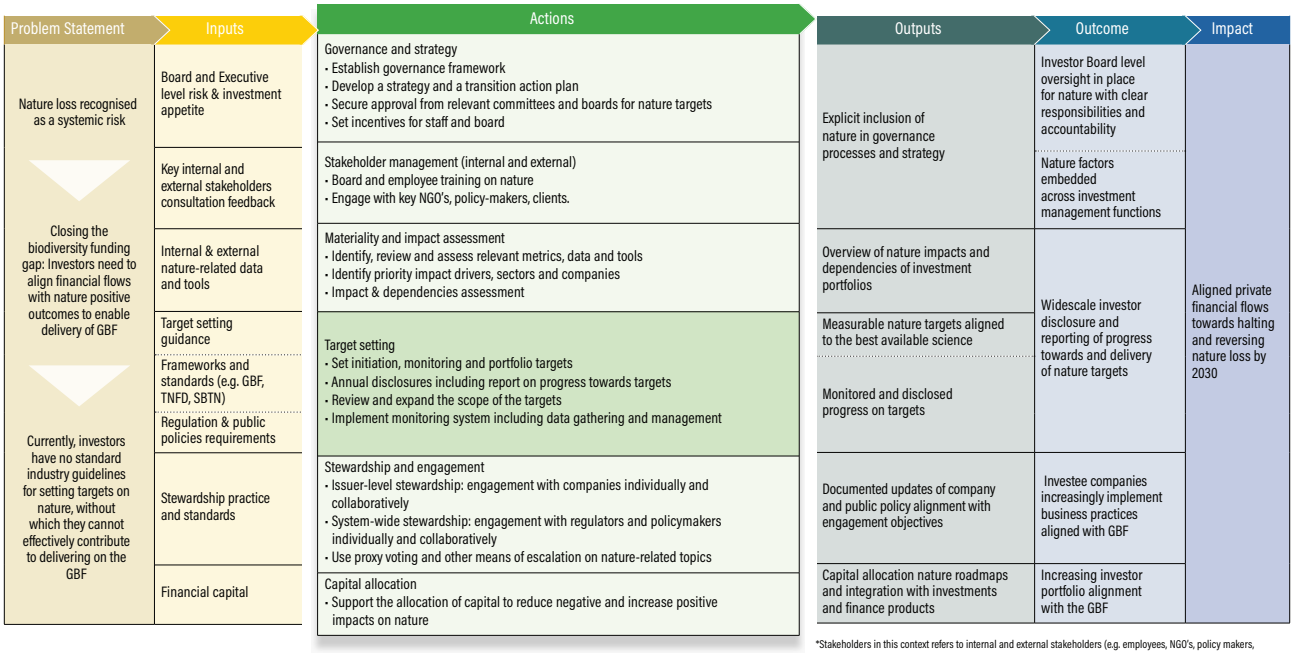
2.1 The importance of strategies and targets

Best practice for investors engaging in, or considering engaging in, new nature-related investment opportunities is to structure their approach through the development of a nature investment strategy and target setting.

A strategic approach provides clarity around the investor's objectives, commitments and/or specific targets, including whether they align with international or industry nature frameworks.[66] Any strategy developed should take into account material nature-related risks and opportunities identified using the assessment frameworks outlined in Section 1 to support prioritisation of new investments that help to diversify and manage existing portfolio risk exposure.

Finance for Biodiversity (FfB) has mapped a potential Theory of Change for aligning investor action with global biodiversity goals. Investors might consider using the Theory of Change framework in a similar way, in order to help develop a nature strategy and target framework aligned with biodiversity outcomes, and building this into their investment process.[67]

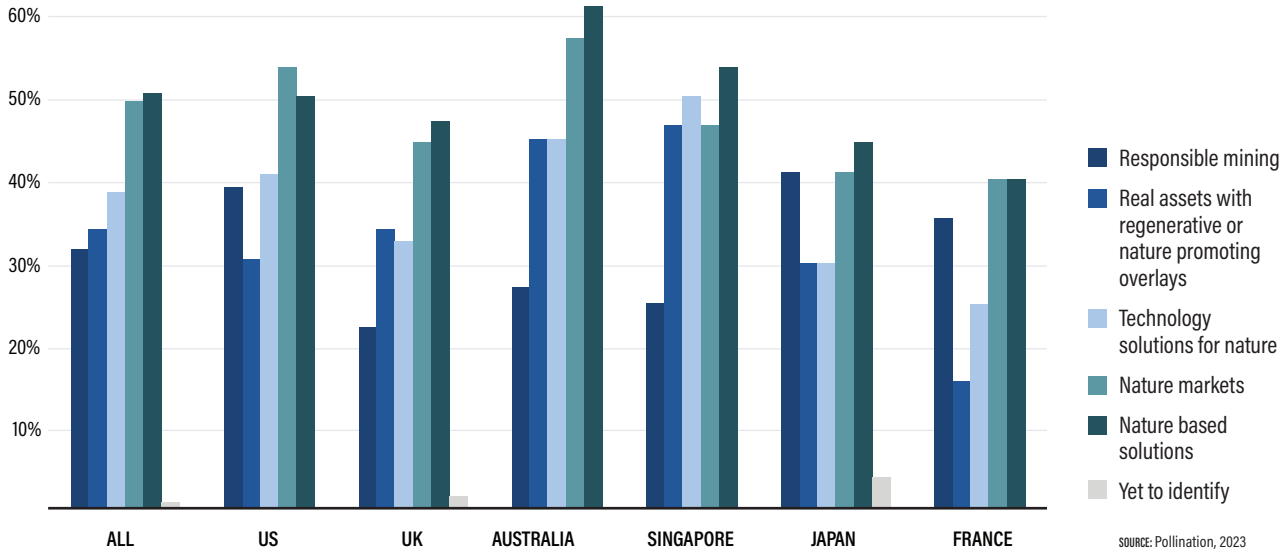
FIGURE 8 Finance for Biodiversity Theory of Change for developing a nature strategy and target framework



*Stakeholders in this context refers to internal and external stakeholders (e.g. employees, NGO's, policy makers, clients). AM and AO need to align strategy, targets, stewardship practices and investment solutions

SOURCE: Finance for Biodiversity[68]

GRAPH 1 **Investor exposure to different nature opportunities by region** (% of responders who highlighted exposure in a category)



SOURCE: Pollination, 2023

2.2 Identifying nature-related opportunities

New nature-related investment opportunities are opportunities outside an investor's current portfolio that present investors with the ability to create positive outcomes for nature and capture new sources of value. Many institutional investors are already actively considering nature and investing in new nature-related opportunities.[69]

Investors play a crucial role in incentivising and supporting the uptake of nature-related opportunities. The role of the private sector and specifically financial institutions, is particularly important when considering the amount of new investment required to support the goals of the GBF; current estimates point to a US$598 – 824 billion financing gap for biodiversity protection per year.[70]

2.3 Assessment of new nature-related investment opportunities

New nature-related investments can be bucketed into three broad categories.

- **Nature-aligned opportunities:** Investments in assets with lower impacts/dependencies on nature compared to the investments already within the investor's portfolio. Examples include listed equities comprising companies implementing strategies and practices with the intention to reduce impacts on nature.
- **Pure-play investments:** Investments in nature positive aligned companies/initiatives. Examples include technology solutions for nature, real assets with regenerative or nature-promoting overlays (e.g., regenerative agriculture), nature markets and NbS.[xvi]
- **Transition opportunities:** Investments in companies/assets actively transitioning in line with the global nature positive goal, with the purpose of deploying capital to accelerate the transition. For example, investments in a forestry company actively transitioning to a sustainable and regenerative model.

To ensure a systematic and efficient approach to identifying and prioritising new nature-related investment opportunities, investors should start by defining clear criteria and goals aligned with their nature strategy. This may include leveraging frameworks and tools such as the Chatham House Investor Framework for Nature-based Solutions,[71] conducting geographic and sectoral analyses to identify high-potential areas, and engaging with stakeholders to gain insights and build partnerships.

As well as establishing a strategy for which new nature-related investment opportunities are identified and prioritised, it is important for investors to assess new nature-based investment decisions with the care and rigour that they would apply to typical investment products, opportunities and claims. See Appendix B for more information on nature positive products, opportunities and claims. This is particularly relevant when investigating claims about 'nature-related' or 'nature positive aligned' investments, as well as assessing 'pure play' assets.

These systems and processes should be integrated with the investor's decision-making and risk management frameworks, and subject to the investor's broader mandate and strategy, such that decisions about nature are not undertaken in isolation.

[xvi] NbS are actions to protect, sustainably manage, and restore natural and modified ecosystems.

Assessing nature-related risks and opportunities for new investments

Outlined below is the general assessment process for investors assessing all new nature-related investment opportunities. For pure play opportunities, there will likely also be particular considerations, which are further outlined below. We note for the sake of completeness that the approach adopted will ultimately need to be adapted to the type of investor and their objectives on a case-by-case basis.

The general assessment process

While relevant considerations will vary depending on the particular asset class and sector, broadly this general assessment process relevant for all new nature-related investment opportunities will follow a similar approach to that described above in Section 1, drawing on the framework of the TNFD:

1. **At the investment screening stage, ensure the specific nature thesis of the investment is understood and substantiated**: As with ESG-related investments more broadly, investors need to make sure that they have a clear and fluent understanding of the proposition made regarding the opportunity. If the proposed investment has a particular methodology of reducing nature impact compared to a benchmark, investors should of course seek to understand both the methodology, the position of the investment and the position of the benchmark. When the investment makes impact claims, these should be assessed using established frameworks (as outlined in Section 2.4). If the opportunity is a product, investors should seek evidence to understand the investment system and approach.
2. **Assess specific nature-related risks and opportunities:** In accordance with the approaches set out in Section 1. Investors can use tools like ENCORE to help identify the opportunity's impacts and dependencies on nature. Then, corresponding to the impacts and dependencies on nature, investors should identify and assess the nature-related risks, including geographic, physical and transition risks associated with the investment.
3. **In the decision/execution stage, consider opportunities to negotiate terms that achieve specific outcomes for nature:** Investors can proactively negotiate terms in transaction documents that facilitate specific, measurable outcomes for nature. This can include setting clear nature-focused targets, integrating nature-based solutions into project plans and stipulating regular nature impact assessments. By embedding requirements such as these into transaction structures, investors can drive nature-aligned outcomes and ensure accountability from project developers and companies regarding their claims about impact on nature.
4. **Where relevant, put in place monitoring, reporting and verification infrastructure**: Investors should also establish relevant infrastructure to evaluate the investment's performance. This is particularly important in the context of pure play asset classes such as NbS, where reporting metrics and data may require additional nature-related considerations (e.g., site-based biodiversity data and metrics – see below for further on this topic). Investors can consider embedding sustainability targets or conditions precedent into the commercial terms of natural capital investments, providing contractual mechanisms to target priority activities. This is the approach taken by the Clean Energy Finance Corporation (CEFC) in its active management of natural capital investments.[72]
5. **Engagement with IPLCs**: Much of the world's remaining biodiversity is stewarded by IPLC.[73] It is highly likely that there will be a strong interconnection between nature-related opportunities and IPLCs. Investors looking to invest in nature-related opportunities particularly in real assets should be aware of this and consider the role of engagement and capital to support the critical role of IPLC to realise positive nature outcomes. Co-design and partnership with IPLCs should be embedded in the design of new nature financing mechanisms and should be a key factor in assessing any new nature-related investment opportunities. During the due diligence process, investors should screen for the involvement of IPLCs, assess the engagement practices of companies or projects, including assessing key transaction documents and processes for adherence to the principle of FPIC – for instance, through profit participation agreements – and evaluate the impact on IPLCs. Once the investment is executed, investors should establish mechanisms to monitor and report on ongoing engagement with IPLCs and support continuous improvement in these practices.

CASE STUDY 6: DESJARDINS GLOBAL ASSET MANAGEMENT'S ESG EVALUATIONS

INVESTOR: Desjardins Global Asset Management (DGAM), headquartered in Montreal, Canda with approximately $77.1 billion AUM[74].

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: Desjardins has established a responsible investment strategy that prioritises four key ESG themes, including the conservation of biodiversity and natural capital, and has also developed an action plan for biodiversity-related ESG engagement and integration.

For infrastructure and real estate portfolios, DGAM incorporates biodiversity metrics into its due diligence and asset assessment processes. Metrics include waste, water, land use, and wildlife fatalities.

For public market investments, biodiversity considerations are integrated into ESG evaluations when relevant to the sector.

ESG measures across three focus areas (deforestation and land rehabilitation, water quality and quantity and regenerative agriculture and sustainable agroindustry) have been integrated into their internal assessment process and engagement strategy. This integration includes quantitative analysis using database metrics and qualitative reviews of sector companies, focusing on their impacts and risks related to nature.

SOURCE: Desjardins[75] and PRI[76]

Some nature-related opportunities may claim to have particular positive impacts on nature, including on biodiversity.

Investors will need to understand if the prospective opportunity has a reasonable basis for making the claim, if it is measurable, and whether the investee or target has undertaken the relevant analysis (or has the infrastructure in place) to measure, report on and verify this claim. What is sufficient will ultimately depend on the sector, asset class and availability of data to assess the claim. Investors may consider using the framework and tools set out above as an initial screening tool to test whether the investment's nature-related risks and opportunities (which, importantly, includes an assessment of the investment's *impacts* on nature) align with the investee's claims. Resources such as WBCSD's Nature-based Solutions Map can provide investors with an initial sense of the types of assets that may fall into the category of nature-based investment opportunities.[77]

The Impact Reporting and Investment Standards Plus (IRIS+) and the Five Dimensions of Impact[78] (managed by the Global Impact Investing Network (GIIN)) provides investors with a standardised, evidence-based approach to evaluating and verifying nature-related impact claims. The framework involves a comprehensive approach to considering impact across five questions:

- What outcomes is the enterprise contributing to and how important are these outcomes to stakeholders?
- Who experiences the effect and how underserved are they in relation to the outcome? In the context of nature-related investments, this might also be considered as what aspect of nature experiences the effect and how underserved is that aspect of nature?
- How much of the effect occurs in the time period of the investment?
- How does the effect compare and contribute to what would likely occur anyway?
- Which risk factors are significant and how likely is it that the outcome is different from the objective?

IRIS+ provides standardised metrics and data reporting conventions that ensure consistency, transparency, and comparability across investments, aligning with global standards and best practice. It enables investors to assess the scale, depth, and risk of impacts comprehensively and can support informed decision-making and accountability in assessing claims about nature-related impacts.

The term nature positive should be treated with particular care. Nature positive is a global societal goal defined as "halt and reverse nature loss by 2030 on a 2020 baseline, and achieve full recovery by 2050."[79] It means ensuring more nature in the world in 2030 than in 2020 and continued recovery after that.[80]

At this point in time, based on the global definition, companies/assets can only contribute to a global nature positive outcome, and cannot in itself *be* nature-positive. Best practice guidance suggests that companies and businesses can contribute to nature positive outcomes.[81] However, a variety of views exist as to whether it is feasible for an asset, company, fund or other entity to claim to be, in and of itself, nature positive. As a result, investors should carefully investigate claims from companies that describe themselves, or the investment opportunities they present, as nature positive.

CASE STUDY 7: CLIMATE ASSET MANAGEMENT'S NATURAL CAPITAL STRATEGY

INVESTOR: Climate Asset Management (CAM), a partnership between HSBC and Pollination Group based in the UK, with approximately US$1 billion in assets under management across natural capital and nature-based Carbon strategies.

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: CAM's Natural Capital Strategy focuses on sustainable forestry and regenerative agriculture, integrating revenue streams from carbon, water, and biodiversity. This strategy aims to optimise landscapes for food and fibre production while enhancing environmental outcomes and addressing the climate and biodiversity crises.

CAM's projects aim to protect natural habitats, restore degraded lands, and reduce biodiversity loss. Investments also focus on improving water management and providing fair and inclusive opportunities for local communities.

CAM employs a comprehensive ESG and Impact (ESGI) Management Framework which adopts a materiality lens to all investment opportunities, focussing on ESGI factors which have, or could reasonably have, the most impact on the project or business, with the remainder of the actions focussing on how to effectively manage these material impacts and opportunities.

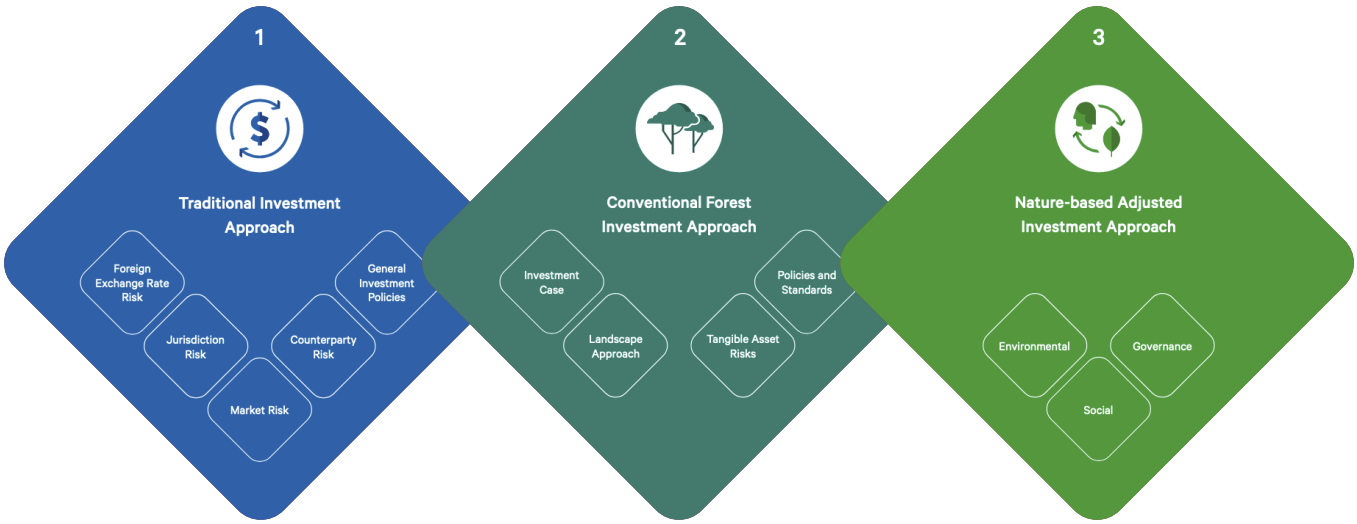
The ESGI Framework is used at each stage of the investment process.

1. At **screening**, CAM screens activities against its excluded activities list, identifies material risks and impacts and defines the initial impact potential of the asset.
2. This is followed by comprehensive ESGI **due diligence**, which includes climate risk assessment, impact potential defined with greater confidence, and development of an ESGI action plan for the investment.
3. In the investment **decision & execution** phase, CAM includes conditions precedent and/or subsequent in investment documentation to drive ESGI outcomes. KPIs are included to track progress against targets.
4. During the **asset management** phase, the investment is monitored, reported on and verified using the KPIs. CAM adopts an asset stewardship approach to support portfolio companies in achieving ESGI objectives.

CAM also collaborates with industry bodies like the Global Impact Investing Network (GIIN) and the Principles for Responsible Investment (PRI) to align with best practices. Its governance framework supports effective capital deployment, emphasising risk management and compliance.

SOURCE: Climate Asset Management[82]

FIGURE 9 **Chatham House Investor Framework for Nature-based Solutions**[87]



Particular considerations for pure play opportunities

Nature markets and NbS offer potential avenues for investment in 'pure play' opportunities and can increase an investor's exposure to investments that have measurable positive impacts on nature. NbS can be an attractive asset allocation that can deliver appropriate returns for the risk while also securing environmental benefits over time.

Investors may undertake additional assessments when assessing these types of investment opportunities.

Different sectors will have specific considerations and investors should review recent literature and guidance, particularly in respect of emerging and transitioning asset classes, such as sector-specific guides like the Financing for Regenerative Agriculture published by the Rockefeller Foundation[83]). Metrics can aid investors and asset managers in the credibility and comparability of sustainability outcomes. For NbS more generally, this might include (in addition to the above):

- **Understanding the natural capital value of the investment:** Measuring and valuing the natural capital of the investment by applying the Natural Capital Accounting Protocol, including quantifying the stock and flow of natural capital and estimating its value. This could also include, for example, the use of tools like IBAT and the Species Threat Abatement and Restoration (STAR) metric to measure both the potential impact of the investment on nature and the contribution that the investment can make to goals such as reducing species' extinction risk in a particular location.[84] The IRIS+ and the Five Dimensions of Impact[85] framework (noted above) can also be applied here to evaluate and verify nature-related impacts.

- **Understanding the particular risk and return drivers for NbS:** Frameworks such as the Chatham House Investor Framework for Nature-based Solutions provide a conceptual tool to help investors understand the particular drivers of risk and return for NbS.[86] This framework currently describes the investment attributes of private equity or debt investments in forest landscape NbS. It is therefore not intended as a substitute for due diligence processes, nor does it provide an exhaustive overview of the risks and returns for current or future nature-based activities. However, it can be used as a tool to help inform investors of the types of risk and returns in an analysis for investments in nature.

  The WBCSD's NbS Blueprint is also a helpful guide to understanding the risks and benefits of NbS more generally.[88] Though drafted for businesses looking to undertake NbS projects, it can provide investors with an understanding of the business case for NbS. The Nature-based Solutions map, which forms a part of this Blueprint is a helpful breakdown of potential NbS opportunities and the business challenges and opportunities they address.[89]

- Deep engagement with IPLC: Investors should carefully investigate how IPLC have been engaged and partnered with by the project. There is some broad guidance that investors might consider when setting their NbS investment strategy and/or objectives. For example, the World Economic Forum has released guidance on 'Embedding Indigenous Knowledge in the Conservation and Restoration of Landscapes', which recommends investors to embed three interrelated concepts into their investment approach: relational obligation, multigenerational responsibility and fractal scalability.[90] It also provides a framework to inform how investors should think about and what investors should do in landscape conservation and restoration.

Engagement with IPLC is not a 'one-size fits all' approach – IPLC have their own unique culture and values. Investors should seek to understand the particular geographic and cultural context of a project through engagement with key stakeholders and partners. Investors may consider seeking additional advice on particular projects to understand the relevant best practice principles and guidelines within the project's jurisdiction. NbS opportunities in different sectors may also have different considerations and/or best practice guidance,[xvii] that investors can look to further inform this assessment.

- **Nature markets:** Investments in nature markets and, in particular, unit-based nature markets[xviii], are an emerging investment class. Nature markets are systems composed of transactions between separate buyers and sellers, in which the transacted goods or services specifically reflect a stock of ecosystem assets or a flow of ecosystem services from terrestrial or aquatic ecosystems.[91] Unit-based nature markets are underpinned by the sale and purchase of tradeable units based on scientifically derived and measurable metrics for different aspects of nature (e.g. biodiversity) or inputs or outputs that impact on nature, including GHG emissions, freshwater use and pollutants (e.g. chemicals, sediments and plastics).[92] This includes NbS for carbon sequestration (also referred to as 'natural climate solutions'), as well as biodiversity credit markets (in which biodiversity credits, generated from activities/outcomes that have a positive impact on species or ecosystems, are traded). Investors can enter these markets in a number of ways, for example by investing in nature market-focussed investment funds, equity investments in project developers, providing project finance or acquiring real assets to be used/developed in the project.[93] Australia's *Nature Repair Act 2023* established the world's first legislated, national, voluntary biodiversity credit market.[94] Other countries are expected to follow, potentially creating a more robust and expansive global market for biodiversity credits.

Nature markets present risks for investors due to their regulatory uncertainty and the complexity of accurately assessing and verifying environmental impacts. Given the significant level of scrutiny on these markets,[95] investments in this emerging asset category should be approached with sufficient understanding and care. It is important to emphasise that biodiversity credits cannot replace the action that is needed by all stakeholders to reduce harm to nature and ensure the sustainable use of biodiversity. The priority is for companies to address biodiversity impacts in their business models and supply chains. The Natural Climate Solutions Alliance provides a step-by-step guide for investing in natural climate solutions for the voluntary carbon market. Key steps in an investor's approach could include:[96]

1. **Understanding and identifying the business case:** Identify the rationale for investing in these markets, aligning with the broader investment strategy.
2. **Planning for investment:** Determine the types and maturity stages of investments, and select financing structures that match objectives and risk appetite. Engage with relevant stakeholders, particularly IPLC, ensuring their rights and knowledge are protected, and FPIC is obtained. Refer to industry standards such as the Australian Carbon Industry Code of Conduct[97], the Australian Indigenous Carbon Industry Network's best-practice guide[98], Te Arawhiti Guidelines for Engagement with Māori[99], and A Guide to Just Transitions for Communities in Aotearoa New Zealand[100].

[xvii] For example, in the Australian carbon market investors might have regard to industry codes such as the Australian Carbon Market Institute's Australian Carbon Industry Code of Conduct which contains specific advice on establishing project ownership and engaging with interest holders. The Australian Indigenous Carbon Industry Network has published a best-practice guide for carbon-project developers, Seeking FPIC from Indigenous communities for carbon projects, which may also usefully inform the approach countries take to standard setting for mitigation activities occurring in its jurisdiction.

[xviii] For example, the work by the International Advisory Panel on Biodiversity Credits (IAPB) (iapbiocredits.org)

3. **Undertaking appropriate due diligence:** Assess the risks and merits of specific opportunities, considering commercial, reputational, regulatory, and operational risks. Utilise industry standards like the Integrity Council for the Voluntary Carbon Market's Core Carbon Principles.[101]
4. **Determining fair and equitable partnership arrangements**: Co-design projects with IPLC to ensure genuine partnerships and equitable sharing of both monetary and non-monetary benefits.
5. **Monitoring and reporting:** Implement robust systems for monitoring, reporting, and verifying project outcomes, aligned with industry standards and methodologies. Develop internal guidelines to assess these systems and manage potential risks.

Specific considerations for transition opportunities

Nature transition opportunities involve investments in companies or assets actively moving towards nature positive goals. These investments are a critical component of efforts to redirect capital flows to support an accelerated transition to a nature positive economy.

In addition to the due diligence considerations set out above in relation to nature-aligned and pure play nature investment, some specific considerations for the investment lifecycle for transition opportunities include:

- **Evaluating transition plans:** Assess the robustness of the company's transition to a nature-aligned business model. This includes understanding the company's targets, the specific steps the company will take, the timeline for actions and the expected outcomes. Investors should look for a clear, credible plan that outlines how the company intends to reduce its most material impacts and dependencies on nature, evidence that it is supporting the plan with adequate investment, and an intention to operationalise the plan through the necessary governance mechanisms embedded throughout the organisation.[102]
- **Stakeholder engagement:** Evaluate for demonstrable engagement across the company's value chain, from suppliers to customers, and with stakeholders including employees and IPLCs to support the achievement of the transition plan in accordance with just transition principles.[103]
- **Measuring progress:** Implement systems to track the company's progress towards its transition goals. This can involve setting interim milestones and KPIs to monitor investee company progress with the assistance of global frameworks, such as the TNFD and SBTN, which help companies and investors assess, interpret and prioritise, measure track and disclose impacts and dependencies on nature.[104] Regular reporting and verification of these metrics are important to ensure the company remains on track and that any deviations are brought to the attention of the investor so that they can be addressed.
- **Transparent disclosure in accordance with best practice frameworks and guidelines**: Ensure that the investee company provides transparent and comprehensive disclosure of their impacts and dependencies on nature and their progress towards their transition plan. This should be in accordance with best practice disclosure frameworks such as the TNFD, SBTN and GRI.[105] Transparent disclosure enhances accountability, allows for better risk assessment, and helps build trust in relation to investments.

Need help finding or developing new nature investment opportunities? Using the search function of the 'Relevant Toolkit Section' column in Appendix A, search by 'New' in the filter to identify relevant guides, frameworks, case studies, and reports

CASE STUDY 8: KAINGAROA TIMBERLANDS, NEW ZEALAND

INVESTOR: The New Zealand Superannuation Fund (NZ Super Fund) is a Sovereign Wealth Fund created in 2001 with a long-term investment horizon and total net asset value of NZ$75 billion (as of June 2024).

NZ Super Fund's ~42% ownership of Kaingaroa Timberlands (KT) - in partnership with Public Sector Pension Investments (Canada) and local communities - represents ~NZ$2.5 billion or 3.3% net asset value (NAV) of the total Fund portfolio (as of June 2024).

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: Originally planted in the early 1900s, KT now comprises ~189,000 ha forest plantation estate in the central North Island of New Zealand, with the underlying land on long-term lease from local indigenous (Māori) landowners. The timber operation produces around 4.5m tonnes of mostly Radiata Pine logs.

As with any intensive timber plantation, KT operations involve a range of nature-related risks, dependencies and opportunities linked to biodiversity, water quality, pests/disease, soil management and greenhouse gas emissions. The NZ Super Fund and KT have long recognised the importance of these aspects to the long-term value of the asset, with potential exposure to commercial risks linked to: tree crop growing conditions and yield; resilience to chronic and acute physical climate-related events and changes; regulatory changes; and social license to operate.

As partners and kaitiaki (stewards), the NZ Super Fund and KT are accustomed to: the traditional culture, values and aspirations of the local Māori communities, for their underlying land, given their intrinsic connections with the natural environment.

Furthermore, the asset owners recognise the financial risks to the operation itself from potential increased operating overheads (regulations), yield reductions (e.g. increased pests, disease and drought), as well as reduced supply of product to the market (export and local), therefore decreased return on investment. KT has generally assessed and managed these operational and nature-related risks on an ongoing basis.

The management of the Kaingaroa Forest meets the criteria for Forest Stewardship Council (FSC) certification, reflecting global good practice, principles and standards covering ecological, social, economic and cultural considerations. Since 2003, the asset has aimed to meet and exceed international sustainable forest management standards set by the FSC and, more recently, the Programme for the Endorsement of Forest Certification.

Building upon the baseline FSC requirements and commitment to good practice, KT refreshed their Sustainability Policy Principles in Jan 2022, including an intention to *'Actively restore and enhance the natural resources and environmental services under our care.'*

The KT team collaborated with NZ Super Fund staff in the formulation of a series of Restorative Development Goals (RDG) 2050 that aim to restore and enhance the environment and society through targeted initiatives covering: climate, biodiversity, communities, tikanga (cultural values), clean water, sustainable lands and sound governance. The RDG initiative includes a roadmap for implementation and monitoring to track progress and report to the Board of Directors.

Nature-related initiatives have resulted in over NZ$1 million in investment into research and field trials including soil quality, biochar applications, increased stream buffer zones, and alternatives to traditional fertilizer and pest/disease management practices. Land area designated primarily for conservation and/or cultural heritage has been expanded to include a wetlands restoration plan.

KT is not currently considered an impact investment by NZ Super Fund, but the owners and operators continue to collaborate, advocate and invest in raising standards and best practices related to nature-related risks, dependencies and opportunities.

The NZ Super Fund team is working with KT's operating entity, partners and Māori communities on the feasibility of integrating key RDGs linked to climate and nature positive operations into core asset management strategy and plans.

SOURCE: Terina Williams and Greg Munford, NZ Super Fund, 2024

2.4 Key challenges in assessing new nature-related investment opportunities

Investors are likely to face unique challenges related to investing in new nature-related opportunities, especially pure play opportunities. These include:

- **Scarcity of investment opportunities that meet capital allocation requirements (minimum scale, ticket size and return thresholds):** This may be mitigated through changing policy, government incentives, regulatory reform to change minimum return requirements, remove barriers to investing in or lending to sub-investment grade companies, incentivise investment in specific areas, and reduce uncertainties and risks associated with nature-related investments.[106]
- **Physical risk exposure**: Investments in nature-related assets, such as forests and plantations, may yield higher risk assessments due to their dependency on natural capital and exposure to physical risks. These risks should be weighed against the positive impacts of the investment and the implementation of risk mitigation strategies, such as fire prevention and pest management strategies.
- **Impact trade-offs**: In some investments there may be a trade-off between achieving high environmental impact and generating revenue. Investors can balance impact goals with financial returns in their nature strategy, factoring in how sustainable practices can drive long-term value for constituents.
- **Challenges with nature markets:** Nature markets present risks for investors due to their regulatory uncertainty and the complexity of accurately assessing and verifying environmental impacts. Unlike greenhouse gas emissions, biodiversity and nature is highly localised, making it difficult to quantify and compare impacts across different locations.

As noted in the introduction of this section, establishing a clear strategy for the investor's approach to nature should provide guidance and reference points to navigate these challenges. Without a clear strategy (even if the strategy is narrow) navigating the above challenges can become a drawn-out experience.[xix]

[xix] See Nature Positive Strategy: Practical Guidance for Corporates" (https://pollinationgroup.com/global-perspectives/nature-positive-strategy-practical-guidance-for-corporates/) for more information and guidance in developing an effective nature positive strategy

CASE STUDY 9: NZ SUPER FUND INVESTMENT WITH ARA PARTNERS

INVESTOR: In 2023, NZ Super Fund committed US$125 million to Ara Partners Fund III, an US-based US$2.3 billion private equity vehicle targeting industrial decarbonisation and circular economy investments.[107] Ara seeks growth equity investments in companies committed to greening large-scale industrial and manufacturing; chemicals and materials; energy efficiency and green fuels; and food and agriculture sectors.

NATURE PORTFOLIO RISK/OPPORTUNITY ASSESSMENT APPROACH: Through lifecycle analysis, Ara identified a range of adverse sustainability-related risks and inefficiencies inherent in many of the processes and resource streams associated with the US industrial and agricultural sectors. In addition to high greenhouse gas emission intensity, Ara singled out solid waste, air / water pollution, and land conversion as major drivers of nature-related impacts from the business-as-usual approach in these key sectors.

With the primary objective of Fund III to unlock the huge potential for decarbonisation of industrial processes, Ara's strategy also recognises the wider enduring opportunities in the transition of processes and supply chains towards more efficient and sustainable industrial solutions. At the same time, Ara assessed significant commercial tail winds from public subsidies, regulatory reforms and shifting social license to operate.

OUTPUTS: Ara invests in a portfolio of growth stage businesses making demonstrable contributions to a circular economy by deploying new or emerging processes and/or technologies which support nature-neutral or positive outcomes. These include circularity initiatives to reduce, replace, re-use or recycle non-biodegradable waste materials and/or chemicals.

For example, Ara company 'Genera' is scaling up the use of agricultural residues to produce biodegradable and compostable molded-fiber pulp, products and packaging. Genera is a fully-integrated supplier; growing and harvesting its own feedstock in partnership with local farmers and producing on-site in Tennessee.[108]

Genera's process uses perennial grasses as its feedstock (including miscanthus and switchgrass), that grow on less productive land, sequester carbon in the soil and (temporarily) in the products themselves, and are fully compostable.

Genera's business model directly replaces carbon-intensive and wasteful fossil plastic packaging systems, whilst reducing land conversion, water use and pollution by promoting more sustainable agricultural and industrial production practices.

SOURCE: NZ Super Fund, 2024

SECTION 3 – ENGAGEMENT, POLICY, ADVOCACY AND COMMUNICATION

This section covers:

- engaging with corporates–for setting investor expectations and metrics, collaborative engagement and leveraging existing engagement themes;
- reflecting nature-related expectations in proxy voting and through shareholder resolutions;
- assessing the policy landscape and contributing to policy advocacy initiatives; and
- internal and external reporting on nature-related exposures, metrics and progress.

3.1 Engagement

Stewardship is a critical component of responsible investment, as well as a requirement of many stewardship codes around the world. Investors can contribute to driving progress towards the goal of halting and reversing nature loss through ongoing, meaningful engagement with investee companies on material nature-related issues. Given the complexity of nature impacts and dependencies and the ongoing need to improve company disclosure, engagement on nature-related topics is particularly important. How each investor chooses to structure its nature engagement programme will vary. Nature as a theme can be integrated into existing engagement and stewardship structures and explicitly built out from there or become a new engagement programme in itself. A nature engagement programme can have multiple focus areas and combination of engagement approaches, depending on resourcing, asset classes and style/type of portfolio.

Recent investor industry members surveys have shown the increasing focus on nature-related concepts and the need to build it into ongoing engagement. RIAA's NZ Benchmark report found "Biodiversity/nature conservation" as the third-most popular issue that investors engage with companies on.[109] Natural capital was also popular, further down the list 9th, after rights of indigenous peoples and diversity, equity and inclusion.[110] RIAA's Australian Benchmark report found "Biodiversity/nature conservation" as the fifth most popular issue that investors engage with companies on (Climate change 93%; Human rights (including modern slavery) 84%; Diversity/inclusion 76%; Labour rights 68%; Biodiversity/nature conservation 54%).[111]

Identifying focus areas for engagement across portfolio

Engagement focus for investors will be determined by identifying nature-related priority areas and target companies. Many investors are already engaging on specific nature-related topics (e.g., water, waste, chemicals and effluent, deforestation) which is likely to inform the prioritisation process. Central to this will be to consider the rationale for nature-related engagements to be pursued by the investor in line with overall goals. This links back to previous sections on identifying nature-related risks and opportunities. Identifying focus areas for engagement could include considerations such as:

- nature topic/thematic most financially material to portfolio or stock: e.g., deforestation, water use;
- sectors with high impact/dependency on nature (either directly or indirectly via value chains); and
- geographic areas (e.g., developing vs developed markets, local/country/regional) or specific biomes (e.g., tropical and sub-tropical forests).

Bringing the above together with considerations such as largest investment exposure will help investors to create a matrix to identify target companies.

Investors can use existing ESG data and portfolio assessment, screening or flagging tools, including dedicated biodiversity impact tools as discussed in Section 1 and 2 to assess the portfolio and identify a) drivers to biodiversity loss; b) eco-system dependencies; and c) countries/regions at risk, using heatmaps overlaid with sector impact while taking into account company direct vs indirect impacts and dependencies. Many investors are already engaging on specific nature-related topics and should leverage these as part of a broader nature engagement initiatives– e.g., water, marine life, climate more broadly, waste, chemicals and effluent, air pollution, land development/conservation, deforestation, circular economy etc. Investors should also be mindful of previously mentioned intersectional links with human rights and IPLC, but also integrating nature to non-nature specific initiatives.

Need more guidance on engagement? Filter by 'Corporate Engagement, Policy, Advocacy' in the 'Relevant Toolkit Section' of any tab of Appendix A to identify relevant resources.

Alternatively, toggle to the 'Guides & Frameworks' tab and filter by the search term 'Engage' in the 'Relevant Capabilities' column

Setting investor expectations and metrics

Through engagement, investors will be working with investee companies to track nature-related performance and associated target-setting. Target-setting and metric tracking is up to the individual investor, but common frameworks can be helpful in setting these. Metrics can be derived from a variety of sources – via a third-party data provider, a collaborative engagement and its benchmarks or other public benchmarks again as listed in Sections 1 and 2 (for example Science Based Targets Network; NA 100; World Benchmarking Alliance Nature Benchmark[xx]). Investors must also decide how often to measure and track the metrics, and if they disclose those measurements externally as well as internally.

Given that nature-based risks and impact are so localised, for investors starting out with engagements on nature, useful questions can start around a company's general strategy, supply chain intelligence and data, disclosures and governance, as well as initiating discussions on double materiality (nature-related risks and impacts) before going into the specifics for each industry or location.

Regarding nature-related targets that companies should set, dialogues may focus on risk-differentiated targets and common frameworks such as the ones released by the Science-based Targets Network and Global Commons Alliance. These include technical guidance on target-setting with comprehensive land and water target-setting guidance available and biodiversity and oceans targets under development[112].

Some types of targets could include for example:

- site level targets/goals (e.g., targets for water stressed locations separate to a group-wide target; and for mining companies targets and objectives related to specific sites, either at the general ecosystem level or species-specific, e.g., net positive impact on biodiversity, non-disruption to migration patterns, protection (non-interference of designated high-value locations), control of weeds or other pests, reforestation targets, or targets around rehabilitation);
- commodity targets (e.g., zero deforestation targets; High Carbon Stock Approach assessments; Roundtable on Sustainable Palm Oil (RSPO) certification; Forest Stewardship Council (FSC) certification); and
- packaging/Materials targets (e.g., targets around a packaging-to-product ratio).

Appendix A of the toolkit has collated additional resources that help investors with general engagement questions.

Collaborative engagements

Collaborative engagement can be pursued in addition to, or in favour of, direct engagement. A number of voluntary nature-related collaborative engagements are already in progress. While not exhaustive, toggle to the 'Nature Finance Initiatives' tab of Appendix A and filter by 'Corporate Engagement, Policy, Advocacy' under the 'Relevant Toolkit Section' column for examples that investors may wish to investigate for suitability, access and whether they are open to new participants.

[xx] Nature can also be integrated into other non-nature specific initiatives e.g., Home - EDCI (esgdc.org)

CASE STUDY 10: ACSI'S APPROACH TO ENGAGING WITH COMPANIES ON NATURE AND BIODIVERSITY

INVESTOR GROUP: The Australian Council of Superannuation Investors (ACSI), which represents Australian and international asset owners and institutional investors with more than $1 trillion in funds under management.

NATURE-BASED ENGAGEMENT APPROACH: ACSI has an active nature engagement programme, prioritising companies from sectors with material impacts or dependencies on nature, and therefore have associated nature-related financial risks or opportunities.

ACSI's engagement objectives for each company typically encompass increased recognition, disclosure and demonstration of nature-related risk assessments. Ideally, ACSI seeks alignment to the TNFD LEAP framework and pathways for managing identified risks.

Engagement objectives are set for each company and have included:

- disclosure against the TNFD framework (noting that this may be only parts of the TNFD framework, particularly in the early stages) and, at minimum, disclosure of a LEAP assessment, with a timeline for full implementation and disclosure of the TNFD analysis;
- demonstrated actions by the company to manage nature-related risks through corporate strategy and governance;
- commitment to set science-based targets for nature with a timeline for interim and long-term targets;
- demonstration of how the company is aligning to the targets set out in the GBF; and
- establishment of a commitment, timeline and action plan for eliminating deforestation from the operations and supply chain.

OUTPUT: ASX-listed companies are still in the early stages of managing and reporting on nature risk. ACSI's engagements have shown that:

- awareness of nature as an issue has increased;
- companies are undertaking deeper analysis of nature-related risk across their operations and supply chains; and
- some companies are setting targets and establishing nature position statements or strategies.

SOURCE: ACSI, 2024

Collaborative engagements on nature have been predominantly focused on large publicly listed equity engagements and priority international companies. Moreover, many appear to be centred around the topic of deforestation or targeting agriculture and food sectors. Investors could consider how collaborative engagements can extend over a broader range of asset classes.

Nature Action 100 (NA100) is an example of a flagship investor-led collaborative engagement initiative on nature. Established in 2022 with engagement kicking off in September 2023, NA100 aims to support greater corporate ambition and action on nature, through engaging with 100 companies across eight priority sectors[xxi] that will be systematically important in reaching the goal of reversing nature and biodiversity loss by 2030. NA100 sets out six key investor expectations covering Ambition, Assessment, Targets, Implementation, Governance, and Engagement.[113] These expectations are used to guide investor engagement activities, as well as underpin the metrics for the NA100 company benchmark which assesses and tracks the progress of target companies' nature-related ambitions and actions. As at January 2024, more than 200 investors ($28 trillion in assets under management or advice[114]) were involved in the initiative, with company engagements happening at the individual investor level and via engagement groups.

3.2 Proxy voting

Proxy voting is a crucial way for investors to signal their views to company leadership.

From 2023 to the middle of 2024, around 20 shareholder proposals with nature relevant topics that went to vote at AGMs globally (excluding climate focused proposals, with the majority of proposals from the US).[xxii] This represents an increase from nature-related shareholder proposals in previous years. Support for proposals varied between 2.3% to 28.7%. In addition, there were more than 25 shareholder proposals related to nature that were withdrawn in the same timeframe.[115] Investors can also use their voting power to vote against relevant directors that are not properly addressing nature-related risks and opportunities.

> "Indigenous knowledge is crucial to Australia's ongoing care for our natural environment, and must be included in the policy dialogue."
>
> *Graeme Samuel AC*

CASE STUDY 11: EXAMPLE OF NATURE-RELATED INVESTOR EXPECTATIONS

(NA100) Investor Expectations for Companies outline six actions that investors will call on companies to take related to the areas of: Ambition, Assessment, Targets, Implementation, Governance, Engagement. These could be applied to various nature impacts.

- Ambition: Publicly commit to minimise contributions to key drivers of nature loss and to conserve and restore ecosystems at the operational level and throughout the value chain by 2030.
- Assessment: Assess and publicly disclose nature-related dependencies, impacts, risks, and opportunities at the operational level and throughout the value chain.
- Targets: Set time-bound, context-specific, science-based targets informed by risk assessments on nature-related dependencies, impacts, risks, and opportunities. Disclose annual progress against targets.
- Implementation: Develop a company-wide plan on how to achieve targets. The design and implementation of the plan should prioritise rights-based approaches and be developed in collaboration with Indigenous Peoples and local communities when they are affected. Disclose annual progress against the plan.
- Governance: Establish Board oversight and disclose management's role in assessing and managing nature-related dependencies, impacts, risks, and opportunities.
- Engagement: Engage with external parties including actors throughout the value chain, trade associations, policy makers, and other stakeholders to create an enabling environment for implementing the plan and achieving targets.

SOURCE: Nature Action 100, 2024

3.3 Policy advocacy

Engagement with policymakers can support nature stewardship goals, improve understanding of nature-related risks and opportunities, ensure the right policy frameworks are in place to accelerate nature finance and address natural commons issues that otherwise may negatively impact long term financial returns. Policy reform at the systems level is crucial as no one company can manage it alone.

In the context of nature, policy advocacy relevant to investors include engagement with policy initiatives that ensure governments have systems in place that halt the destruction of nature and prevent the loss of ecosystem services. In addition, policies that enable the uptake of activities that support the restoration of nature will provide investors with the certainty to seize opportunities presented to them.

Investors may see advocating for such legislation and regulation as a pathway for nature-related impacts and dependencies to be brought to light. This will support companies and investors to better assess financial consequences and channel efforts towards halting nature loss. In addition to policies on effective

[xxi] The initial eight sectors included in the initiative are: biotechnology and pharmaceuticals; chemicals, such as agricultural chemicals; household and personal goods; consumer goods retail, including e-commerce and specialty retailers and distributors; food, ranging from meat and dairy producers to processed foods; food and beverage retail; forestry and packaging, including forest management and pulp and paper products; and metals and mining.

[xxii] For further information on the 2024 vote season you can refer to Opinion: Biodiversity is now on the ballot, are you ready? - Finance for Biodiversity Foundation

TABLE 1 Examples of shareholder resolutions on nature-related issues

Topic	Company examples	Proposal	Proponent	Votes in support
Biodiversity	PepsiCo, Inc.	Report on Risks Related to Biodiversity and Nature Loss	Primary: Green Century Equity Fund Co-Filer: Green Century Capital Management	18.4%
	The Home Depot, Inc.	Disclose a Biodiversity Impact and Dependency Assessment	Domini Impact Equity Fund | Domini Social Investments	16.1%
Deforestation	Pilgrims Pride Corporation	Report on Efforts to Eliminate Deforestation in Supply Chain	Primary: As You Sow Foundation | Mercy Investment Services Co-Filer: Adrian Dominican Sisters	4.7%
	Tyson Foods, Inc.	Accelerate Efforts to Eliminate Deforestation from Company's Supply Chains	Green Century Capital Management	3.3%
Supply chain water risk	Restaurant Brands International Inc.	Report on Supply Chain Water Risk Exposure	The Province of St. Joseph of the Capuchin Order | Seventh Generation Interfaith Coalition for Responsible Investment	28.7%
	Kraft Heinz Company	Report on Supply Chain Water Risk Exposure	Mercy Investment Services	7.8%
Sourcing minerals from deep sea mining	Tesla, Inc.	Commit to a Moratorium on Sourcing Minerals from Deep Sea Mining	As You Sow Foundation	7.5%
	General Motors Company	Report on the Company's Use of Deep-Sea Mined Minerals in its Production and Supply Chains	As You Sow Foundation | The Woodcock Foundation	12.5%

SOURCE: ISS STOXX Voting Analytics

protection of biodiversity and ecosystems, this includes policies that relate to functioning nature markets, improvements to national environmental data and information, and nature-related disclosures to better assess nature-related impacts, dependencies, risks and opportunities, to inform better investment decisions.

To this end, investors should ask what policies will allow them to have clarity about nature-related risks and opportunities, and engage in the policy process to ensure roadblocks are removed and efforts can be accelerated. Investors can also support their local sustainable finance industry group to conduct policy advocacy on behalf of responsible investors. Some examples of relevant regulatory initiatives across different government levels are outlined in the table 2.

Investors typically respond to calls for consultations on government policy reviews and may offer support for national or global statements calling for action. Similar activities extend to nature-based topics. Investors can also play a role in ensuring broader systemic issues are taken to account in policy initiatives, such as ensuring the importance of empowering IPLC.

Need more guidance on policy advocacy? Toggle to the 'Guides & Frameworks' tab of Appendix A and search by 'Policy' under the 'Relevant Capabilities' column filter

Government Level	Explanation	Examples
Global	There are a number of global international laws and conventions that aim to deal with the governance of nature and natural systems, and the effectiveness of these are important in setting globally agreed minimum standards to realize opportunities and reduce risks. Influence on global conventions may be through national governments who lead many of these international efforts, or through specific finance sector initiatives that are attached to organisations overseeing these conventions (e.g., COP Finance and Biodiversity Day; Sustainable Development Goals etc.)	The UN Convention on Biological Diversity (CBD) COP and associated forums that provide opportunities for engagement/ influence that relate to the Kunming-Montreal Global Biodiversity Framework. Montreal Protocol on Substances that Deplete the Ozone Layer. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
Regional	Many nature frameworks that require corporate reporting or greater investor disclosures are developed at the regional level including strong progress and momentum in Europe. Regulatory initiatives that manage natural commons, for example water bodies (rivers and lakes), or vegetation management, ensuring the functioning and successful enforcement of these may reduce operational risks to companies and financial risks to investors.	EU Taxonomy and SFDR regulation disclosures on economic activities that are environmentally sustainable by contributing to the protection and restoration of biodiversity and ecosystems, and reporting on activities that affect biodiversity sensitive areas. And related corporate disclosure requirements as set out in the EU CSRD (Corporate Sustainability Reporting Directive) regulations. Europe: Danube River Protection Convention
National/Federal	Biodiversity and conservation regulation to ensure further destruction of nature is halted often acts at the national level; including country-specific targets, goals and commitments under the Kunming-Montreal Global Biodiversity Framework; and policy initiatives that support the recovery of nature and ensuring the efficient and effective functioning of these, for example establishment and oversight of nature repair markets.	French Article 29 on Energy and Climate requirements to report on biodiversity-related risks. Australia: 2022 Nature Positive Plan Aotearoa New Zealand: Resource Management Act (RMA) 1991; National Environment Standard (NES) for Freshwater and the NPS for Freshwater Management Australia: Murray-Darling; Aotearoa New Zealand: Te Ture Whaimana o Te Awa o Waikato – Vision and Strategy for the Waikato River
Local	Local-level policy can include state, district, council, or city level – enforcement and implementation of regulation/ initiatives will be driven locally - this level of policy engagement will be most relevant for high impact projects and activities in specific locations. For example, planning rules and remediation requirements; deforestation tends to be a state or even local council level issue (see Australian Ethical case study)	Aotearoa New Zealand treaty settlements have distinct objectives that recognise the mātauranga (knowledge) of iwi, and inclusion of its use in legislation. All treaty settlements have provisions that enable iwi to integrate their knowledge within nature-related policy. For example, there are over 48 Iwi Environmental Management Plans, which are an expression of mātauranga that they expect to be incorporated in to regional and local council policy. Queensland, Australia: The Vegetation Management Act.

CASE STUDY 12: RIAA POLICY ADVOCACY WORK RELATED TO THE AUSTRALIAN GOVERNMENT CONSULTATION ON ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT

Australian Government consultation on Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) reform

One of the most significant policy developments in Australia is the reform to the EPBC Act following a period statutory review (the Samuel Review). The Department of Climate Change, Energy, the Environment and Water (DCCEEW) have been undertaking a rolling consultation on aspects of the Government's response to the Samuel Review, including the Nature Positive Plan.

One of RIAA's policy priorities for Aotearoa New Zealand and Australia is to protect nature and our natural capital, recognising the important role of government in enabling investors to protect Australia's unique biodiversity, noting that 30% of Australia's GDP is dependent on nature and ecosystem services. In support of this priority, RIAA engages with relevant policymakers and stakeholders on new policy and updated policy.

To support RIAA's mission (to align capital with a healthy and sustainable environment, society and economy) and policy priorities, RIAA determined to make a submission to the Nature Positive Plan. RIAA closely engaged investor members of its Nature Working Group (NWG) to develop the submission and bring an investor view to the consultations and ensure the final Plan supported appropriate private sector investment in nature. Unlike most consultations, the Nature Positive Plan consultation paper did not ask specific questions. As such, RIAA asked the NWG questions related to their experience with the current EPBC Act process and views on the proposed objectives, from an investor perspective. In addition, the NWG External Reference Group (ERG), made up of Environmental NGOs, scientists and other stakeholders, shared their experience of engaging with investors on nature-related issues, provided views on existing policies and the proposed changes, and provided feedback on RIAA's submission itself.

Through this, the RIAA submission encapsulated direct experience from investors, project proponents, scientists and interested groups. The submission was able to address the impact of the Federal Budget and new bills to parliament through the input of the NWG and its ERG.

SOURCE: RIAA, 2024

CASE STUDY 13: AUSTRALIAN ETHICAL ENGAGEMENT WITH LENDLEASE ON NATIVE WILDLIFE PROTECTION

INVESTOR: Australian Ethical, an ethical superannuation fund and investment manager with AU$10.4 billion at 30 June 2024.

NATURE-BASED ENGAGEMENT APPROACH: In 2023, Australian Ethical divested its shares in Lendlease, a multinational construction and real estate company headquartered in Australia, due to concerns that its Mt Gilead housing development in NSW threatened the survival of one of the last remaining healthy koala colonies in NSW.

Over the course of four years, Australian Ethical used their shareholdings in Lendlease to advocate for the protection of the Mt Gilead koala colony in NSW. This included consultation with independent experts, including environmental and animal protection groups, site visits and multiple meetings with the Lendlease project team, CEO and heads of sustainability to understand what protections Lendlease was putting in place for koalas. Australian Ethical reported that Lendlease made some positive progress during this time, including commitments to increase total koala habitat, provide underpasses, and widen corridors.

In December 2022, Australian Ethical released a public statement calling on the NSW Government and Lendlease to be transparent about their calculations of the width of the koala corridors, to give Australian Ethical and others the ability to take part in a genuine consultation. Australian Ethical ultimately decided to divest its shares in Lendlease in 2023, with the view that Lendlease failed to produce critical information needed to independently assess the impact of its Mt Gilead housing development on koalas.

OUTPUT: After divesting, Australian Ethical continued to advocate for the Mt Gilead koala colony, calling on the NSW Minister for Environment and Heritage to intervene and encouraging the public to express their concerns to the Minister around the impact of the Lendlease Mt Gilead development on koalas.

SOURCE: Australian Ethical, 2024

3.4 Communication of nature-related investment activities

Building the internal business case

To be able to garner the resources, capacity, and skills to address nature related impacts, investors will need to work internally to build a strong internal business case for nature. The business case will be the foundation for any activity, asset allocation, portfolio decisions, engagement and advocacy. It should:

- demonstrate relevance to an organisation's investment programme
  - Provide an overview of current nature impacts and dependencies
  - Outline nature-related information that is available and what additional data needs to be gathered or built out
  - Outline where nature topics intersect with existing investment priorities and principles
- highlight relevant international and domestic policy developments;
- describe the development of internationally recognised reporting framework (The TNFD);
- highlight high level of investor uptake of initiatives such as the NA 100; and
- outline key steps forward with metrics to track progress.

While data sets and in-house capacity evolves, it is already possible to present information to a board or investment committee using existing data and metrics to outline exposures/risks, specific themes and focus sectors. Sectoral and country/regional assessments can present a high-level view while allowing investment teams to identify data gaps in high-priority areas.

Need guidance on building the business case for nature? Toggle to the 'Reports' tab of Appendix A and filter by "The 'Case' for Nature" under the 'Relevant Toolkit Section' column

External reporting by investors

Reporting and disclosure on nature-related topics will likely be required soon so investors should prepare. The TNFD is the key reporting framework for nature-related disclosures. There are multiple guidance papers that target disclosing organisations in general, but also those that provide guidance to financial sector companies. In addition, the TNFD has developed a tools database that can also be helpful to get access to assessment and reporting tools.

For relevant TNFD publications, toggle to the 'Full Resource List' tab in Appendix A and filter by 'TNFD' in the 'Commissioned By/Author' column.

It is important to evaluate statements such as "nature positive" and assess nature-related claims for greenwashing when reporting on investment and stewardship activities.

Looking for more guidance on Engagement, Policy & Advocacy? Filter by 'Corporate Engagement, Policy, Advocacy' in the 'Relevant Toolkit Section' column of any tab in Appendix A

APPENDICES

Appendix A: Resource List

This Appendix has been developed in concert with the RIAA Nature Investor Toolkit. It aims to provide investors with a comprehensive catalogue of tools, databases, guides, and resources designed to facilitate the identification, assessment, management, and monitoring of nature-related impacts, dependencies, risks, and opportunities.

To access the appendix, download it here.

In this Appendix, users will find the following types of resources:

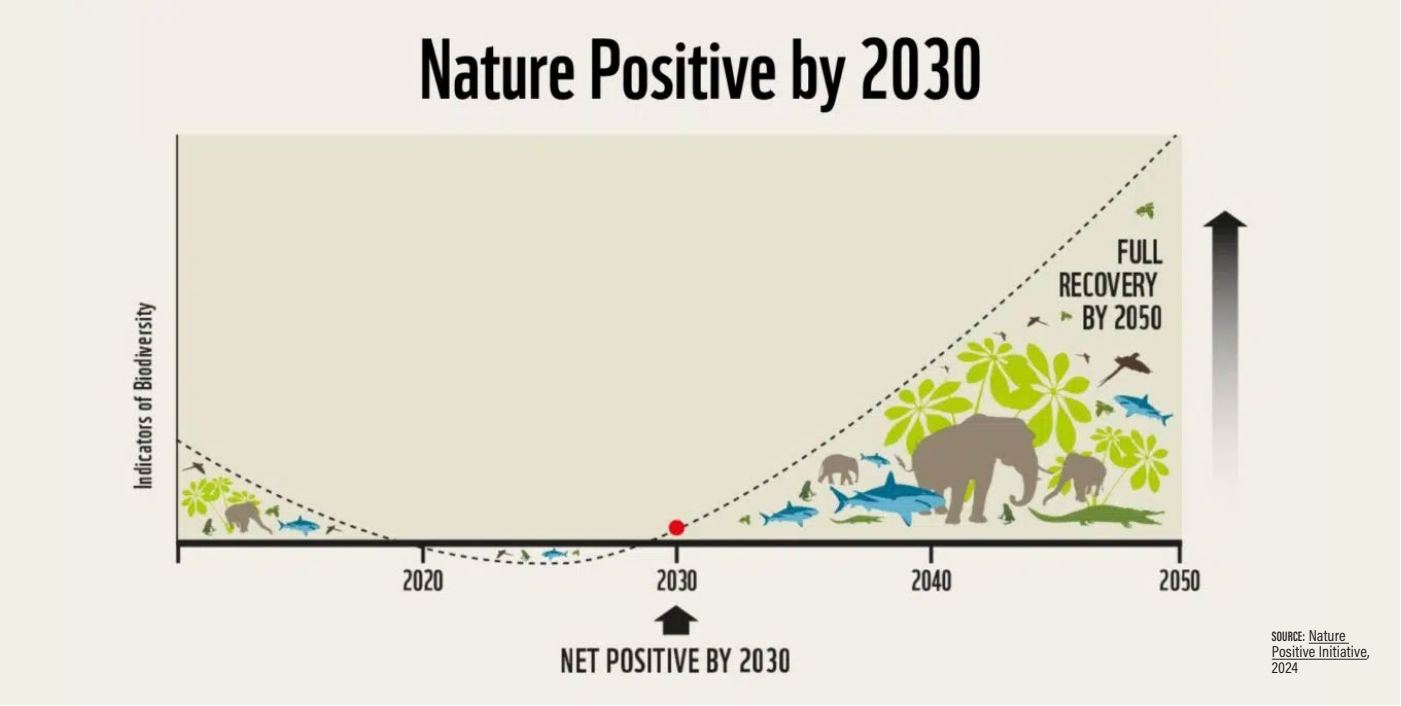
1. **Case Studies & Financing Opportunities:** In this section users will find case studies and examples of how financial institutions have assessed nature-related risks and opportunities, conducted stewardship activities, and developed investible nature projects.
2. **Data & Databases:** In this section users will find links to data sources and databases that can serve as inputs into the identification, assessment, and monitoring of nature-related risks and opportunities.
3. **Guides & Frameworks:** In this section users will find guidance documents and frameworks designed to support investors undertake activities such as partnership and engagement with IPLC, the assessment and management of nature-related risks, preparing nature-related disclosures.
4. **Nature-finance Initiatives:** In this section users will find links to nature-finance initiatives that investors can join in order to develop further skills and knowledge, set targets, collaborate with peers, and address systemic risks.
5. **Reports:** In this section users will find the reports cited in the main toolkit document have been included here, as well as other key documents nominated by toolkit authors. These reports can help investors build the case for nature, develop a foundational understanding of nature finance concepts, and learn about important industry trends.
6. **Tools & Toolkits:** In this section users will find a bank of tools and toolkits aimed specifically at supporting financial institutions in the integration of nature into investment decision making. Some tools and toolkits may be issue specific, with many focusing on identifying and monitoring land-use change risks. Both free and paid tools/toolkits have been included here.

Appendix B: Defining nature positive and nature positive companies

Nature-positive means halting and reversing nature loss by 2030, measured from a baseline of 2020. The definition was developed by the Global Goal for Nature Group in 2020 as the umbrella goal for the post-2020 GBF.[116] It requires measurable net positive biodiversity outcomes through the improvement in the abundance, diversity, integrity and resilience of species, ecosystems and natural processes.[117]

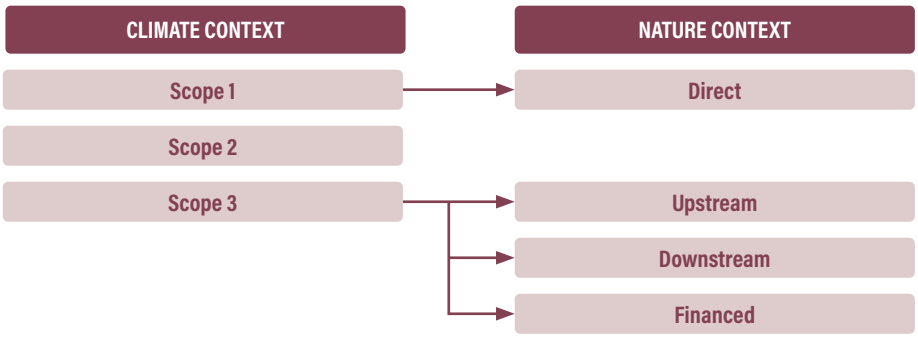
It is important to remember that nature positive is proposed as a global objective - the intended state of the world's biodiversity and ecosystems. At this point in time, best practice guidance suggests that companies and businesses can contribute to nature positive. However, there is a variety of views as to whether it is feasible for an asset, company, fund or other entity to be, in and of itself, nature positive.[118]

As a result, investors should carefully investigate claims from companies that describe themselves, or the investment opportunities they present, as definitively nature positive.



SOURCE: Nature Positive Initiative, 2024

Appendix C: Adaptation of 'Scopes for the nature context



(For financial institutions)

SOURCE: The TNFD

Endnotes

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Published: September 2024

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