



ESG VIEWPOINT

Biodiversity Best Practice and Engagement Approach



Harry Ashman
Vice President,
Responsible Investment



Joe Horrocks-Taylor
Senior Associate,
Responsible Investment

At a glance

- > The Earth's biodiversity is dwindling at an alarming rate with companies contributing to the loss and facing increasing nature-related risks to their business models.
- > Nature loss poses financially material risks for asset managers and it's an issue also closely linked to climate change.
- > In this ESG Viewpoint we explore how biodiversity risks can be assessed, outline our approach to engaging with businesses on the topic and detail our best practice framework.

Engagement and voting efforts as well as expectations outlined in this Viewpoint reflect the assets of a group of legal entities whose parent company is Columbia Threadneedle Investments UK International Limited and that formerly traded as BMO Global Asset Management EMEA. These entities are now part of Columbia Threadneedle Investments which is the asset management business of Ameriprise Financial, Inc.



Overview

The Earth’s biodiversity is dwindling at an alarming rate. Around a **quarter of species** are at risk of extinction by 2050, and global wildlife populations have **plummeted by 69%** on average since 1970.

The **key drivers of biodiversity loss** are climate change, land-use change, pollution, direct exploitation of natural resources, and invasive species. All five drivers are primarily fuelled by corporate activities. Agriculture-driven habitat loss is an identified threat to **24,000 of the 28,000 species** threatened with extinction, **32% of World Heritage Sites** are threatened by mining or oil and gas operations, and **27% of total ecosystem service losses** are due to chemical pollution.

Corporates both contribute to biodiversity loss and face increasing nature-related risks to their business models due to financial dependencies on nature. **Nature contributes** between US \$44 trillion and \$150 trillion to the world’s economy each year – the loss of nature-based services poses severe risks for business. Pandemics such as **COVID-19 are made more likely by habitat loss**, wildlife trafficking and humanity’s destruction of biodiversity, and **75% of agricultural crops, worth \$2.4 trillion** rely on insect pollination which is threatened by **declining insect populations**.

“Biodiversity” and “nature”

Following social and industry trends, we tend to use the terms “biodiversity” and “nature” interchangeably. Biodiversity is a term used to describe the enormous variety of life on Earth, including plants, bacteria, animals, and humans. It can also be used more specifically to refer to all the species in one region or ecosystem (an interacting system of organisms and the physical environment). Nature tends to be far broader, encompassing all living beings as well as the features, processes and forces that exist on Earth. Given the presence and characteristics of both living entities and natural processes provide risks and value to human activity, both are relevant to us as investors, so we will use the terms biodiversity and nature throughout this piece.

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Why nature is a material risk for asset managers



Learn how we assess enterprise level exposure



How have we engaged on nature issues



Understand our best practice framework



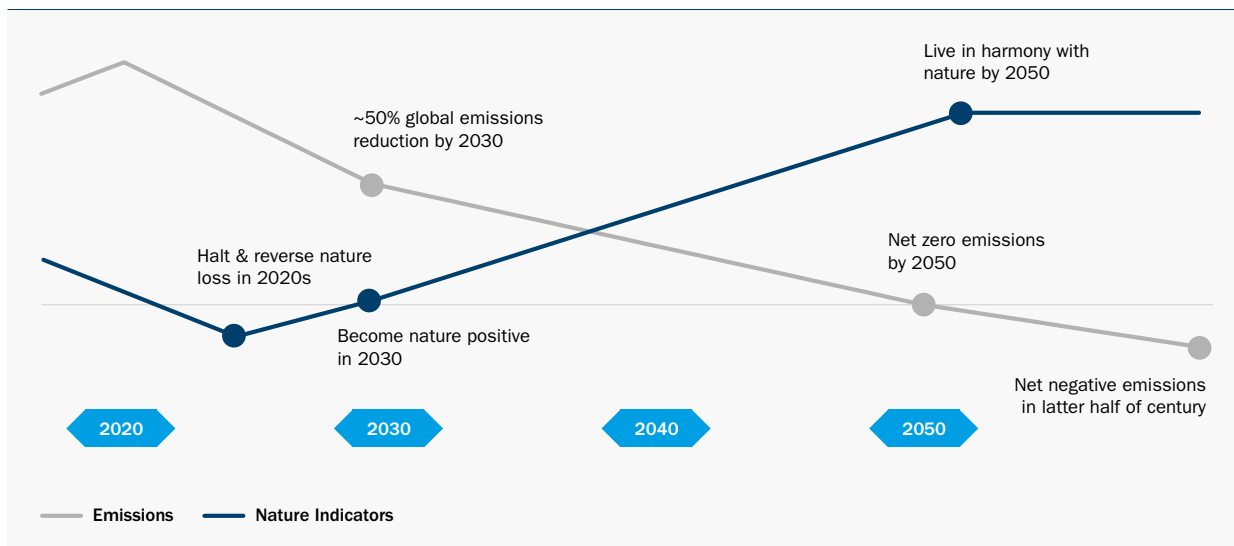
A material risk for asset managers

Just like climate change, nature loss poses financially material risks for asset managers. It can impact the underlying performance of the assets we invest in through multiple risk and opportunity pathways. We have built upon our experience in engaging on and building models to assess climate change issues and seek to address both themes in together where relevant.

Given the significant contribution of the destruction of natural carbon sinks and land-use activities towards global greenhouse gas emissions, and the potential for nature-based solutions to assist physical resilience and

carbon sequestration, it is clear we must tackle both issues in tandem. 61% of our engagements on nature issues in the first ten months of 2022 also covered climate change.

Pathways to a sustainable planet



We view action to combat nature loss as a key component of our decarbonisation approach.

As a signatory to the Net Zero Asset Managers Initiative, with a 2050 net zero target for our investment portfolios, we view action to combat nature loss as a key component of our decarbonisation approach and the twin pathways of net zero and nature positive guide much of our approach to environmental issues.

Addressing the impacts that our investments have on biodiversity loss and managing the risks that it poses to financial performance, is a key component of our Environmental Stewardship approach. Unlike climate change there is no one key measure of progress, and whilst regulations and global agreements on nature issues have long been in place, international consensus and focus on the topic has drifted. The development of the post-2020 Global Biodiversity Framework should provide clarity for policymakers and corporates on the levers and level of ambition required. This will help investors to more clearly identify risks and impacts among investee companies and inform our engagement.

We are aware that investors and broader society need to step up efforts as the magnitude of the biodiversity crisis grows, and we will look to align our engagement approach with the Global Biodiversity Framework goal of reversing biodiversity loss by 2030. Our engagement approach will also be shaped by the Nature Action 100 initiative, of which we are one of eleven Lead Investors¹. This collaborative initiative will focus on engaging companies in key sectors with the largest impacts and dependencies on nature to ensure they are taking timely and necessary actions to protect and restore nature and ecosystems.

¹ <https://www.ceres.org/news-center/press-releases/secretariat-selected-collaborative-global-investor-engagement-initiative>

Assessing our enterprise-level exposure

To understand the exposure of our equity and corporate fixed income investments to biodiversity impacts and dependencies, we conducted a heatmap assessment using the [UNEP-WCMC ENCORE tool](#). This assessment identified the sectors we invest in which have the most substantial exposure to nature impacts and dependencies in their operations and supply chains, namely the Food, Beverage & Tobacco, Utilities, and Materials sectors, informing where we focus our engagement and analysis efforts. The Dependency score ranks sectors according to how dependent their businesses are on ecosystem services, whilst the Impact score reflects the severity of impacts that these firms have on biodiversity through their operations and value chain.

Table 1: Columbia Threadneedle invested GICs industry groups ranked by their dependency and impact on biodiversity out of 24 industry groups assessed (internal analysis based on ENCORE data)

Sector	Dependency rank	Impact rank
Food, Beverage & Tobacco	1	6
Utilities	2	23
Materials	3	2
Energy	4	1
Household & Personal Products	5	7
Telecommunication Services	6	19
Transportation	7	3

Source: Columbia Threadneedle Investments analysis based on ENCORE data



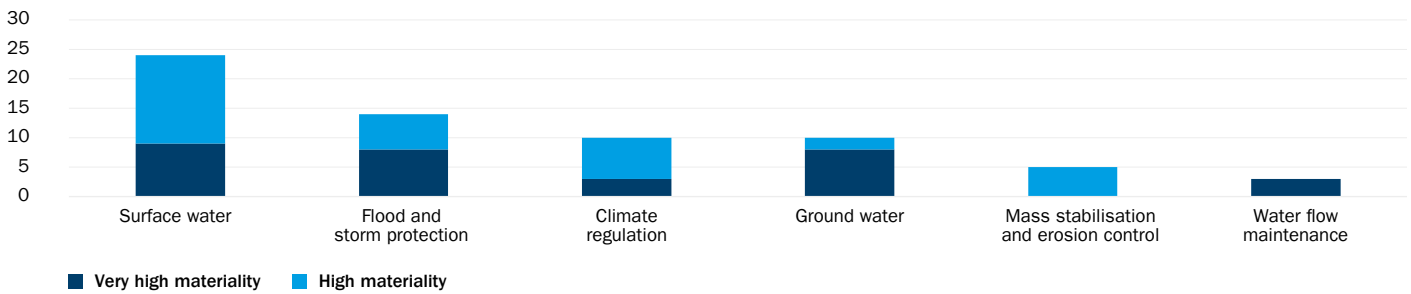
We can see that many sectors we are exposed to through our equity and fixed income investments have a very high dependency on ecosystem services, indicating that the protection of these services is extremely important for the ongoing viability of many businesses. This strengthens the business case for actions to mitigate this risk, either by changing inputs or operations to reduce dependencies or by acting to protect the provision of the relevant ecosystem service as a whole.

In contrast, a higher percentage of our aggregate equity and fixed income investments are in sectors that contribute to the

key drivers of biodiversity loss. Negative impacts can be a material risk, and are an important engagement focus in view of growing regulatory and reputational risks.

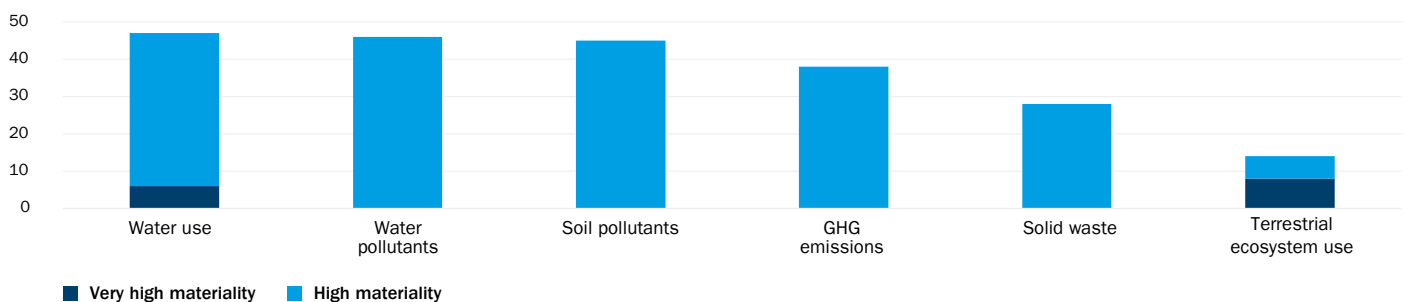
It should be highlighted that the above data is at the sector level and does not indicate the relative performance of our specific holdings within each sector. We are in the process of expanding our biodiversity modelling capability to measure the quality of individual issuers' management of these issues to help us identify the best performers and prioritise engagement objectives. Both our modelling and engagement draws on the best practice framework in this paper.

Graph 1: Reliance on key ecosystem services across Columbia Threadneedle's investment portfolios (by percentage of equity and corporate fixed income book). Figures are indicative, based on sector-level dependency data.



Source: Columbia Threadneedle Investments analysis based on ENCORE data

Graph 2: Impacts on nature among Columbia Threadneedle's investment portfolios (by percentage of equity and corporate fixed income book). Figures are indicative, based on sector-level impact data.



Source: Columbia Threadneedle Investments analysis based on ENCORE data

The complexity of nature-related issues requires a clear focus on the materiality of specific issues for each holding.

Engagement on nature issues

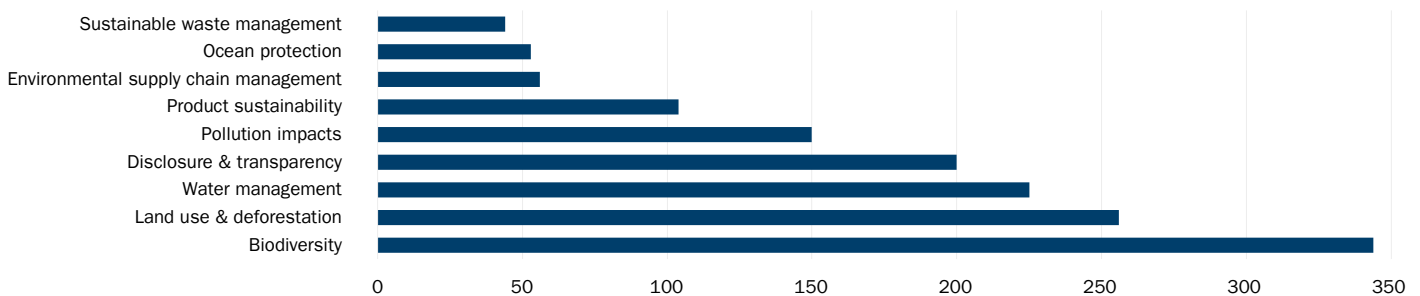
The complexity of nature-related issues requires a clear focus on the materiality of specific issues for each holding, and the risks and opportunities they entail. This approach also comes through strongly in the Taskforce on Nature-related Financial Disclosures (TNFD) and Science Based Targets for Nature² frameworks. The range of nature-related issues is clear from Graph 3 showing the topics covered in engagement so far in 2022, across 608 engagements with 391 issuers. We have also had a biodiversity voting policy for the past two years which enables us to reinforce our engagement messages. This policy flags companies with the high exposure to and insufficient disclosure on nature-related risks for votes against management.

A notable engagement theme is land use change and deforestation, a key driver of biodiversity loss, social issues and emissions. This includes our work in automotive value chains³; where leather is an

important source of deforestation risk that has received far less attention than deforestation linked to the food industry. Our work on other drivers of deforestation includes collaborations through the PRI's Soft Commodities Practitioners Group⁴, Ceres' Working Group on Land Use and Climate⁵ and the Investor Policy Dialogue on Deforestation⁶.

Our research on our holdings' dependencies and impacts also emphasised the importance of water, in terms of sectors being both reliant on and negatively impacting water-related ecosystem services, from the provision of adequate, good quality water resources and habitats to its natural regulation. Up to October 2022 we had engaged 183 issuers on water management and ocean protection. As the physical effects of climate change increase these will become topics of growing importance. Several of our funds also invest in solution providers in this area, such as companies producing innovative leak detection and waste water treatment services.

Graph 3. Nature-related topics covered in engagements. Jan-Oct 2022



Source: Columbia Threadneedle Investments analysis based on internal active ownership team engagement data

² <https://sciencebasedtargetsnetwork.org/wp-content/uploads/2020/11/Science-Based-Targets-for-Nature-Initial-Guidance-for-Business.pdf>

³ <https://www.columbiathreadneedle.co.uk/en/inst/insights/esg-viewpoint-drivers-of-deforestation-putting-the-brakes-on-deforestation-in-automotive-supply-chains/>

⁴ [PRI | Sustainable land use \(unpri.org\)](https://www.unpri.org/)

⁵ <https://www.ceres.org/climate/food/land-use-and-climate-working-group>

⁶ <https://www.tropicalforestalliance.org/en/collective-action-agenda/finance/investors-policy-dialogue-on-deforestation-ipdd-initiative/>

Evolving best practice

Drawing on our analysis of relevant issuers’ exposure, disclosure and management approach, we have developed engagement objectives with reference to the best practice framework below. As this is a nascent issue we expect to refine this framework over the coming years.

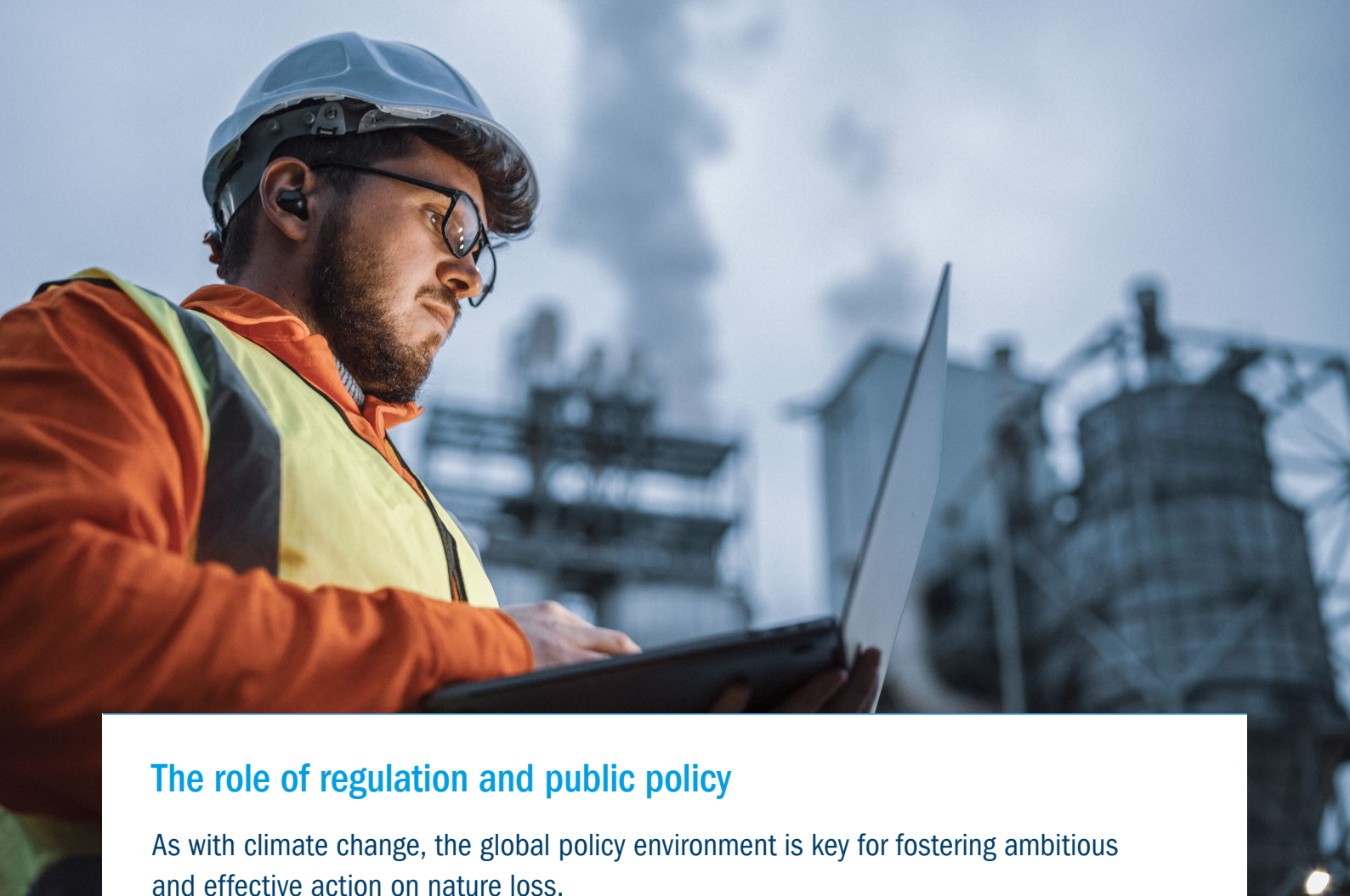
Currently only **3%-12% of European and US companies** report anything on biodiversity, and even when companies do report, the information is **often not specific, measurable, or time-bound**, making it difficult to determine business impacts. Improved

measurement and disclosure of nature issues is key for investors to understand risks and impacts, issuers to develop and communicate impactful strategies and all parties for tracking progress.

Biodiversity strategy component	Best Practice
<p>1 Ambition to be nature positive</p> <p>Leading companies announce concrete ambitions to reduce, reverse and restore all negative impacts on nature by 2030 – aligned with the Mission 2030 in the Global Biodiversity Framework proposed at the UN Convention on Biological Diversity COP15 in December 2022.</p> <p>The best commitments are accompanied by clear metrics for progress tracking, and include all current and future operational assets and material supply chain impacts on nature. To be nature positive, businesses must fully understand their current biodiversity footprint, set an ambitious biodiversity target and a timeline to get there, and then commit resources to make changes and transparently report on progress.</p>	<p>IUCN Biodiversity Positive (ongoing) Business for Nature – How business and finance can contribute to a nature positive future now Ermgassen et al 2022</p>
<p>2 Set short-, medium- and long-term targets to address nature loss</p> <p>The most robust biodiversity ambitions are backed up by a series of targets covering short, medium and long-term timeframes⁷ to ensure immediate action, ongoing momentum, and a clear direction of travel. Strong targets cover the most pertinent impacts an organisation has on biodiversity through its operations and value chain.</p> <p>We suggest that companies use the forthcoming Science Based Targets for Nature (SBTN) framework to prioritise impact areas and set targets. Targets should follow the mitigation hierarchy by successively prioritising avoiding then reducing impacts on biodiversity, before seeking to restore and regenerate biodiversity. In line with the SBTN biodiversity hub working guidance, companies should consider how they approach their new, on-going and historical impacts on biodiversity when setting targets.</p>	<p>Science Based Targets for Nature – Initial Guidance Accountability Framework – deforestation targets Contextual Water Targets IUCN Review Protocol for Biodiversity Net Gain</p>
<p>3 Risk and impact assessment</p> <p>Companies should locate their interactions with nature, evaluate their dependencies and impacts, and assess their material nature-related risks and opportunities to provide investors with a full picture of the issue. Given the growing understanding and current data quality issues we expect this to be an iterative process, with companies initially conducting heatmapping exercises to identify their most material nature-related impacts, dependencies, and risks. Ultimately the best disclosure will evolve to be a location-specific process, with companies following emerging scenario-analysis guidance to assess how their exposure to risks and opportunities will shift over the short-, medium- and long-term.</p> <p>Companies should use this analysis to appraise their current strategies to capitalise on opportunities and mitigate risks, with this process overseen by the Board of Directors or a relevant committee and incorporated into the company’s regular risk management processes. The company should clearly link this assessment process with its strategic decision-making.</p>	<p>TNFD LEAP Framework IUCN’s Guidelines for planning and monitoring corporate biodiversity performance</p>

⁷ Timeframe definitions are as follows; Short term, up to 2025; Medium term, 2026-2035; Long term, 2036-2050

4 Disclosure of biodiversity-related impacts, risk and opportunities	
<p>Biodiversity leaders disclose full details of their related risks and impacts on biodiversity, including upstream, operational and downstream impacts where material. Where possible, we encourage the disclosure of past performance and future projections to help investors understand company trajectories. In the medium-term the efforts of organisations like the TNFD and ISSB will help to streamline the use of different biodiversity metrics, but in the short-term we still expect corporates to disclose sufficient data to enable investors to appraise their exposure to nature-related risks and impacts, especially through the CDP Forests and Water questionnaires.</p> <p>We encourage corporates to extend their disclosures beyond output metrics to outcome and impact metrics, and expect corporates to disclose how they impact on different facets of biodiversity (e.g. habitats, species abundance, species richness).</p>	<p>TNFD – A Landscape Assessment of Nature-related Data and Analytics Availability</p> <p>European Taxonomy</p> <p>GRI metrics</p>
5 Develop robust policies and procedures	
<p>Policies should be developed to govern the avoidance and management of activities that may (directly or indirectly) cause significant land use change, overexploitation of species, facilitation of invasive species or fragmentation of ecosystems. Particular care should be taken to avoid disruptive operations in protected areas (IUCN categories I-IV), key biomes or internationally recognised areas such as natural UNESCO World Heritage Sites and to avoid contributing to reductions of any Critically Endangered or Endangered Species on the IUCN Red List of Threatened Species.</p> <p>Policies should be implemented through a clear procedural framework. For operational impacts this may include pre-construction procedures for evaluating ecological impacts in EIAs/ESIAs and inclusion in Environmental Management Plans, and operational procedures for setting Biodiversity Action Plans and Water Management Plans. For value chain impacts this could include due diligence processes, grievance mechanisms, whistle-blowing processes, and processes for including biodiversity impacts in product Life Cycle Assessments.</p>	<p>Examples of biodiversity policies and procedures:</p> <ul style="list-style-type: none"> - Biomass sourcing policy - Deforestation policy - Biodiversity policy
6 Disclosure of a clear biodiversity strategy	
<p>Companies at the forefront of tackling nature loss are setting a clear, quantitative strategy to address impacts on and risks from nature loss, including links to capital allocation and material sourcing decisions. Good quality plans include details of the specific actions companies will take to reduce risks and impacts and changes in operations, products or spending. The most thorough plans also consider the links between climate change and nature loss, as well as other issues like physical risks, water issues and social impacts. They are also avoiding the trap of using offsets and nature based solutions as a quick fix to both the biodiversity and climate crises, and are taking a well considered approach to their use, following best practice and prioritising mitigation of impacts.</p> <p>Best practice is for companies to align capex decisions with biodiversity-related goals as well as climate goals, for example by ensuring they are not entering protected areas or causing significant damage through project implementation. As the Post-2020 biodiversity framework is finalised it will become clearer how companies can align their capex decision making with its goals and ensure long term compliance and resilience.</p>	<p>IUCN Biodiversity offsets policy</p> <p>Columbia Threadneedle: Nature as an ally: tackling the climate-nature nexus</p> <p>Columbia Threadneedle: Principles for carbon offsetting</p>
7 Demonstrate how policy engagement is aligned with corporate and global goals on biodiversity	
<p>To ensure an accommodating regulatory environment companies should align their direct and indirect lobbying efforts with their stated nature targets and the Post-2020 biodiversity framework ambition to halt and reverse the loss of nature by 2030. Best practice is to disclose any lobbying that takes place on biodiversity relevant policies, efforts to ensure that industry associations also align with the global goal, and a process to address any misalignments.</p>	<p>InfluenceMap assessment of Industry Association's engagement on biodiversity-related policy</p> <p>The Investor Expectations on Corporate Climate Lobbying are a good framework for all lobbying disclosures</p>
8 Demonstrate robust and effective board oversight and governance of nature related issues	
<p>Where nature impacts or dependence are a material issue, Boards should demonstrate oversight of biodiversity matters via an executive committee member, CEO or committee with explicit responsibility for biodiversity that reports directly to the board. As board understanding of corporate biodiversity impacts and risks may be more nascent than climate, a clear competency review and training programme may need to be implemented.</p> <p>The strongest executive compensation approaches link the measures for the CEO and at least one other senior executive specifically to biodiversity, including a KPI on progress towards a company's biodiversity targets.</p>	<p>ESG Viewpoint – Should 'doing good' pay out? Linking executive pay to ESG metrics</p>
9 Social due diligence and engagement	
<p>Our expectation that companies implement robust policies for conducting human rights due diligence, adhere to the UN Guiding Principles on Business and Human Rights and commit to ensuring Free, Prior and Informed Consent is particularly relevant for nature-related issues. Land rights, the provision of ecosystem services and the cultural significant of natural features should all be taken into account as part of a company's nature-related due diligence.</p> <p>Companies with the most advanced approach actively seek input from all stakeholders when developing their nature strategies and on operational decisions that may have an impact on nature. Indigenous communities are amongst the world's most important and effective stewards of biodiversity, and should play a key role in these conversations.</p>	<p>International Labour Organization Indigenous and Tribal Peoples Convention</p>



The role of regulation and public policy

As with climate change, the global policy environment is key for fostering ambitious and effective action on nature loss.

Recognising pollution as a key environmental issue and driver of biodiversity loss, we signed a letter facilitated by the WWF, Ellen McArthur Foundation, and BCG to UN Member States to demonstrate our support for a UN Treaty on plastic pollution to harmonise regulations and standards to support governments and companies to move to a circular approach and address plastic waste. This initiative has since advanced into a formal UN decision to explore options for a treaty.

We are members of the Taskforce on Nature-related Financial Disclosures Forum and have provided detailed feedback on both draft versions of the framework which have been published to date. We share the widespread expectation that TNFD will become adopted by regulators as a mandatory framework for many issuers. In anticipation we will continue piloting the framework with other leaders on biodiversity in the financial sector.

With time rapidly running out to avoid the collapse of key ecosystems the implementation of a framework for nature action equivalent to the Paris Agreement's temperature goals and would be a great achievement. The mechanics of how goals may be measured, funded and achieved will be vital for ensuring greater success than the previous set of global biodiversity goals⁸, which remain unmet. We will continue to engage with companies and with the wider public debate on this critical issue.

We are members of the Taskforce on Nature-related Financial Disclosures Forum.

⁸ <https://www.theguardian.com/environment/2020/sep/15/every-global-target-to-stem-destruction-of-nature-by-2020-missed-un-report-aoe>

Get to know the authors



Harry Ashman, Vice President, Responsible Investment

Harry joined the Responsible Investment team in 2022 and covers engagement with extractive sectors, focusing on climate change and natural capital. He previously worked on environmental strategy and engagement at the Church Commissioners for England, having previously set up the Capgemini Group's sustainable innovation and consulting programme. He enjoys running, water sports and exploring the great outdoors with his dog, Woody.



Joe Horrocks Taylor, Senior Associate, Responsible Investment

Joe joined the Responsible Investment team in 2021 and is focusing on climate change and biodiversity. Before joining us, Joe worked as a sustainability consultant with a range of private and public sector clients. Outside work he enjoys playing sport, hiking and birdwatching.

Contact us

 columbiathreadneedle.com

 Follow us on LinkedIn

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