

COP15: A Turning Point for Investor Approaches to Biodiversity

The UN Biodiversity Conference will focus minds on the importance of nature. How are asset managers addressing the topic?

Morningstar Manager Research

5 December 2022

Contents

- 2 Why Is Biodiversity Important?
- 2 COP15: The Forgotten COP?
- 3 COP15: An Overview
- 4 Biodiversity as an Investment and Active Ownership Theme
- 12 Appendix 1: Extracts From Asset Managers' Publications

Lindsey Stewart, CFA
Director of Investment Stewardship Research
Manager Research
lindsey.stewart@morningstar.com

Additional contribution from:
Gayaneh Shahbazian
ESG Research Manager, Biodiversity
Morningstar Sustainalytics
gayaneh.shahbazian@morningstar.com

Executive Summary

We depend on services from the natural world for everything—including food, water, energy, and healthcare. The value of these services is estimated at up to USD 140 trillion per year by the Organisation for Economic Co-operation and Development, with over half of global gross domestic product "moderately or highly dependent" on nature, according to the World Economic Forum. The 15th United Nations Biodiversity Conference, COP15, is about to begin in Montreal. Its aim is to agree on a new global biodiversity framework, setting new goals for nature preservation "to ensure that, by 2050, the shared vision of living in harmony with nature is fulfilled."

The COP27 U.N. Climate Change Conference in November reinforced the link between climate change and biodiversity preservation. Following from this, COP15 is expected to focus the minds of governments and the financial sector on biodiversity and how it links to climate change. This paper examines the aims of COP15, and how asset managers have embedded biodiversity into their active ownership activities—that is, their engagement and voting policies and practices—and what might change in the future. It also examines the policies of 25 asset managers, including the world's five largest by fund assets.

Key Takeaways

- ► The expected new global biodiversity framework from COP15 will trigger changes to laws and regulations worldwide, which, over time, will have implications for businesses. Asset managers have already started to update their engagement and voting policies on biodiversity preservation.
- ▶ By requesting more transparency and reporting on biodiversity, asset managers are looking to better understand companies' material biodiversity impacts and dependencies, among other issues.
- ▶ Of the 25 asset managers we reviewed, half (13) already provide detail on their biodiversity-related active ownership policies, including AllianceBernstein, AXA, BNP Paribas, LGIM, and Schroders. Out of the top five, only BlackRock and Capital Group provide such detail. Policies by Vanguard, State Street, and Fidelity Investments address environmental issues only at a high level, focusing on climate without addressing biodiversity specifically.
- ► Engagement initiatives targeting biodiversity-related issues are gaining prominence: notably, the Finance for Biodiversity Pledge, which has 111 signatories representing over USD 16 trillion of assets; and Nature Action 100, a collaborative engagement initiative similar to Climate Action 100+, which plans to launch this year with an initial group of 11 investment institutions.
- ► Investment funds specifically targeting biodiversity as a theme are currently rare compared with those targeting climate. There are 14 such funds, representing USD 1.6 billion of assets. AXA and Lombard Odier account for over 70% of these assets.

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit: http://global.morningstar.com/equitydisclosures

Why Is Biodiversity Important?

We depend on services from the natural world for everything—including food, water, energy, and healthcare. Their value is enormous, as several studies have shown. For example, the OECD estimates the total global value of ecosystem services is USD 125 trillion to USD 140 trillion per year. The World Economic Forum estimates that USD 44 trillion of economic value generation, over half of the world's total GDP, is "moderately or highly" dependent on nature and its services.

With so much at stake, it is reasonable to wonder why biodiversity hasn't taken a more prominent role in discussions about environmental protection. Now, following the recent U.N. Climate Change Conferences, COP26 and COP27, and with the 15th U.N. Conference on Biodiversity, COP15, about to begin, there are signs that biodiversity is about to receive the attention it deserves, both from governments and institutional investors.

COP15: The Forgotten COP?

The U.N. Climate Change Conferences of the last two years—COP26 in the United Kingdom and COP27 in Egypt—have certainly captured the world's attention, with good reason.

The Glasgow Climate Pact was agreed at COP26 last year after much fraught negotiation, settling on the challenging goal of limiting global warming to 1.5 degrees Celsius. Notably, the pact marked the first time an explicit link was made between limiting climate change and promoting biodiversity preservation in such an agreement. It states:

"The Conference of the Parties... emphasizes the importance of protecting, conserving and restoring nature and ecosystems to achieve the Paris Agreement temperature goal, including through forests and other terrestrial and marine ecosystems acting as sinks and reservoirs of greenhouse gases and by protecting biodiversity, while ensuring social and environmental safeguards."

This idea was taken a step further in the COP27 Agreement of November 2022, which states:

"The Conference of the Parties... underlines the urgent need to address, in a comprehensive and synergetic manner, the interlinked global crises of climate change and biodiversity loss in the broader context of achieving the Sustainable Development Goals, as well as the vital importance of protecting, conserving, restoring and sustainably using nature and ecosystems for effective and sustainable climate action."

With biodiversity and climate change now being addressed in tandem, rather than separately and unequally, COP15 will be a turning point for investor approaches to tackling biodiversity loss. In the following sections, we outline the objectives of COP15 and introduce some of the evolving engagement

¹ Biodiversity: Finance and the Economic and Business Case for Action, OECD, February 2019.

² Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy, World Economic Forum, January 2020

³ Paragraph 38 of the Glasgow Climate Pact agreed at COP26 in November 2021.

initiatives and reporting and transparency frameworks that are certain to have an effect on asset managers' investment stewardship activities in 2023 and beyond.

COP15: An Overview

The Convention on Biological Diversity is a binding treaty ratified by nearly 200 countries. (Although this is an impressive number, it notably excludes the United States.) First signed in 1992 at the Rio Earth Summit, the CBD's three main objectives are:

- ► The conservation of biological diversity
- ▶ The sustainable use of the components of biological diversity
- ▶ The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

The purpose of COP15 is to agree a post-2020 global biodiversity framework, setting new goals for nature preservation over the next decade "to ensure that, by 2050, the shared vision of living in harmony with nature is fulfilled." The new framework will replace the Aichi Biodiversity Targets set at COP10 in 2010, which expired in 2020. Unfortunately, none of the 20 Aichi targets were fully achieved.

COP15 is being held in Montreal from Dec. 7–19 this year. The conference was originally intended to be held in Kunming, China, in 2020 but was delayed by the coronavirus pandemic. The first phase of COP15 was held virtually in 2021, culminating in the Kunming Declaration, which emphasizes the key role that biodiversity plays in sustainability:

"Biodiversity, and the ecosystem functions and services it provides, support all forms of life on Earth and underpin our human and planetary health and well-being, economic growth and sustainable development... Urgent and integrated action is needed, for transformative change, across all sectors of the economy and all parts of society... to shape a future path for nature and people, where biodiversity is conserved and used sustainably, and the benefits arising from the utilization of genetic resources are shared fairly and equitably, as an integral part of sustainable development."

Over time, it is expected that the new global biodiversity framework will trigger changes to laws, regulations, and market practices worldwide, in a similar way to how the Paris and Glasgow climate agreements have influenced policymakers' actions on achieving net-zero emissions. Over the years, the climate agreements have prompted new regulations and reporting requirements on climate risks, opportunities and governance, and transition planning, which have in turn influenced asset managers' expectations of investee companies.

Consequently, we expect asset managers' policies on biodiversity preservation to change to reflect the goals of the new global biodiversity framework in 2023 and beyond, starting with their engagement and proxy-voting policies. In light of this, this paper examines the ways asset managers are approaching biodiversity and natural capital as an investment and active ownership theme.

Biodiversity as an Investment and Active Ownership Theme

It remains rare to find funds that specifically target biodiversity and natural capital as an investment theme. At the time of writing, there are 14 such funds in Morningstar Direct™, representing USD 1.6 billion of fund assets (shown in Exhibit 1). All but one of the managers running these funds are domiciled in Europe; Karner Blue, in the United States, is the exception. Just two asset managers, AXA and Lombard Odier, account for over 70% of these assets.

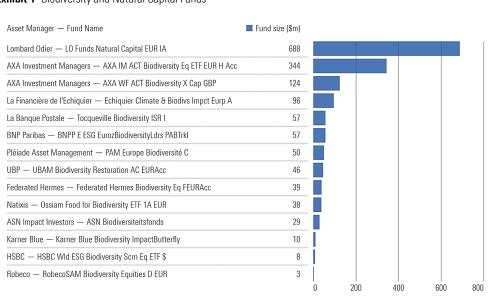


Exhibit 1 Biodiversity and Natural Capital Funds

Source: Morningstar Direct. Data as of Nov. 28, 2022.

While these 14 funds represent a promising start for biodiversity-specific investments, they are dwarfed by the assets in over 1,100 climate funds, representing over USD 350 billion in assets globally. Clearly, there is a long way to go before biodiversity gains the same prominence as climate as a fund investing theme.

That said, there is evidence that asset managers are beginning to take a more advanced approach to biodiversity in their active ownership activities. This manifests in two ways:

- ► Emerging engagement initiatives; and
- Specific asset manager stewardship policies.

Biodiversity-Related Engagement Initiatives

The Finance for Biodiversity Pledge was launched in September 2020 with a focus on creating a "nature positive" economy — halting and reversing nature loss by 2030. The pledge currently has 111 signatories representing over USD 16 trillion of assets; 75 are asset managers, with insurers, banks, and pension funds making up the remainder. According to a recent update, "the 111 signatories commit to collaborate, engage, assess, set targets and report, by 2024 at the latest. They call on global leaders to agree on effective measures at the CBD COP15 to reverse nature loss in this decade."

Exhibit 2 Asset Manager Signatories to the Finance for Biodiversity Pledge

Asset Manager	Country	Asset Manager	Country
Abrdn plc	United Kingdom	Lazard Frères Gestion	France
Achmea Investment Management	Netherlands	LGIM	United Kingdon
ACTIAM N.V.	Netherlands	Lombard Odier	Switzerland
Amundi	France	Mandarine Gestion	France
APG Asset Management	Netherlands	Manulife	Canada
Astanor Ventures	Luxembourg	Mirova	France
Australian Ethical Investment	Australia	New Forests Pty Ltd	Australia
AXA Investment Managers	France	Nia Impact Capital	United States
Bank J. Safra Sarasin	Switzerland	NN Investment Partners	Netherlands
Boston Common	United States	Nordea Asset Mgmt	Denmark
Change Finance, PBC	United States	Nordis Capital	Canada
Crédit Mutuel Asset Management	France	Oakham Wealth Management	United Kingdon
Crescent Capital Group LP	United States	ODDO BHF Asset Management	France
Demeter Partners	France	OFI AM	France
Deutsche Oppenheim	Germany	OIP TRUST	Italy
DNB Asset Management	Norway	Ossiam	France
Domini Impact Investments	United States	PGGM N.V	Netherlands
DPAM	Belgium	Pictet Group	Switzerland
EAB Group	Finland	Planet A Ventures	Germany
eco.business Fund	Luxembourg	Pymwymic Investment Mgmt	Netherlands
Edmond de Rothschild	France	Rathbone Greenbank Investments	United Kingdon
EGAM0	France	Resona Asset Management	Japan
Ethical Partner Funds Management	Australia	Robeco	Netherlands
Etica Sgr - Responsible Investments	Italy	Schelcher Prince Gestion	France
Federal Finance Gestion	France	Schroders	United Kingdon
Federated Hermes Limited	United Kingdom	SG 29 Haussmann	France
Fidelity International	Bermuda	SLM Partners	United Kingdon
First Sentier Investors	Australia	Société Générale Private Wealth	Luxembourg
Fondaction	Canada	STOA Infra & Energy	France
Future Food Fund	Netherlands	Storebrand Asset Management	Norway
Gay-Lussac Gestion	France	Swedbank Robur	Sweden
Green Century	United States	Sycomore Asset Management	France
HSBC Global Asset Management	United Kingdom	Triple Jump	Netherlands
Incofin Investment Management	Belgium	UFF African Agri Investments	Netherlands
Jupiter Asset Management	United Kingdom	Van Lanschot Kempen	Netherlands
Karner Blue Capital	United States	Vancity Investment Management	Canada
La Financière de l'Echiquier	France	Vert Asset Management	United States
La Française Group	France	-	

Source: Finance for Biodiversity Pledge. Data as of Nov. 28, 2022. Note: Includes impact funds, investment funds, and wealth managers.

The update identifies engagement with companies as a key activity for 2023, with a particular focus on sharing effective practices and driving forward collaborative engagements with companies on the "Nature Positive" theme. Collaborative engagements are particularly effective in driving change on sustainability themes — when many institutional investors work together to improve corporate practices and increase transparency, it is more effective in convincing companies that a systemic shift is occurring rather than just a change in the preferences of a minority of highly sustainability-conscious investors.

The planned launch of Nature Action 100, with an initial group of 11 investment institutions, will be a key development in this regard. Nature Action 100 is a collaborative global investor engagement initiative for biodiversity and natural capital, modelled on the existing collaborative engagement initiative for climate change: Climate Action 100+. The 11 launch institutions (shown in Exhibit 3) are all asset managers and asset owners, most of which are also Finance for Biodiversity Pledge signatories.

Exhibit 3 Launch Institutions for Nature Action 100

Asset Manager	Country	Asset Manager	Country
AXA Investment Managers	France	Federated Hermes Limited	United Kingdom
Christian Brothers Investment Services	United States	Karner Blue Capital	United States
Columbia Threadneedle	United States	Robeco	The Netherlands
BNP Paribas Asset Management	France	Storebrand Asset Management	Norway
Church Commissioners for England Domini Impact Investments	United Kingdom United States	Vancity Investment Management	Canada

Source: Finance for Biodiversity Pledge, Ceres. Data as of Nov. 28, 2022.

According to the update, the Secretariat and Corporate Engagement work stream of Nature Action 100 will be co-led by the sustainability advocacy nonprofit Ceres and the investor network Institutional Investors Group on Climate Change, both heavily involved in Climate Action 100+. The Finance for Biodiversity Foundation (whose 56 members are signatories of the Finance for Biodiversity Pledge) and the financial think tank Planet Tracker will co-lead the initiative's Technical Advisory Group.

The conclusion of COP15 and the launch of Nature Action 100 will likely prompt significant changes in the way asset managers approach biodiversity issues from an active ownership perspective. However, asset managers are already taking steps to include this theme as an important supplement to their policies and practices on achieving net-zero greenhouse gas emissions in the fight against climate change. We saw evidence of this in our recent research on large asset managers' proxy-voting policies.

In the following section, we will take a deeper dive into asset managers' engagement and voting policies on biodiversity and natural capital.

Asset Manager Stewardship Policies Specific to Biodiversity

We examined the policies and publications of a selection of 25 U.S. and European asset managers. The selection includes the top five global asset managers by fund assets, according to Morningstar Direct as of Sept. 30, 2022: Vanguard, BlackRock, Fidelity Investments, Capital Group, and State Street. It also includes 20 asset managers that have been assigned a Morningstar ESG Commitment Level of Leader or Advanced—the two highest levels. As we've found in similar previous studies on sustainability themes, European managers tend to provide more detail on their policies than those in the United States.

We found that 13 of the 25 asset managers provided detail on their active ownership approach to biodiversity. Out of the top five global asset managers, we found that only BlackRock and Capital Group made significant specific comments about their approach to investment stewardship on biodiversity.

Policies by Vanguard, State Street, and Fidelity Investments address environmental issues at a high level, focusing on climate without addressing biodiversity specifically. Of the other 20 asset managers we reviewed, 11 provided detail on their biodiversity-related active ownership policies.

AllianceBernstein, AXA, BNP Paribas, LGIM, and Schroders are the largest of these managers. A full list of the asset managers we reviewed, along with extracts from their policies and publications, can be found in the Appendix.

In our analysis, we identified four distinct themes covered by asset managers whose engagement and voting policies cover biodiversity and natural capital in detail.

- ► Material biodiversity impacts and dependencies
- ► Biodiversity as a key link to climate change action
- Reporting and transparency
- ► Engagement priorities and voting policies

Material Biodiversity Impacts and Dependencies

Several managers refer to their focus on investee companies' material biodiversity-related impacts and dependencies and their risks and opportunities when framing their policies; this being the language used by the CBD itself. Some examples are below.

"We look to companies to disclose detailed information on their approach to managing material natural capital-related business risks and opportunities... To support investors' assessments, it is helpful for companies with material dependencies or impacts on natural habitats to disclose how they measure their progress on key issues."—BlackRock

"We expect companies to assess and report on key impacts and dependencies on nature, beginning with companies in high impact sectors, and with a priority focus on deforestation and water-related issues."—BNP Paribas

"Nature-related risk encompasses biodiversity loss and ecosystem degradation. We seek to identify and assess exposure to nature-related risks in our investments, with a particular focus on materiality (i.e. negative impact on, or dependency on, nature)."—Impax

This focus on both impacts and dependencies would appear to imply a double-materiality approach (that is, consideration of material impacts on both the investee company and the environment, rather than the company alone); however, some managers (including BlackRock) state their intention to retain a focus on financial materiality. As with climate, we would expect managers' thinking on what is material to evolve over time.

Some managers appear to take a slightly different approach, stating only a focus on impacts—some examples are below.

"RLAM equally expects investee companies to acknowledge and address their most material negative impacts whether these are financial, social, environmental or governance-related. Topics covered by this include, but are not limited to,... biodiversity — activities such as deforestation that may negatively impact the local biodiversity, particularly associated with sites or operations located in areas with sensitive or fragile ecosystems."—Royal London

"Companies should analyze the impacts of their operations and products on land use and biodiversity, including agricultural land use, deforestation, habitat conservation, and pollution."—Calvert

Biodiversity as a Key Link to Climate Change Action

Reflecting the explicit link drawn between climate change and biodiversity preservation in the latest climate COP agreements, several asset managers have also made such a link in their own engagement and voting policies. They particularly focus on antideforestation actions alongside other nature-based solutions. Here are some examples.

"A special subject within the management of environmental issues is the subject of climate change... An important aspect of this is water and biodiversity management, and companies should be aware of their exposure to water- and deforestation-related risks and develop appropriate mitigation strategies." — Robeco

"Corporate climate commitments should be reviewed against the emerging science regarding nature loss, and upgraded where appropriate, to reflect the appropriate sense of urgency, scale and place. This latter category is the key distinction — greenhouse gas concentrations are global, but biodiversity is always local. Companies that have made 'net-zero' commitments should consider investing in nature-based solutions as soon as possible. Where appropriate, these policies should address how the company evaluates climate and biodiversity 'offsets'."—BNP Paribas

"LGIM recognises the importance of ending commodity-driven deforestation to tackle climate change, reduce biodiversity loss, and support food security. We are proud to be a signatory to Deforestation-Free finance commitment and fully support the call for financial institutions to take ambitious measures within their control to eliminate commodity-driven deforestation within their investments."—LGIM

"We recognise that deforestations, changes in land use, increasing agricultural intensity, overpopulation, climate change and pollution contribute to biodiversity loss and we therefore take these factors into consideration in our ESG analysis of companies."—Schroders

The food and apparel sectors are identified as particularly exposed to biodiversity risks with a link to climate change. Among our selection, Schroders and LGIM highlight this most prominently, with LGIM

disclosing a high-level sector-by-sector analysis of biodiversity risks as part of its Climate Impact Pledge (see Page 21).

"LGIM's expectations of investee companies are focused on high impact sectors. Within the Apparel sector, we expect companies to demonstrate how they are improving the circularity of materials and eliminating deforestation from supply chains. In the Food sector, we expect a shifting away from high-impact products and progress on decarbonising agricultural supply chains."—LGIM

"The food and water system is both at risk from climate change and is a significant contributor to greenhouse gas emissions and other environmental pressures; for example, through the use of fertilizer and pesticides. We engage to promote a food and water system that is more environmentally sustainable, healthy, and better able to meet the needs of a growing population."—Schroder

Reporting and Transparency

As is often the case with sustainability themes, most asset managers who comment extensively on the biodiversity theme agree that better reporting and transparency is key.

It has become common practice for asset managers to urge companies to report climate-related risks and opportunities using the frameworks provided by the Taskforce on Climate-Related Financial Disclosures and the Sustainability Accounting Standards Board (now part of the IFRS Foundation, which is in the process of issuing its own sustainability reporting standards).

A similar trend is emerging for biodiversity and natural capital. SASB-aligned disclosures are still encouraged, but the work of the Taskforce on Nature-Related Financial Disclosures, a reporting framework for nature-related risks and opportunities modelled on the TCFD, is of key interest to asset managers. The TNFD framework is currently in development, with its third "beta" version open for public comment. It is likely to develop further following the outcome of COP15, with the next version due for release in February 2023.

As shown in the selected quotes below, several managers expect the TNFD to become a "valuable resource" and the "default framework" for reporting nature-related risks, while there is also a desire to retain a level of alignment with existing standards such as SASB. As we've seen with other sustainability standard-setting initiatives in 2022, managers place a high premium on maintaining global consistency to provide a comparable basis for evaluating investment decisions.

"In our view, the forthcoming recommendations of the Task Force on Nature-related Financial Disclosures will be a valuable resource for companies in their reporting... We believe the TNFD should focus on financially material, business relevant risks and opportunities, rather than double materiality. Its aim should be to develop, implement, and fine-tune reporting standards that result in disclosure that explains to investors how a company has considered its reliance on

and access to natural capital. This should be evaluated from a financial perspective, but also in the context of a company's ability to execute on a sustainable business model."—BlackRock

"We believe this streamlining is essential to reduce the reporting burden on companies and for investors and stakeholders to have clear and consistent information. We urge the TNFD to recommend SASB as the primary source to identify the most material sustainability topics and to ensure comparable metrics across peer groups."—BlackRock

"We will be seeking greater disclosure from investee companies in line with the Taskforce on Nature-related Financial Disclosures (TNFD) framework and SASB standards. As a signatory to the Finance for Biodiversity Pledge we have committed to collaborating and knowledge sharing, engaging with companies, assessing impact, setting targets and reporting publicly."—LGIM

"Ultimately, we expect that the TNFD will provide the default corporate reporting framework for nature loss. In the meantime, we expect companies to provide thorough responses to the annual CDP survey on climate, forests and water, use the Accountability Framework Initiative reporting guidance for forests, and include a discussion of their response to the biodiversity crisis in their regular sustainability reporting."—BNP Paribas

Engagement Priorities and Voting Policies

As shown in the quotes below, managers who discuss their engagement priorities usually focus on escalating issues with companies seen to violate international norms; however, some also look at the issue from the perspective of sharing best practices on possible solutions to biodiversity loss. Establishing collaborative engagement initiatives, like Nature Action 100, is also seen as an increasingly urgent need, according to some of these comments.

"Our monitoring process identifies entities that have been implicated in environmental degradation. This includes violations on emissions, waste disposal or involvement in illegal deforestation either directly or in their supply chain. We engage with those who have been involved to help ensure that they are taking appropriate remedial action."—Capital Group

"Impax has also developed an engagement guideline relating to biodiversity. We have started engaging with our investee companies not just on corporate biodiversity dependencies and (negative) impact on biodiversity, but also from an opportunities-perspective on possible solutions and best practices."—Impax

"Natural-related risk and management: The degradation of natural capital, including the loss of biodiversity and depletion of renewable stocks, poses a risk for businesses, their earnings and their value. We engage to encourage companies to develop strong governance on this issue, and adopt emerging good practices on nature-related financial disclosures and target setting."—Schroders

"We are expanding the incorporation of biodiversity in our voting and corporate engagements and will engage with the industries having the greatest adverse impacts on biodiversity, with a core focus on deforestation and water issues. Our expectations for corporations extend from board oversight of biodiversity impacts and dependencies to proactive lobbying for nature-positive public policies. We will continue to work to build a collaborative investor stewardship initiative to address biodiversity loss."—BNP Paribas

"The lack of a comprehensive deforestation policy constitutes one of our 'red lines' when deciding LGIM's priority engagement companies."—LGIM

Asset managers rarely have specific policies regarding voting intentions on biodiversity, although some do indicate support for shareholder resolutions requesting better reporting and transparency on biodiversity-related risks or adoption of specific policies to tackle those risks.

"In voting on proposals relating to the foregoing environmental matters, Calvert ordinarily will: support reasonable proposals to reduce negative environmental impacts and a company's overall environmental footprint, including any threats to biodiversity in ecologically sensitive areas... support proposals requesting greater transparency of the company's impact on land use, including deforestation, throughout the company's product lifecycle; support proposals asking companies for the preparation of a report on the impact of the company on biodiversity, throughout the company's product lifecycle."—Calvert

"We will generally support resolutions seeking the following actions by companies: Report on company policies and implementation practices related to biodiversity, including deforestation."—UBS

"Our minimum voting standards also consider the presence and application of a deforestation policy and programme."—LGIM

Appendix 1: Extracts From Asset Managers' Publications

In this research paper, we reviewed proxy-voting policies and other relevant publications and disclosures by the top five asset managers by fund assets as at 30 September 2022 (Vanguard, BlackRock, Fidelity Investments, Capital Group, and State Street), and by U.S. and European asset managers with significant fund allocations to equities and which have been assigned one of the two highest Morningstar ESG Commitment Level ratings (Leader and Advanced).

Exhibit 4 Asset Managers Reviewed for This Research Paper

Asset Manager	Country	ESG Commitment Level
AllianceBernstein	United States	Advanced
Amana (Saturna Capital)	United States	Advanced
Amundi	France	Advanced
AXA	France	Advanced
BlackRock	United States	Basic
BNP Paribas	France	Advanced
Boston Trust Walden	United States	Leader
Calvert	United States	Leader
Candriam	Luxembourg	Advanced
Capital Group	United States	Basic
Fidelity Investments	United States	Low
Generation	United Kingdom	Advanced
HSBC	United Kingdom	Advanced
Impax	United Kingdom	Leader
Jupiter	United Kingdom	Advanced
LGIM	United Kingdom	Advanced
Nuveen/TIAA	United States	Advanced
Parnassus	United States	Leader
Robeco	Netherlands	Leader
Royal London	United Kingdom	Advanced
Schroders	United Kingdom	Advanced
State Street	United States	Basic
UBS	Switzerland	Advanced
Unigestion	Switzerland	Advanced
Vanguard	United States	Low

Source: Asset managers' websites. Data as of November 2022.

Below are selected extracts from these asset managers' policy documents relating to how managers consider biodiversity and natural capital issues from an equity active ownership perspective. Quotes have been edited for clarity. You can also find links to recent thought leadership by these managers at the end of this appendix.

Top Five Global Asset Managers by Fund Assets

BlackRock

BIS Engagement Priorities, February 2022

"Natural Capital — We look to companies to disclose detailed information on their approach to managing material natural capital-related business risks and opportunities, including how their business models are consistent with the sustainable use and management of natural resources such as air, water, land, minerals and forests."

"While recognizing that natural capital is a complex issue and ecosystems are interconnected, for the purposes of our work we focus on three key areas—biodiversity, deforestation and water—which we believe can impact the long-term financial returns of some companies. As long-term investors, we encourage companies to disclose how they have adopted or plan to incorporate business practices consistent with the sustainable use and management of natural capital, including resources such as clean air, water, land, minerals and forests. We are also interested to hear from companies how they contribute to biodiversity and ecosystem health and consider their broader impact on the communities in which they operate. In our view, the forthcoming recommendations of the Task Force on Nature-related Financial Disclosures will be a valuable resource for companies in their reporting."

"We look to companies to disclose detailed information on their approach to managing material natural capital-related business risks and opportunities, including how their business models are consistent with the sustainable use and management of natural resources such as air, water, land, minerals and forests. To support investors' assessments, it is helpful for companies with material dependencies or impacts on natural habitats to disclose how they measure their progress on key issues such as water conservation, reforestation, and pollution control. This may include a discussion of efforts to improve efficiency, minimize and mitigate negative impacts and track positive impacts."

BIS: Our Approach to Engagement on Natural Capital, February 2022

"Given the growing pressures on the natural ecosystems from which many companies derive economic benefits, business will increasingly face financial risks and opportunities associated with their impacts and dependencies on natural capital. As a result, we view the careful management of natural capital as a core component of a resilient long-term corporate strategy for companies that rely on the benefits that nature provides. The challenge of producing more goods with fewer inputs—e.g., land, water, raw materials—can provide opportunities for companies, while those that do not appropriately manage their impacts may face operational, regulatory, or reputational risks as ecosystems come under pressure."

"We believe that it is increasingly important to investors to understand how companies are minimizing their impacts on the natural capital on which their long-term financial performance depends. As long-

term investors, we encourage companies to disclose how they have adopted or plan to incorporate business practices consistent with the sustainable use and management of natural capital, including resources such as clean air, water, land, minerals and forests. We are also interested to hear from companies how they contribute to biodiversity and ecosystem health and consider their broader impact on the communities in which they operate."

"Until recently, the cost of natural capital had not been priced into the cost of doing business in any meaningful way. We expect this to change over time as government policies increasingly look to address the negative consequences for society from natural capital depletion. Although policy actions will be uneven globally, we anticipate measures that will encourage more efficient use of resources, such as a price or tax on the externalities, from which many companies currently benefit."

"Companies' other stakeholders are also increasingly taking into consideration the sustainability and impacts of the companies with which they engage, particularly as consumers and employees. These trends have the potential over time to significantly impact the economic viability of some companies, especially those that do not have resilient business models."

"The challenge of producing more goods with fewer inputs—e.g., land, water, raw materials—can also provide opportunities for companies including: reduced input costs, the benefits of innovation, research and development (R&D), and an enhanced ability to partner with the companies in their supply chains, as well as consumers... We also believe that companies have an opportunity to benefit from improved practices across an industry. Active participation in industry initiatives can help companies contribute to sector-level supply chain improvements, such as storage, logistics and traceability programs. Initiatives can also advance practices through the establishment of meaningful policies and commitments, such as those addressing deforestation and human rights, including conduct relating to indigenous peoples."

Comment Letter: TNFD Consultation, Technical Scope, March 2021

"We have made "climate risk and natural capital" key engagement priorities. More than half of the global gross domestic product (GDP)—US\$44 trillion—is moderately or highly dependent on nature. Moreover, one in five companies globally face significant operational risks as a result of collapsing ecosystems. In order for long-term investors to better understand the risk/ return profile of their investments, disclosure of material climate and natural capital risks is essential—we are interested to know how companies are managing and mitigating risk, while also positioning their strategies for a low-carbon, resource constrained world. Better yet, we want to know how companies are contributing solutions to the preservation of natural resources and technology that will help mitigate the worst effects of climate change."

"We believe the TNFD should focus on financially material, business relevant risks and opportunities, rather than double materiality. Its aim should be to develop, implement, and fine-tune reporting standards that result in disclosure that explains to investors how a company has considered its reliance on and access to natural capital. This should be evaluated from a financial perspective, but also in the context of a company's ability to execute on a sustainable business model."

"We agree that companies should use the SASB materiality map to prioritize the most urgent and material natural capital and environmental-related risks. However, additional metrics and frameworks for materiality are also listed in the document for companies to consider. Over the last year, we have seen the market increasingly coalesce around SASB. We believe this streamlining is essential to reduce the reporting burden on companies and for investors and stakeholders to have clear and consistent information. We urge the TNFD to recommend SASB as the primary source to identify the most material sustainability topics and to ensure comparable metrics across peer groups."

Capital Group

ESG Policy Statement, November 2022

"Biodiversity, land-use and associated ecosystems provide a range of invaluable services to society that underpin human health, well-being and economic growth. After a decline of 68% in species' populations between 1970 and 2016, the OECD Environmental Outlook to 2050 projects a further loss in biodiversity under a business-as-usual scenario. This loss could cause severe problems for land use and marine industries such as the fishing sector, as well as agriculture, extractive industries (cement and aggregates, oil and gas, mining), forestry (oil palm and timber) and tourism. As a result, we expect increased scrutiny of entities and countries about their practices in this area."

"Globally, we are seeing increasing levels of legislation aimed at protecting the environment. It is essential that organizations have strong processes in place to ensure that they adhere to these regulatory standards to maintain their license to operate. Our monitoring process identifies entities that have been implicated in environmental degradation. This includes violations on emissions, waste disposal or involvement in illegal deforestation either directly or in their supply chain. We engage with those who have been involved to help ensure that they are taking appropriate remedial action."

ESG Commitment Level: Leader

Calvert

Proxy Voting Guidelines, March 2022

"Land Use and Biodiversity: Companies should analyze the impacts of their operations and products on land use and biodiversity, including agricultural land use, deforestation, habitat conservation, and pollution. In voting on proposals relating to the foregoing environmental matters, Calvert ordinarily will: support reasonable proposals to reduce negative environmental impacts and a company's overall environmental footprint, including any threats to biodiversity in ecologically sensitive areas; support proposals asking companies to report on their environmental practices, policies and impacts, including environmental damage and health risks resulting from operations, and the impact of environmental liabilities on shareholder value; support proposals requesting greater transparency of the company's impact on land use, including deforestation, throughout the company's product lifecycle; support proposals asking companies for the preparation of a report on the impact of the company on biodiversity, throughout the company's product lifecycle."

Impax

ESG Policy, September 2022

"Material Environmental, Social, and Other Risks: We analyse companies' and issuers' environmental and social policies, processes and disclosures, identifying the most material risks. Materiality is defined as the sustainability issues or risks that may most materially disrupt a company's operations through financial, physical, or reputational loss or disruption. These risks can include: Resource use and dependencies, biodiversity risks, waste and pollution externalities, health and safety, supply chain complexities, and product liabilities including cyber risks and data privacy. We seek investments in companies or issuers that have addressed the material risks with robust policies, processes, management systems and incentives that are scaled appropriately to the importance of the risk."

Engagement Policy, April 2022

"The thematic engagement areas for 2022 are Biodiversity, improved disclosures relating to corporate supply chains and related geo-locations, and Ethics of algorithms and Al."

Impax Policy on Nature, Biodiversity, and Deforestation, August 2022

"Nature-related risk encompasses biodiversity loss and ecosystem degradation. We seek to identify and assess exposure to nature-related risks in our investments, with a particular focus on materiality (i.e. negative impact on, or dependency on, nature)."

"We believe it is important to capture exposure to nature-related risks holistically by adopting the so-called double materiality approach. This means that we consider both the risks of biodiversity loss and ecosystem degradation on our investments (especially where there is a significant dependency on nature and ecosystem services) and the potential negative impacts of our investments on nature. It is when considering the impacts of our investments on nature that we start to capture both the potential for liability or loss of license to operate, and also start to identify the knock-on and cumulative effects of biodiversity loss on long-term economic growth."

"In its active strategies, Impax seeks to understand the character of companies through fundamental ESG analysis, and the insights gained are then used to establish the priorities for engagement. The analysis is based on a double materiality approach, focusing on corporate governance structures, the most material environmental and/or social risks for a company, company contributions to sustainability related problems, and any controversies that a company has faced. All companies and other issuers must meet financial and ESG criteria before entering Impax's list of investable companies. The investment team members are responsible for integrating ESG analysis into the investment process for actively managed listed equities and fixed income."

"Bottom-up company-specific engagement: As part of our ongoing, proprietary company and issuer-level ESG analysis, we identify company- and issuer-specific matters and risks and actively engage with companies and issuers about these matters. Impax has also developed an engagement guideline relating to biodiversity. We have started engaging with our investee companies not just on corporate

biodiversity dependencies and (negative) impact on biodiversity, but also from an opportunitiesperspective on possible solutions and best practices."

"Top-down strategic engagement: Every year we assess and outline the engagement priorities for the next 12 months. These priorities are based on market developments and emerging sustainability issues that are relevant and material for our companies and issuers. We then identify the companies and issuers most exposed to these topics and focus our engagement on specific companies and issuers."

"We believe the financial sector can play a critical role in addressing environmental degradation by both influencing companies to stop depleting natural resources, and by deploying capital into nature-based solutions. An important step is the introduction of the Taskforce on Nature-related Financial Disclosures (TNFD) as a risk management and disclosure framework for organisations to report on nature-related risks."

Robeco

Stewardship Policy, November 2022

"Companies should continually improve their environmental performance in areas such as emission reductions, resource efficiency, recycling, substitution or reduction of toxic substances and biodiversity. The main drivers entail the adoption of improved technologies and operating procedures, the development of eco-friendly products and services and raising customer awareness."

"A special subject within the management of environmental issues is the subject of climate change... We apply an enhanced engagement approach towards the highest emitting companies in our portfolios. In our voting policy we define escalation steps if companies do not meet our expectations. An important aspect of this is water and biodiversity management, and companies should be aware of their exposure to water- and deforestation-related risks and develop appropriate mitigation strategies."

ESG Commitment Level: Advanced

AllianceBernstein

Proxy Voting and Governance Policy, March 2022

"Environmental Proposals (Shareholder Proposals) CASE-BY-CASE. These proposals can include reporting and policy adoption requests in a wide variety of areas, including, but not limited to, (nuclear) waste, deforestation, packaging and recycling, renewable energy, toxic material, palm oil and water. For proposals requesting companies to adopt a policy, we will carefully consider existing policies and the company's incorporation of national standards and best practices. In addition, we will evaluate the potential enactment of new regulations, as well as any investment risk related to the specific issue. We generally support shareholder proposals calling for reports and disclosure while taking into account existing policies and procedures of the company and whether the proposed information is of added benefit to shareholders."

AXA

Corporate Governance and Voting Policy, February 2022

"We will pay particular attention to the election of directors who have the experience and a proven track-record in managing environmental and social issues. In the context of the energy transition, climate change, as well as natural capital degradation and biodiversity loss, these competences of the board members on these issues will be sought as we consider them to be key and essential."

"For companies impacted by the social, data privacy, biodiversity, issues or any other relevant ESG topics, we expect an integration of material ESG elements related to their ESG strategy."

"In companies which are exposed to biodiversity, social and data privacy risks, the Board may be held responsible for not taking the necessary measures to address them. A dissenting vote might be cast against the CEO, the Board Chairman, or the appropriate supervisory element of the governance structure in case risk management shortcomings are proven to have occurred."

"We may withhold support from relevant resolutions including approval of Reports & Accounts, director elections and remuneration proposals in the following instances: 1/ Disclosure: Non-disclosure of quantitative and qualitative information (and where appropriate targets) on key environmental and social issues of relevance to the company, particularly in high-risk sectors (climate, biodiversity issues) and or where sectorial peers are able to report."

BNP Paribas

Governance and Voting Policy, September 2022

"Biodiversity-related expectations: Reflecting on our Biodiversity Roadmap, we expect companies to assess and report on key impacts and dependencies on nature, beginning with companies in high impact sectors, and with a priority focus on deforestation and water-related issues."

Biodiversity Roadmap, May 2021

"We are expanding the incorporation of biodiversity in our voting and corporate engagements and will engage with the industries having the greatest adverse impacts on biodiversity, with a core focus on deforestation and water issues. Our expectations for corporations extend from board oversight of biodiversity impacts and dependencies to proactive lobbying for nature-positive public policies. We will continue to work to build a collaborative investor stewardship initiative to address biodiversity loss. Our proxy votes will continue to support shareholder proposals on climate, deforestation and other critical environmental issues. Our public policy advocacy will increasingly incorporate biodiversity considerations."

"Board oversight: The board of directors must have clear oversight of their company's dependencies and impacts on nature loss. We will look for boards to include biodiversity on the board agenda, either by creating new committees or by amending existing committee charters to include biodiversity, and will be seeking an understanding of board expertise in this area and details of how the board exercises its oversight responsibilities."

"Impact assessment: Companies must develop a deep understanding of how nature loss impacts the company in the short, medium and long term, and how the company is contributing to biodiversity loss. This analysis should be overseen by the board, be transparent, and be updated at least annually."

"Upgrade climate commitments to address nature loss: Corporate climate commitments should be reviewed against the emerging science regarding nature loss, and upgraded where appropriate, to reflect the appropriate sense of urgency, scale and place. This latter category is the key distinction — GHG concentrations are global, but biodiversity is always local. Companies that have made 'net-zero' commitments should consider investing in nature-based solutions as soon as possible. Where appropriate, these policies should address how the company evaluates climate and biodiversity 'offsets', in alignment with IUCN's Biodiversity Offsets Policy."

"Set science-based targets for nature: Companies will need to develop policies and procedures to address biodiversity loss, with clear and ambitious science-based goals. We recommend that companies use the Accountability Framework Initiative (for forests) and participate in the development of the Science Based Targets Network framework. Sustainable capital allocation: Boards should include considerations of ecosystem resilience in their oversight of corporate capital allocation decisions, including executive compensation, research and development, etc."

"Lobbying for nature: Companies should align their direct and indirect lobbying efforts with an ambitious outcome for the upcoming meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15), and ensure their lobbying is consistent with the preservation of nature. We will be looking to adapt the Investor Expectations on Corporate Climate Lobbying to biodiversity loss."

"Disclosure: The Taskforce for Nature-related Financial Disclosures has only just begun its work. Ultimately, we expect that the TNFD will provide the default corporate reporting framework for nature loss. In the meantime, we expect companies to provide thorough responses to the annual CDP survey on climate, forests and water, use the Accountability Framework Initiative reporting guidance for forests, and include a discussion of their response to the biodiversity crisis in their regular sustainability reporting."

"Collaborative engagement is particularly well suited to addressing systemic risks. While there is a broad range of long-term collaborative investor engagements focused on elements of the biodiversity crisis, including climate change, deforestation, plastics, chemicals, etc., there is no single collaborative engagement focused explicitly on biodiversity. Biodiversity seems to be falling through the cracks. We also believe it is particularly important to ensure that each of these initiatives incorporate biodiversity considerations to ensure that they do not inadvertently undermine progress... We recently chaired the first call for a PRI-coordinated informal working group on biodiversity. We are also serving on the biodiversity advisory committee of a new Ceres Working Group on Land Use and Climate launched partly in response to our advocacy for a biodiversity-focused engagement programme."

Jupiter

Annual Stewardship Report, April 2022

"In 2021, Jupiter signed the Finance for Biodiversity Pledge and became a member of the Finance for Biodiversity Foundation. We are an active participant in the 'Engagement with companies' working group, which is connected to a Pledge commitment. We have also co-authored a chapter in a linked publication, focusing on biodiversity engagement as a collective action and its importance for financial institutions to achieve change, reverse biodiversity loss and preserve and enhance the value of client assets."

Royal London

Voting Policy UK, February 2022 Global Voting Policy (Ex-UK), January 2022

"In line with our obligation as an Asset Manager to consider the principal adverse impacts of our investments, RLAM equally expects investee companies to acknowledge and address their most material negative impacts whether these are financial, social, environmental or governance-related. Topics covered by this include, but are not limited to... Biodiversity — activities such as deforestation that may negatively impact the local biodiversity, particularly associated with sites or operations located in areas with sensitive or fragile ecosystems."

LGIM

Global Corporate Governance and Responsible Investment Principles, April 2022

"Biodiversity loss is currently happening at a rate greater than any other time in human history. This matters to investors as biodiversity loss presents a major global systemic risk, with more than half of the world's gross domestic product (GDP) — around \$44 trillion — dependent on nature. We expect companies to assess their impact and dependencies on biodiversity with a view to managing risk, as well as mitigating and, over time, reversing negative impacts. We encourage companies to commit to having an overall positive impact on biodiversity and to consider the direct as well as indirect activities of their supply chains. We will be seeking greater disclosure from investee companies in line with the Taskforce on Nature-related Financial Disclosures (TNFD) framework and SASB standards. As a signatory to the Finance for Biodiversity Pledge we have committed to collaborating and knowledge sharing, engaging with companies, assessing impact, setting targets and reporting publicly."

Policy on Biodiversity, November 2021

"LGIM recognises the importance of ending commodity-driven deforestation to tackle climate change, reduce biodiversity loss, and support food security. We are proud to be a signatory to Deforestation-Free finance commitment and fully support the call for financial institutions to take ambitious measures within their control to eliminate commodity-driven deforestation within their investments. LGIMs expectations of investee companies are focused on high impact sectors. Within the Apparel sector, we expect companies to demonstrate how they are improving the circularity of materials and eliminating deforestation from supply chains. In the Food sector, we expect a shifting away from high-impact

products and progress on decarbonising agricultural supply chains. The lack of a comprehensive deforestation policy constitutes one of our 'red lines' when deciding LGIM's priority engagement companies. Our minimum voting standards also consider the presence and application of a deforestation policy and programme."

Climate Impact Pledge, June 2022

"Biodiversity expectations: Why? The climate and nature crises are inextricably linked. Net zero requires both emission avoidance and sequestration. Functioning natural systems are essential to this but increasingly vulnerable due to climate change. LGIM's expectations: An assessment of the impacts and dependencies on nature and biodiversity, and appropriate mitigation actions."

"Sector-specific considerations [for airlines]: A direct impact could result from the degradation of habitats, airport expansion, disruption to bird 'flyways,' the spread of alien species, or noise and light pollution. The financing of poor offsetting practices and the use of biofuels could have an indirect effect."

"Sector-specific considerations [for apparel]: A direct impact could result from material preparation and processing (water pollution from dyeing). Indirectly — through raw material production (cotton agriculture) and end of life treatment (waste disposal and microplastics)."

"Sector-specific considerations [for banks]: Indirect impacts could result from lending, investing and project financing activities. Financial flows harmful to biodiversity range across all sectors with negative influences on their operating environments."

"Sector-specific considerations [for building]: Direct impacts could result from the destruction of natural habitats. Indirect impacts could result from upstream extraction, the manufacturing of building materials, and the financing of poor offsetting practices."

"Sector-specific considerations [for cement]: A direct impact associated with quarrying activities, such as land clearance, pollution, alteration of hydro-geological systems, noise and vibrations from blasting."

"Sector-specific considerations [for chemicals]: Pollution, including from chemicals, is one of the primary drivers of biodiversity loss. Direct impacts could result from manufacturing and polluting effluent. Indirectly — from the use and disposal of chemical products."

"Sector-specific considerations [for electric utilities]: Direct impacts could result from building utility infrastructure, significant water use, damming and waste disposal. Indirect impacts could result from financing of poor offsetting practices, the use of biofuels, and upstream fossil fuel extraction."

"Sector-specific considerations [for food]: The global food system is the primary driver of biodiversity loss. Impacts could result from habitat clearance for farmland, soil degradation, monoculture environments, overexploitation of species, and widespread pollution."

"Sector-specific considerations [for forestry and paper]: Direct impacts could result from unsustainable forestry practices causing loss of native species, forest degradation and habitat disruption. Indirect impacts could result from timber processing and associated operations."

"Sector-specific considerations [for glass]: Indirect impacts could result from aggregate extraction from marine and riverine ecosystems, and direct impacts from the manufacturing process, including water use and the discharge of wastewater and other pollutants."

"Sector-specific considerations [for insurance]: Indirect impacts could result from an insurer's role in enabling activities through risk management, underwriting and investing practices."

"Sector-specific considerations [for logistics]: Indirect impacts could result from the use of biofuels and infrastructure, and direct impacts from the use of vehicles and polluting emissions."

"Sector-specific considerations [for mining]: Direct impacts result from habitat removal, ground water extraction, infrastructure corridors, waste disposal, air quality and alien species."

"Sector-specific considerations [for multi-utilities]: Direct impacts could result from the poor management of water resources and unsustainable abstraction, utility infrastructure and pollution. Indirect impacts could result from upstream gas extraction and the financing of poor offsetting practices."

"Sector-specific considerations [for oil & gas]: Direct impacts could result from exploration and development: oil spills, ocean noise, alien species, water extraction etc. Indirectly — through financing of poor offsetting practices and the production of biofuels."

"Sector-specific considerations [for road transport]: Indirect impacts could result from raw-material extraction, polluting emissions and the use of biofuels. Directly - from the manufacturing process."

"Sector-specific considerations [for shipping]: A direct impact could result from port expansion, exhaust emissions and eutrophication, spills, ocean noise, vessel strikes and physical damage from anchorage. The financing of poor offsetting practices could have an indirect effect."

"Sector-specific considerations [for steel]: Indirect impacts could result from upstream mining activities. Direct impacts from the manufacturing process include: water use, wastewater discharge and other pollutants."

"Sector-specific considerations [for tech and telecoms]: Direct impacts could result from building communication networks and the supporting infrastructure. Indirect impacts could result from the raw material extraction needed for hardware, disposal of electronic waste, and creation of hazardous waste."

Schroders

ESG Policy for Listed Assets, May 2022

"The variety of plants and animals, and where they live — is critical for our everyday lives. It provides us with food, water, clean air, shelter and medicines. Loss of biodiversity and changes to ecosystems can increase the risk of infectious diseases in animals, plants and humans. We recognise that deforestations, changes in land use, increasing agricultural intensity, over-population, climate change and pollution contribute to biodiversity loss and we therefore take these factors into consideration in our ESG analysis of companies and engage with companies where we believe their practices are unsustainable."

Engagement Blueprint, February 2022

"The services that nature provides often go unpriced, resulting in their excess use. This is why we are seeing ecosystem decline and degradation as well as rising ecological scarcity... We prioritise four key engagement sub-themes within the broad topic of biodiversity and natural capital. These reflect the key natural capital and biodiversity issues faced by our investee companies: 1) Natural-related risk and management: The degradation of natural capital, including the loss of biodiversity and depletion of renewable stocks, poses a risk for businesses, their earnings and their value. We engage to encourage companies to develop strong governance on this issue, and adopt emerging good practices on naturerelated financial disclosures and target setting. 2) Circular economy, pollution and waste: Creating a circular economy that limits pollution and waste, such as plastic pollution, and promotes re-use and recycling is critical in reducing the intensity of natural resource consumption and alleviating environmental pressures. We engage to encourage companies to minimise waste and pollution, and to promote circularity. 3) Sustainable food and water: The world's food system must transform to meet population growth, and address malnutrition and other health risks. Moreover, the food and water system is both at risk from climate change and is a significant contributor to greenhouse gas emissions and other environmental pressures; for example, through the use of fertilizer and pesticides. We engage to promote a food and water system that is more environmentally sustainable, healthy, and better able to meet the needs of a growing population. 4) Deforestation: Forests are an important carbon sink and they also play a critical role in the earth's water cycle and in sustaining biodiversity. Deforestation is a major contributor to greenhouse gas (GHG) emissions and biodiversity loss. We expect companies to eliminate exposure to commodity-driven deforestation and to promote the sustainable management of forestry assets. Where appropriate, we will seek to align our engagement expectations with those of major collaborative initiatives such as the Taskforce on Nature-related Financial Disclosures, Science-Based Targets for Nature and Nature Action 100+."

UBS

Proxy Voting Summary Policy and Procedures, March 2022⁴

"We may vote in favor of proposals put forward by shareholders that seek to promote good corporate citizenship and environmental stewardship, while enhancing long-term shareholder and stakeholder

⁴ This document, previously available at this URL, was unavailable at the time of publication.

value... We will generally support resolutions seeking the following actions by companies: Report on company policies and implementation practices related to biodiversity, including deforestation.

Thought Leadership and Other Resources on Biodiversity

Amundi, July 2022

There is no place like Earth: How investors can address biodiversity loss

AXA, September 2022

Biodiversity loss: Understanding and responding to a global systemic risk

BlackRock, April 2022

Hello, biodiversity

Candriam, September 2022

Next Stop: Biodiversity

HSBC, June 2021

Time to invest in biodiversity

HSBC, September 2022

COP15 on biodiversity

Impax, February 2022

Just too complex? Addressing biodiversity loss and the role of investors

Jupiter, October 2021

Biodiversity: Sustainable investing's new frontier?

Jupiter, April 2022

Safeguarding Biodiversity: Taking a leaf out of climate initiatives

LGIM, May 2022

Biodiversity: an intergovernmental COP out?

Nuveen, October 2021

Nuveen Natural Capital: sustainability practices and policies

Robeco, January 2022

Robeco launches biodiversity paper and teams up with WWF-NL

Schroders, July 2021

Nature has a value. We must account for it

About Morningstar Manager Research

Morningstar's global manager research team conducts objective, qualitative analysis of managed investment strategies such as mutual funds and exchange-traded funds. Manager research analysts express their views through the Morningstar Analyst Rating, which takes the form of Gold, Silver, Bronze, Neutral, or Negative. The analysts arrive at a strategy's Analyst Rating by assessing key areas including its management team and supporting resources (People Pillar), its investment approach and rationale (Process Pillar), and the investment organization backing the strategy concerned (Parent Pillar). The analysts juxtapose those assessments with the strategy's cost in arriving at a final Analyst Rating, which expresses their conviction in the strategy's ability to outperform a relevant benchmark index or category peers over a market cycle, adjusted for risk. The Morningstar Analyst Rating methodology is forward-looking in nature and applied consistently across geographies and markets. (The Analyst Rating is an opinion, not a statement of fact, and is not intended to be nor is a guarantee of future performance.)

About Morningstar Manager Research Services

Morningstar Manager Research Services combines the firm's fund research reports, ratings, software, tools, and proprietary data with access to Morningstar's manager research analysts. It complements internal due-diligence functions for institutions such as banks, wealth managers, insurers, sovereign wealth funds, pensions, endowments, and foundations. Morningstar's manager research analysts are employed by various wholly owned subsidiaries of Morningstar, Inc. including but not limited to Morningstar Research Services LLC (USA), Morningstar UK Ltd, and Morningstar Australasia Pty Ltd.

For More Information

ManagerResearchServices@morningstar.com



22 West Washington Street Chicago, IL 60602 USA

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, call +1 312 696-6869.