CAMRADATA
A With Intelligence Company

Biodiversity Whitepaper

Sponsored by

Amundi
ASSET MANAGEMENT

redwheel

Clear and Independent Institutional Investment Analysis

We provide institutional investors, including pension funds, insurance companies and consultants, with data and analysis to assess, research and report on their investments. We are committed to fostering and nurturing strong, productive relationships across the institutional investment sector and are continually innovating new solutions to meet the industry's
complex needs.

We enable institutional investors, including pension funds, insurance companies and consultants, to conduct rigorous, evidence-based assessments of more than 5,000 investment products offered by over 700 asset managers.

Additionally, our software solutions enable insurance companies to produce consistent accounting, regulatory and audit-ready reports.

To discuss your requirements

+44 (0)20 7832 6517
info@camradata.com
LinkedIn
@camradata

camradata.com

© Copyright CAMRADATA Analytical Services December 2023
This marketing document has been prepared by CAMRADATA Analytical Services Limited ('CAMRADATA'), a company registered in England & Wales with registration number 06651543. This document has been prepared for marketing purposes only. It contains expressions of opinion which cannot be taken as fact. CAMRADATA is not authorised by the Financial Conduct Authority under the Financial Services and Markets Act 2000.CAMRADATA Analytical Services and its logo are proprietary trademarks of CAMRADATA and are registered in the United Kingdom. Unauthorized copying of this document is prohibited.

Contents

Welcome to CAMRADATA's Biodiversity Whitepaper

If climate change was the institutional investment watchword of the 2010s, biodiversity has stolen the headlines in the latest decade as investors grapple with the risks and challenges posed by its potential demise.

According to National Geographic,[1] the term biodiversity describes the enormous variety of life on Earth. It can refer to life as a whole or a very small, specific section of it. Plants, bacteria, animals and humans all fall under the biodiversity banner, with estimates reaching around 8.7 million species in existence.

But while a natural wonder and something essential to our very existence, getting a handle on how biodiversity can be translated to an investment theme has been a complex journey.

With such a broad palette of opportunity and risk, there might be countless ways of expressing the vision of how to either prevent a collapse in nature's vital fabric or to stop even the smallest slip negatively impacting portfolios.

No wonder, then, that investors have preferred a more straightforward approach to environmental issues through decarbonisation or limiting portfolios emissions.

Yet, along with the understanding that maintaining a vast array of biodiversity is essential to every ecosystem on Earth, the concept of investing to ensure this happens is growing in popularity.

In this whitepaper, we will discuss how integrating biodiversity into portfolio construction and allocation might set investors and the planet up for a brighter future.

[1] https://education.nationalgeographic.org/resource/biodiversity/

Meet the Team

Natasha Silva
Managing Director, Client Relations

Amy Richardson
Managing Director, Business Development

Sam Buttress
Associate, Business Development

Sarah Northwood
Marketing and Events Coordinator

Orin Ferguson
Associate, Business Development

Biodiversity Roundtable

The CAMRADATA Biodiversity Roundtable took place in London in November 2023

Changing mindsets on biodiversity

Making long-term investments to protect biodiversity will be crucial to the planet's survival, but investors and asset managers continue to focus on short-term factors...

The financial services industry has made significant progress in moving climate change to the top of the agenda in recent years, but discussions about biodiversity remain years behind.

While some easy wins in biodiversity are still possible, adopting a long-term investment mindset will be essential to making major advancements. The food sector remains one of the biggest drivers of biodiversity loss so introducing solutions to the sector will be crucial.

Biodiversity remains a complex issue and quantifying it is challenging for fund managers. Paul Williams of the Natural History Museum says "a measure for biodiversity should quantify a value that is shared broadly among the people for whom the issues at hand are important. One such value is to ensure continued possibilities for adaptation and for use by people in a changing and uncertain world".

While translating concern for nature into an investment theme has advantages, the broadness of biodiversity gives way to countless underlying opportunities and risks. This can put off investors that prioritise clear-cut approaches to ESG issues from engaging with biodiversity-led investments.

CAMRADATA invited industry leaders and experts to discuss approaches to mitigating biodiversity loss and how investors can engage with potential solutions while still receiving strong returns in their portfolio.

"A huge amount of discussion and education is needed on biodiversity. Many trustees are at least two years behind in terms of their level of knowledge and ability to engage with the issue compared to climate change," Alex Quant, Head of ESG research and investment consultant with XPS Investments, says. "But while that may feel like a long time, they will catch up quite quickly because they will take a level of learning from their climate change experience."

Bespoke products that focus on specific areas of biodiversity will be key to investors' success.

Leah Worrall, deputy head of sustainable investment insight at Isio, says: "There is growing awareness of biodiversity issues, particularly among local government pension schemes and master trusts that are leading the way. Sometimes climate change can be a good entry into nature, but it does just have to be an entry to avoid encouraging a siloed focus on forestry offsetting, rather than broader biodiversity of plants and animals.

> *"If we don't introduce meaningful reforms to the food sector, there is no chance of preserving biodiversity. It can be very easy to get caught up in the complexities of the challenge, but it is easy to get started in the areas which we know are material for biodiversity and nature, and the food sector is one of them. "*

"Investors will also need to settle on their sustainability priorities. For one investor to tackle the whole world's sustainability challenges is not possible. The way they can try to do that is through a waterfall framework, to focus on the most important sustainability challenges in the portfolio, to then layer additional environmental and social concerns on top of this whilst addressing the synergies and trade-offs."

The simple solutions

The global food system is the primary driver of habitat loss and therefore biodiversity loss, as natural ecosystems continue to be converted into land for crop production or pasture.

Government policies and commercial interests have aimed to produce more food at a lower cost in recent decades, with food production relying heavily on the use of fertiliser and pesticides, reducing the variety of life within agricultural settings.

Ray Dhirani, head of impact management at Tribe, says: "If we don't introduce meaningful reforms to the food sector, there is no chance of preserving biodiversity. It can be very easy to get caught up in the complexities of the challenge, but it is easy to get started in the areas which we know are material for biodiversity and nature, and the food sector is one of them."

Dhirani also notes that small changes can make significant differences when companies adopt a broader stakeholder approach.

"I've been working with a big wind turbine manufacturer," he says. "When they engage in site assessments, simple things such as painting one of the wind turbine blades black results in less disturbance to birds. Changing the colour of one blade costs them almost nothing but it can lead to a reduction of harmful effects on biodiversity. There are some very challenging areas that need to be investigated within nature and biodiversity, but there are also some easier wins."

Lee Backhouse, senior manager of responsible investments for Scottish Widows, says asset managers currently have a window of opportunity before biodiversity-related reporting regulations come into force.

"The Taskforce on Nature-related Financial Disclosures (TNFD) remains voluntary, giving the industry the benefit of flexibility and room to adapt as internal understanding of the framework evolves – it's the perfect time to become familiar with the framework," he says. "In the absence of policy and regulation, early focus on biodiversity is increasingly being driven by recognition of how action in the area is essential in meeting net-zero targets."

Dhirani also says firms should be willing to explain that a listed equity fund can only solve part of the problem of biodiversity loss at large.

> ***“We as investors haven’t yet defined what good practice looks like for companies on biodiversity. There’s a lot we can learn from climate engagement to draw out best practices, from collective action, in making sure we are harnessing not just pension schemes but global investors, as well as thinking about escalation processes”***

“People who say their firm offers the one thing you need to invest in to solve the biodiversity crisis have got it wrong,” he says. “A fund can push as much as it can into the space, but there will always be gaps and ways to engage with other actors to achieve the goal. If funds were open and honest about that, it would make a substantial difference.”

The challenges ahead

Supporting biodiversity means different things in different regions and ecosystems. Similarly, different markets across the world are at different stages of their biodiversity journey.

Cherry Muijsson, client CIO for the EMEA pensions team within multi-asset strategies and solutions at BlackRock, says: “I cover the UK, but also the Netherlands and the Nordics where this has been a big topic already and has come under some pressure from the regulators, particularly in the Netherlands.

“People care about biodiversity and it is easier for investors to understand than climate change. People relate to it more, but that doesn’t help with the complexity of adding it to a portfolio.”

Muijsson adds that constructing portfolios that take into account how much of nature is reflected in asset prices and risk and return considerations is essential for some clients.

Amanda O’Toole, portfolio manager of the Redwheel Biodiversity Strategy, says she launched a biodiversity strategy following recognition of a growing interest from climate tech company management teams in both the measurement and implications of their biodiversity footprint and exposures.

“It’s important to think about your impact and dependency on nature and the risks associated with this, to try to build that out by location – rather than talking in broad brush terms about biodiversity, which helps no one,” she says. “By mapping your dependency on nature services you can move forward. As an investor It enables you to look at how you can reduce your physical risk or dependency, by selecting businesses in areas where perceived risk is lower.”

Caroline Le Meaux, global head of ESG research, engagement and voting at Amundi, says firms must take a bottom-up approach to incorporating biodiversity into their investments.

“It’s easy to get stuck in the data conversation. The problem is the market has developed data solutions to meet regulatory requirements, for us to be able to do some reporting, but that is very top-down and proxy-orientated,” she says. “Using very top-down footprints, they take an angle that doesn’t focus on what the company is really doing. So, after this first phase, there needs to be a second, bottom-up phase that entails a discussion directly with investees for them to disclose their own footprints.

“The top-down approach is good for awareness but not for what we need to make a real impact. We need to be very prudent when assessing biodiversity data because sometimes it gives the wrong impression.”

O’Toole also highlights that data sets must be at the manufacturing plant level rather than at the company level.

“I need to be able to think about each KPI – and there are many KPIs – for each vector that depletes biodiversity, specifically in terms of location because otherwise it is meaningless,” she says. “The difference between being in the centre of a city like Rio de Janeiro compared to an hour outside it, is everything.”

Despite the complexities, Muijsson says many trustees and pension schemes have made the decision to set secondary objectives.

“Biodiversity is a big theme and trustees want to react to it, but they face barriers that include looking at the taxonomy of importance and what data they should be using to avoid doing significant harm,” she says. “Take the energy transition as an example – think about how much land it would require and the specific minerals you would need to mine. There are huge complexities to work through.”

Nature positive

Nature positive refers to a system where nature, species and ecosystems are being restored rather than degraded. This requires enhancing the resilience of our planet and societies to halt and reverse nature loss.

Worrall argues that regulators and experts may draw hard lines on stewardship and engagement on climate-related issues. However, nature-related discussions are still in their early stages.

“We as investors haven’t yet defined what good practice looks like for companies on biodiversity. There’s a lot we can learn from climate engagement to draw out best practices, from collective action, in making sure we are harnessing not just pension schemes but global investors, as well as thinking about escalation processes,” she says. “There has been a lot of discussion about engagement being the preferred approach in the climate sphere, versus divestment, but most managers will actually escalate to selective company disinvestment where these companies are unresponsive to engagement.

“All of that is still being worked out in the nature space by groups such as Nature Action 100. These will probably start to set the tone, but we’re very early in that. It’s unlikely that those engagements will look like the sort of engagements we’re doing on climate.”

As such, expectations are low for companies to be nature positive, and Backhouse argues that any one company cannot claim to be nature positive, but can rightfully claim to contribute to a global goal through credible action..

“We have a movement targeting the concept – the Nature Positive Initiative – that will work to establish a common definition and standardised use of the term, bringing with it a level of much-needed integrity. With WBCSD sector guides, their work will serve as a baseline for us to consider when engaging with corporates. However, this will not be the be-all-and-end all – interpretation is likely to remain fluid and we must remain alert to regulatory expectations,” he says.

Le Meaux says that while some companies, such as the mining companies that are essential for gathering minerals needed for the energy transition, will never be nature positive, there are still routes to lowering their impact.

“If another industry has a positive nature impact, then the mining company could continue to have a negative impact without it being as much of a problem,” she says. “As with climate, we need to accept some sectors will always be negative – but they need to manage their impact and lower it as much as possible.”

Worrall also stresses that accepting less than perfection is an important step in the biodiversity journey.

“If we get too caught up in searching for the perfect data or making the perfect investment decision, in relation to biodiversity, it will slow everything down,” she says. “Beyond this, it is worth noting there has been a significant increase in passive investments in recent years.

“No one here would argue that a biodiversity impact investment is a great solution, employing active management and typically concentrated in private markets. But if you’re trying to target the mass market, there must be a role for passive. Passive funds have a long way to go in their approach to biodiversity and there is a lot we could be doing – for example, from improving biodiversity data and its integration into indexation, to active ownership in improving biodiversity practices, including introducing hurdles that set expectations companies will need to achieve by 2030, whilst layering this alongside other considerations, such as climate optimisation and social factors. That is extremely important if we want to encourage widespread investment.”

Dhirani says it’s important to learn from the communities that currently live in harmony with nature.

“It is not fair to say that humans will always cause a net depletion of nature because that is not necessarily true,” he says. “If we can learn from those communities that are able to exist without causing biodiversity loss, and there are examples of indigenous communities all over the world that do, that would be very helpful.”

Long-term planning

While some of the effects of biodiversity loss are already beginning to be felt, in financial services the impact can seem a long way off. Losing habitats and the species that live in them will have a trickle-down effect on humans, so working now to prevent issues in the future is essential.

Le Meaux highlights that a change in executive remuneration will help push companies towards adopting a long-term mindset.

"Our current system creates short-term incentives. Boards and top executives are paid based on those incentives, such as looking at cash flow generation over one to five years," she says. "By definition, they are not paid to think long-term so we need to change that including the focus on quarterly results."

Muijsson emphasises the need for forecasting based on nature-based scenarios, similar to the work done on climate-based scenarios.

"That will help guide us when thinking about what the coming years will potentially look like, which would then help investors to plan," she says. "The TNFD is working on modelling but at this stage there is policy uncertainty and there is not anything people can fully agree on. We want to understand what the world might look like in 20 years, which includes the impact of both improving and worsening physical and transition risks."

Quant also highlights the nature-positive solutions that already exist.

"Enabling all investors to get access to truly liquid long-term solutions helps because that is where real positive impacts can be achieved," he says. "People would leap at the opportunity to invest in those, but they need support."

That support should be delivered via policy and a strong industry commitment, according to Backhouse.

"Through effective use of the policy toolkit, the government's reforms could certainly help present attractive illiquid investable opportunities for DC defaults in a way which creates demonstrable upside for beneficiaries. Industry commitment to the Mansion House Compact is key," he says.

O'Toole argues that the focus over the coming years will be on habitat change and restoration as well as the impact we have on water. "Those are the vectors that can be most readily addressed in terms of measurement and adopting solutions for best practice."

> ***"Enabling all investors to get access to truly liquid long-term solutions helps because that is where real positive impacts can be achieved, people would leap at the opportunity to invest in those, but they need support."***

Bringing your content to life

Deliver your thought leadership exclusively to the institutional investor market through the Knowledge Bank feature on CAMRADATA Live.

A free service for subscribing Asset Managers to upload content including articles, whitepapers, podcasts and videos as well as the opportunity to feature in our weekly newsletter with full 360 reporting. Share your knowledge, your way, with the people that matter.

info@camradata.com

CAMRADATA

Roundtable Participants

Caroline Le Meaux

Global Head of ESG Research, Engagement and Voting

Personal Profile

Caroline Le Meaux joined Amundi in July 2019 and takes responsibility of the ESG Research, Engagement and Voting team. She was previously head of the long-term investment department at the pension division of Caisse des Dépôts et Consignations (CDC) which is the fiduciary manager of several French pension funds including Ircantec and RAVGDT. She was notably in charge of the SRI strategy, ESG and climate policy.

Before that, she was director of investment at FRR Fonds de Réserves des Retraites from 2011 to 2014. She was formerly fund manager at BNPPAM, managing Small and Mid Caps European equities and has been head of quantitative analysis for European equities.

Caroline Le Meaux began her career at Paribas Asset Management ; she is a CFA (Chartered Financial Analyst) and is a graduate of Paris IX Dauphine University.

Company Profile

Amundi, the leading European asset manager, ranking among the top 10 global players[1] , offers its 100 million clients – institutional, corporate and retail - a complete range of savings and investment solutions in active and passive management, in traditional or real assets. With its six international investment hubs[2] , financial and extra-financial research capabilities and longstanding commitment to responsible investment, Amundi is a key player in the asset management landscape. Amundi clients benefit from the expertise and advice of 5,400 employees in more than 35 countries. A subsidiary of the Crédit Agricole group and listed on the stock exchange, Amundi currently manages over £1.7 trillion of assets[3] .

[1] Source: Source: IPE "Top 500 Asset Managers" published in June 2023, based on assets under management at 31 December 2022

[2] Boston, Dublin, London, Milan, Paris and Tokyo

[3] Amundi data as at 30/09/2023

Amanda O'Toole

Portfolio Manager, Redwheel Biodiversity Strategy

Personal Profile

Amanda joined Redwheel in April 2023 as a Partner and Portfolio Manager. She will manage the Redwheel Clean Economy strategy and Redwheel Biodiversity strategy. Her ambition for the role is to protect the planet's biodiversity and help drive the global transition to a clean economy through her investment process.

Prior to Redwheel, Amanda was Portfolio Manager of the Clean Economy and Biodiversity strategy at AXA IM and led as a global specialist on cleantech themes within the internal research team. Before this, she also held appointments as an Analyst at Nevsky Capital and began her career at PriceWaterhouse-Coopers in corporate finance.

Amanda holds a BA (Hons) in Economics from the University of Newcastle Upon Tyne and is an Associate Chartered Accountant.

Company Profile

Redwheel is a specialist, independent investment organisation. Our active investment heritage is built on a foundation of innovation, origination and high conviction.

Our business was established in 2000 with a simple ambition: to create an environment in which exceptional fund managers can operate in a manner that allows them to maximise the benefits of their skills over the long-term.

We have always remained true to that ambition. Today, we have more than 1744 people aligned to that goal, including 57 dedicated investment professionals working across seven independent investment teams.

There are three key attributes that define who we are:

- Autonomy
- Independence
- Ownership

Roundtable Participants

Cherry Muijsson

Vice President, Multi-Asset Strategies and Solutions

Personal Profile

Cherry Muijsson, PhD, is a Client CIO for the EMEA Pensions team within Multi-Asset Strategies and Solutions (MASS).

As Client CIO, Ms. Muijsson delivers the best of BlackRock's investment thinking through strategic asset allocation design, portfolio construction, manager selection and tactical asset allocation. Prior to joining MASS, Ms. Muijsson was a member of BlackRock's Financial Markets Advisory Group (FMA) where she was an engagement manager and a subject matter expert on stress testing and bank balance sheet management, including on high profile studies with official institutions and GSIBs.

Ms Muijsson completed her PhD in Economics at the University of Cambridge focusing on financial stability and factor-based investment strategies. She held various research positions in private and governmental institutions, including at the Dutch Central Bank (DNB) and University of Sydney, and was an academic supervisor at Trinity College Cambridge for the Tripos. Her work has been published in peer-reviewed journals.

Leah Worrall

Deputy Head of Sustainable Investment Insight

Personal Profile

Leah leads on Isio's sustainable research agenda, from nature to social concerns for investors, as well as leading on sustainable advice for some of our largest clients. She has a climate change-focused masters, with over ten years of experience working on sustainability issues, including with market-leading pension schemes over the past few years.

Before moving into the pensions industry, she worked in the thinktank industry, developing sustainability research for government institutions and international banks.

Lee Backhouse

Senior Manager, Responsible Investments

Personal Profile

Lee is part of the Responsible Investment and Stewardship team at one of the UK's leading pension providers Scottish Widows, where he leads the work on nature and biodiversity, with a focus on biodiversity impact assessment, the growth of carbon and nature markets and TNFD.

He authored Scottish Widows' report on nature and biodiversity for the pensions industry and is an active contributor to several nature-focused industry initiatives, advocating for industry-wide action. With a background in investment risk and compliance, Lee is a team SME on matters of sustainable finance policy and regulation.

Ray Dhirani

Head of Impact Management

Personal Profile

Ray is head of impact management at Tribe. Ray co-leads our impact management proposition alongside Chief Impact Officer, Amy Clarke. He is also responsible for the impact management of Tribe's single line securities, net zero commitments, whilst overseeing fund engagement activities.

Prior to Tribe, Ray was head of sustainable finance at WWF UK, where he worked across thematic and policy areas covering climate change and wider environmental themes including extractives, food systems and deforestation, as well as conservation and finance sector data.

Before WWF, Ray worked in the global markets division of Merrill Lynch in New York. He holds a BSc. in Economics from the Wharton School at the University of Pennsylvania and an MSc. in Environment & Development from the London School of Economics.

Moderator

Alex Quant

Head of ESG Research and Investment Consultant

Elizabeth Pfeuti

Chief Client Officer

Personal Profile

Alex is Head of ESG Research at XPS Investments. Alex is responsible for assessing and engaging with investment fund managers to make sure they take into account ESG when making investment decisions, and working with pension schemes to help them effectively review and further embed sustainability in their investment portfolios.

Personal Profile

Former Dow Jones staffer Elizabeth Pfeuti is Rhotic's Chief Client Officer and a member of the Rhotic Media executive leadership team. A highly-decorated journalist, Elizabeth has been in financial journalism for around 15 years. At Dow Jones, she covered the asset management, investment banking and investor services beats for Financial News, where she also wrote on a wide range of regulatory themes

She was previously the European Editor for CIO Magazine and boasts an exceptional contact book of buy-side and in-house institutional CIOs and asset management executives. More recently she has worked on corporate briefs for pension consultants, investment banks and asset management groups.

XPS Investment

RHOTIC

To meet our clients evolving needs, Amundi offers industry-leading investment solutions, the strength and scale of a global leader and a firm commitment to responsible investment.

- €1.973 trillion in assets under management(2)
- A presence in more than 35 countries with 6 investment hubs
- Active, passive and real assets investment solutions

Because that's what you expect from a trusted partner.

amundi.com

Trust must be earned

Amundi ASSET MANAGEMENT

FOR PROFESSIONAL CLIENTS ONLY.
Source IPE "Top 500 asset managers" published in June 2023 and based on AUM as of end December 2022. (2) Amundi data as at 30/09/2023. In the UK, this promotion is issued by Amundi (UK) Limited, registered office: 77 Coleman Street, London, EC2R 5BJ, United Kingdom. Amundi (UK) Limited is authorised and regulated by the Financial Conduct Authority under number 114503. This document is not intended for any citizens or residents of the United States of America or any "U.S. Person" as defined by "Regulation S" of under the US Securities Act of 1933. Investing involves a risk of capital loss. The content of this advertisement is for information purposes only and does not constitute a recommendation to buy or sell. November 2023.

Integrating Biodiversity into Portfolios: A bespoke framework

> *"A comprehensive biodiversity framework could be based on 3 pillars; Avoid, Reduce and Favour"*

The key role of Biodiversity

Biodiversity is part of the Earth's natural capital and considered the cornerstone of a well-functioning planet. It refers to the diversity of living organisms and is assessed at three different levels - the diversity of ecosystems (i.e. terrestrial, marine and aquatic), species and genes. Biodiversity contributes to the health and resilience of soils, plants and animals, and benefits humans, being integral to the provision of clean drinking water, waste decomposition and agricultural productivity as well as human health and well-being. Collectively, these benefits are known as ecosystem services: provisioning services (e.g. food, energy, medicine), cultural services (e.g. recreational activities) and regulating services (e.g. climate regulation).

Human activity has led to a rapid 60% decline in wild animal populations over 40 years[1], posing risks like increased food prices and threats to local livelihoods and economies.

Businesses, recognizing their dependence on nature (over 50% of global GDP is moderately or highly dependent on it)[2] are now realizing the risks that biodiversity loss represent. Despite this, some industries contribute to this decline through their activities (e.g. deforestation) or the location of their operations (or supply chains) in biodiversity sensitive areas. To reverse this impact, global investment in conservation would require an investment of $536 billion annually by 2050. Current expenditure falls short of this target, at $133 billion per year[3].

Measuring Biodiversity and Building an Investment Framawork

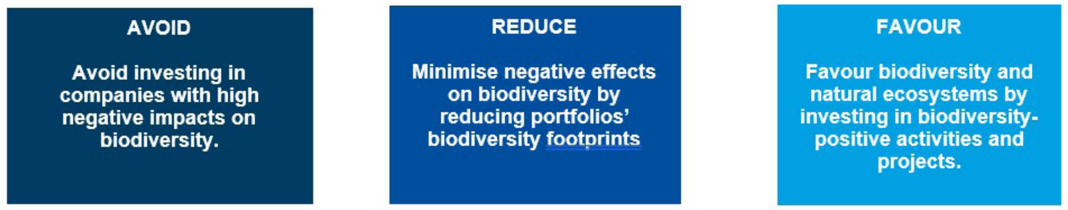
A rising awareness of the interrelationship between companies and biodiversity has ensured that related issues are increasingly factored into portfolio construction. To analyze companies' exposure to biodiversity risks and integrate biodiversity considerations into investment strategies, investors can rely on an assessment process which involves: drawing on relevant environmental data, monitoring controversies, and applying caps to ESG scoring criteria for issuers with insufficient risk management practices.

Authors:

Caroline Le Meau
Global Head of ESG Research, Engagement and Voting

Tegwen Le Berthe
Global Head of ESG Scoring & Methodology

Building on this rating process, a comprehensive biodiversity framework could be based on 3 pillars



Source: Amundi Institute as of 31 October 2023.

1. Avoid

This pillar aims to exclude companies with high impacts on biodiversity. We undertake a "**Do No Significant Harm (DNSH") assessment**[4] based on 4 of the 5 drivers of biodiversity loss identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019): land and sea use, direct exploitation of organisms, climate change, and pollution[5]. This DNSH is conducted across several dimensions: company controversies, practices and policies, and activities.

We also carry out an assessment of companies' activities that negatively affect biodiversity sensitive regions, on the basis of the definition of Principal Adverse Impact (PAI) 7, thereby excluding those with operations causing significant damage to these areas[6]

2. Reduce

This pillar aims to track portfolios' biodiversity footprints and achieve an overall reduction in this biodiversity footprint metric. The MSA[7] metric can be used, which expresses the mean abundance of original species in a habitat compared to what it would be in an undisturbed habitat. As companies will be required to report more on their biodiversity impacts, other metrics will likely be available going forward to complement the MSA. Nonetheless, we advocate to invest in sectors facing important biodiversity-related challenges in order to drive positive change in the real economy.

3. Favour

This pillar aims to invest in issuers that are leaders on biodiversity-related matters. To measure environmental impact, indicators related to natural capital and climate change may be used.
For fixed income portfolios, we favour green bonds that finance eligible Green projects related to biodiversity, in alignment with the International Capital Market Association (ICMA)'s Green Bond Principles[8]

Engagement Encourages Corporate Change

Although corporates both affect and depend on biodiversity, they are still early in the process of determining how to measure, address and report on biodiversity-related metrics. To accelerate action, investors can also engage[9] to help companies address biodiversity risks. The objectives are two-fold:

- Increase awareness of biodiversity loss to accelerate corporate action
- Identify current industry best practices and disseminate these recommendations to corporates

First, investors can derive a focus list of companies for which biodiversity is deemed relevant. Then, engagement should focus on addressing biodiversity issues and ecosystem risks, spanning direct operations and value chains. In case of controversy, investors should communicate directly or collaborate with peers, seeking assurance for effective remediation. If engagement proves unsuccessful or the issuer's action plan appears weak, exclusion from investment portfolios and escalation strategies, including negative ESG criteria overrides, Annual General Meeting (AGM) queries, and votes against management, can be implemented.

Amundi's 2022 engagement campaign on biodiversity

- 119 companies were engaged on their biodiversity strategy. As part of this commitment, Amundi provides recommendations to improve the integration of this risk within their strategies. Amundi has also strengthened its shareholder dialogue on the preservation of natural resources.
- More broadly, 344 companies were engaged through various programmes (including the promotion of a circular economy and better management of plastic, the prevention of deforestation, and various topics including pollution control or sustainable management of water resources).

Source: Amundi Institute as of 31 October 2023.

[1] Costanza R. et al (2014), "Changes in the global value of ecosystem Services", Global Environmental Change, Volume 26, May 2014, Pages 152-158.
[2] Source: World Economic Forum, Davos (2020)
[3] Convention on Biological Diversity
[4] The DNSH (do no significant harm) principle is integrated into the EU taxonomy regulation. This principle requires companies not to cause any harm to the 6 environmental objectives which determine the sustainability of an activity.
[5] The invasive non-native species driver of biodiversity loss is not included in our assessment due to the current lack of data available on the topic.
[6] A Principal Adverse Impact (PAI) is any impact of investment decisions or advice that results in a negative effect on sustainability factors, such as environmental, social and employee concerns, respect for human rights, anti-corruption and anti-bribery issues. PAI 7 requires companies to disclose activities that negatively affect biodiversity sensitive areas.
[7] There is no consensus over which methods and indicators are best in assessing biodiversity. However, researchers and companies are increasingly using the MSA metric as their key measure of biodiversity footprint.
[8] United Nations Environment Programme (November 2021), Five ecosystems where nature-based solutions can deliver huge benefits
[9] Amundi launched an engagement campaign dedicated to biodiversity strategies in 2021.

IMPORTANT INFORMATION
Unless otherwise stated, all information contained in this document is from Amundi Asset Management S.A.S. and is as of November 2023. Diversification does not guarantee a profit or protect against a loss. The views expressed regarding market and economic trends are those of the author and not necessarily Amundi Asset Management S.A.S. and are subject to change at any time based on market and other conditions, and there can be no assurance that countries, markets or sectors will perform as expected. These views should not be relied upon as investment advice, a security recommendation, or as an indication of trading for any Amundi product. This material does not constitute an offer or solicitation to buy or sell any security, fund units or services. Investment involves risks, including market, political, liquidity and currency risks. Past performance is not a guarantee or indicative of future results.
Date of first use: November 2023. Doc ID 3247007.

Diversity for asset managers is at a critical tipping point.

CAMRADATA now hosts the Asset Owner Diversity Charter within CAMRADATA Live, making it free to access for both asset owners and asset managers alike.

The Asset Owner Diversity Charter was formed with an objective to formalise a set of actions that asset owners can commit to improve diversity, in all forms, across the investment industry. It seeks for signatories to collaborate and build an investment industry which embodies a more balanced representation of diverse societies.

info@camradata.com

CAMRADATA

with. Intelligence

Pension Bridge
Hedge Europe 2024

6 – 7 February, Zurich

Reasons to attend:

- Hear from Europe's largest pension funds and private wealth allocators on their hedge fund strategies
- Understand the emerging manager landscape
- Learn about new strategies designed to deliver alpha
- 1:1 allocator to manager ratio
- The event is under strict Chatham House Rules

Speakers include:

Guy Saintfiet
Partner
Aon

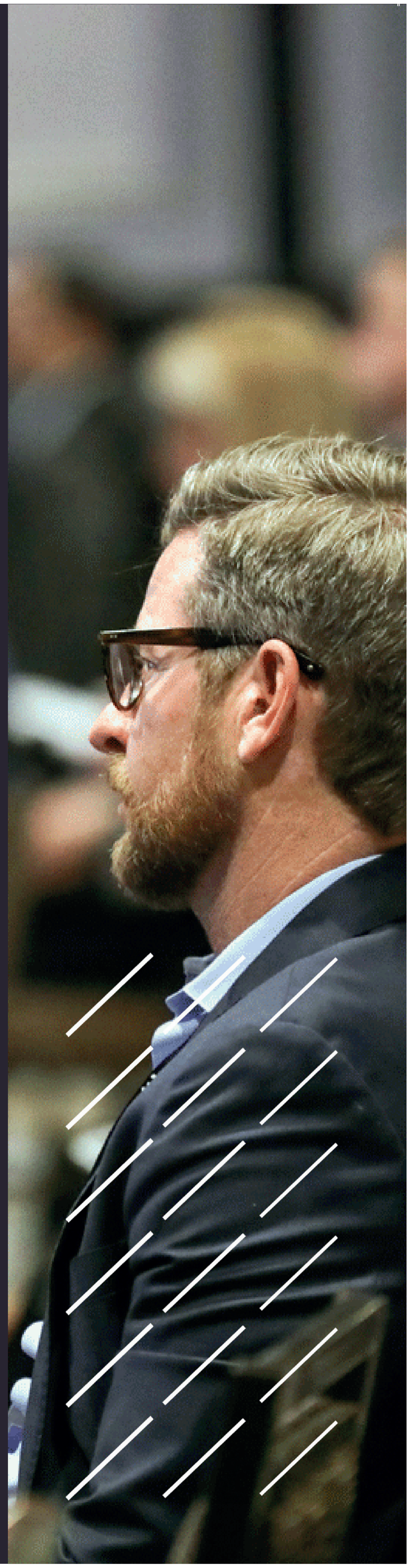
Julien Jarmoszko
Chief Investment Officer
Selection Finance Patrimoine

Sebastian Seckinger
Executive Director
Hedge Fund Portfolio Management
LGT Capital Partners

Alessandro Greppi
Portfolio Manager
Zurich Insurance

Matthieu Mougeot
Investment Solutions Leader, Switzerland
Mercer

events.withintelligence.com/pensionbridgehedge



The Redwheel Biodiversity Strategy

A long-term structural investment opportunity

Natural ecosystems are under threat from an array of mostly human-made problems such as pollution and over-exploitation of resources. These fundamental issues are exacerbated by a large funding gap. We believe the preservation of the planet's biodiversity represents an unrecognised structural growth opportunity, supported by regulatory, governmental and consumer pressures.

The Redwheel Biodiversity Strategy invests in companies that have the potential to succeed profitably by progressing the preservation of biodiversity through their products and services.

Find out more >

redwheel.com
invest@rwcpartners.com
+44 20 7227 6000

redwheel

For investment professionals only. No investment strategy or risk management technique can guarantee returns or eliminate risks in any market environment. Redwheel is a registered trademark of RWC Partners Limited. RWC Partners Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom. RWC is incorporated in England and Wales with its registered office at Verde 4th Floor, 10 Bressenden Place, London, SW1E 5DH, United Kingdom and its registered number is 03517613.

How Institutional Investors Can Think About The Value of Nature

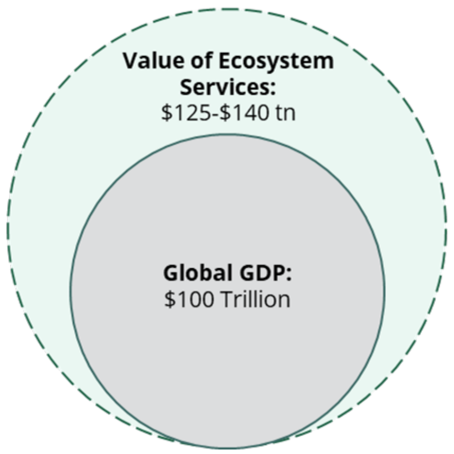
"More than half of global GDP is deemed to be highly or moderately exposed to nature."

Nature matters – our individual human experience of nature is precious. Its value is immeasurable.

Framing nature as the basis for Natural Ecosystem Services concentrates our focus on the more tangible contributions nature provides the economy and society.

Ecosystem Services

In 2019, the OECD estimated that Natural Ecosystem Services contributed $125-140 trillion of value each year[1], which it noted was more than one and a half times the size of global GDP.



Source: World Economic Forum, World Bank as at 2022

The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

These Services are commonly categorised as:

- Provisioning Services – resources which may be extracted from ecosystems;
- Regulating Services – processes which regulate the operation of natural systems such as carbon sequestration;
- Cultural Services – less quantifiable services which support the development of culture such as architecture and recreation; and
- Supporting Services – basic natural phenomena which underpin other services, such as photosynthesis.

Author:

Amanda O'Toole
Portfolio Manager
Redwheel Biodiversity and Clean Economy Strategies

For instance, primary, secondary and working forests are a crucial source of Nature Services. Accounting for more than 30% of the planet's land, [2] they offer Provisioning Services including timber, fibre, food and medicinal plants. They also provide Regulating Services including a cooling mechanism; local precipitation regulation; protection from soil erosion, landslides and floods; water filtering; and carbon sequestration.

Forests offer a range of Cultural services including leisure activities, aesthetic pleasure and psychological benefits to those who enjoy them. They also remain a source of biodiversity with potentially valuable and undiscovered genetic material.

Some Natural Services can be replaced with artificial processes. For instance, animal pollination services are worth more than $217 billion a year to the agricultural sector[3] and contribute to 35% of the world's crop production [4]. Many pollinators are threatened by a combination of habitat loss, pathogens and pollution, raising concerns for food security.

Artificial pollination methods ranging from manual pollination to experimental micro-drone technology have some limited ability to replicate animal pollination services. In many cases it is simply not feasible to replicate Natural Ecosystem Services.

Counting the cost

It is estimated that three quarters of all land is materially altered and two thirds is suffering the cumulative effects of human activity[5]. The pace of degradation has been unprecedented – half of all forest lost in the last 10,000 years has been lost since 1900 [6].

More than half of global GDP is deemed to be highly or moderately exposed to nature[7]; human health and well-being is highly dependent upon its Regulating Services which afford us access to clean air and water. Thus, the degradation of biodiversity and Ecosystem Services represent a material risk to the global economy as well as human health and wellbeing.

The World Bank estimates that "business as usual" would result in the loss of $90 – $225 billion of real GDP by 2030, depending on the extent to which natural carbon capture services are lost) [8] .

Change is coming

Whilst the precise value of natural ecosystems is difficult to quantify, the cost of inaction is becoming clear. Aggravated by climate change, we are beginning to witness the impact of their degradation – declining wild food sources, the threat of crop failure, the spread of pests and disease, soil erosion and the lack of flood protection are beginning to manifest.

Evidence of the physical risk associated with inaction is stimulating policy responses. The historic Kunming-Montreal Global Biodiversity Framework agreed in 2022 sets out twenty-three targets[9] to be achieved by 2030 in order that we remain on track for the long-term goals associated with the 2050 Vision for Biodiversity. Whilst policymakers grapple with the challenges associated with delivering these targets, other stakeholders are beginning to assess both their dependency and impact on nature.

We believe, these are crucial first steps towards addressing physical risk associated with dependency and transition risk associated with impact. The Taskforce on Nature-related Financial Disclosures (TNFD) offers guidance and recommendations for the process of measurement and disclosure to enable corporates to quantify the value of nature to their business. This is a key step in the integration of nature into decision making.

What we can measure; we can address

TNFD has created the 'LEAP' framework to help asset owners identify key areas of risk and assess materiality through four phases:

- 'Locate' the interface with nature
- 'Evaluate' dependencies and impacts on nature
- 'Assess' nature-related risk and opportunity
- 'Prepare' to respond to and report on material issues

Given the critical influence of location on specific dependencies and impacts on nature by individual assets, the accuracy of this step is crucial to assessing the value or materiality of nature to it. It also allows us to understand where and how activities contribute to the degradation of nature and thus where we should focus efforts to limit further damage and address transition risk.

The economic case for a nature transition is increasingly clear. As we come to terms with the significance of inaction, it appears policymakers, asset owners, investors, corporates and consumers are increasingly willing to embrace the need for change. The shift is accelerating, demand for solutions is growing and funding sources are emerging to attract investment and innovation.

This represents an opportunity for the best of the solutions available now and serves as an incentive for those developing exciting solutions for the future. There is a growing body of products and services which allow the continued production of the goods and services upon which we depend but with a more limited negative impact on the natural ecosystem.

We may never be able to fully quantify the value of nature, but we are becoming aware of the cost of its loss. Progress may be slower than the science demands; but it is coming.

Source: Redwheel

Whilst updated figures are not available, we have performed further analysis and believe that this data has not significantly changed and is reflective for 2023.

Key Information

No investment strategy or risk management technique can guarantee returns or eliminate risks in any market environment. Past performance is not a guide to future results. The prices of investments and income from them may fall as well as rise and an investor's investment is subject to potential loss, in whole or in part. Forecasts and estimates are based upon subjective assumptions about circumstances and events that may not yet have taken place and may never do so. The statements and opinions expressed in this article are those of the author as of the date of publication, and do not necessarily represent the view of Redwheel. This article does not constitute investment advice and the information shown is for illustrative purposes only.

[1] Executive-Summary-and-Synthesis-Biodiversity-Finance-and-the-Economic-and-Business-Case-for-Action.pdf (oecd.org)
[2] Forests, desertification and biodiversity - United Nations Sustainable Development
[3] Updated-10.23.20-FINANCING-NATURE_Exec.-Summary_Final-with-endorsements_101420.pdf (paulsoninstitute.org)
[4] FAO's Global Action on Pollination Services for Sustainable Agriculture | Food and Agriculture Organization of the United Nations
[5] Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat
[6] Deforestation and Forest Loss - Our World in Data\
[7] It's Now for Nature: Turning nature ambitions into action through the Nature Strategy Handbook - PwC UK
[8] World Bank Document
[9] COP15: Final text of Kunming-Montreal Global Biodiversity Framework | Convention on Biological Diversity (cbd.int)

Important Notice

This document is produced by CAMRADATA Analytical Services Limited ('CAMRADATA'), a company registered in England & Wales with registration number 06651543.

CAMRADATA is neither authorised nor regulated by the Financial Conduct Authority in the United Kingdom nor the Securities and Exchange Commission in the United States of America.

This document is a marketing documentation and is not intended to constitute an invitation or an inducement to engage in any investment activity. It is not intended to constitute investment advice and should not be relied upon as such. It is not intended and none of CAMRADATA, its holding companies or any of its or their associates ('With Intelligence Group') shall have any liability whatsoever for (a) investment advice; (b) a recommendation to enter into any transaction or strategy; (c) advice that a transaction or strategy is suitable or appropriate; (d) the primary basis for any investment decision; (e) a representation, warranty, guarantee with respect to the legal, accounting, tax or other implications of any transaction or strategy; or (f) to cause the With Intelligence Group to be an advisor or fiduciary of any recipient of this report or other third party.

The content and graphical illustrations contained in this document are provided for information purposes and should not be relied upon to form any investment decisions or to predict future performance.

CAMRADATA recommends that recipients seek appropriate professional advice before making any investment decision.

Although the information expressed is provided in good faith, the With Intelligence Group does not represent, warrant or guarantee that such information is accurate, complete or appropriate for your purposes and none of them shall be responsible for or have any liability to you for losses or damages (whether consequential, incidental or otherwise) arising in any way for errors or omissions in, or the use of or reliance upon the information contained in this document. To the greatest extent permitted by law, we exclude all conditions and warranties that might otherwise be implied by law with respect to the document, whether by operation of law, statute or otherwise, including as to their accuracy, completeness or fitness for purpose.

CAMRADATA Analytical Services Limited and its logo are proprietary trademarks of CAMRADATA and are registered in the United Kingdom.

Unauthorised copying of this document is prohibited.
© Copyright CAMRADATA Analytical Services Limited 2023

CAMRADATA
With Intelligence
One London Wall
London
EC2Y 5EA

+44 (0)20 7832 6500
camradata.com

Join us on LinkedIn