



AXA IM: Biodiversity For Growth

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Investing in transition winners is only natural

1

Over 50% of global GDP is dependent on nature and its services¹. Biodiversity loss could cost the economy \$5 trillion²

2

Investors are increasingly aware of the future financial risk associated with biodiversity loss; however, the transition to a nature positive economy offers a multi-decade growth opportunity

3

AXA IM's Biodiversity Strategy targets innovative companies that align positive impact with the potential for long-term financial returns

The Biodiversity opportunity

Investors are becoming increasingly aware of the importance of biodiversity. Biodiversity boosts our planet’s resilience against threats not only to global economies, but to our continued existence, such as flooding, food scarcity and infectious diseases. Its loss poses major economic risks; higher material costs combined with disruptions to operations, supply chains and livelihoods.

The extent to which future generations can grow and thrive depends upon governments, corporations and consumers working together to preserve our natural capital. Naturally, this is also critical for long-term investors to consider, who have the opportunity to invest in solution providers. Identifying leading companies which provide scalable and commercial solutions to protect and preserve biodiversity through the products and services they provide, and/or their operational practices, is of particular importance.

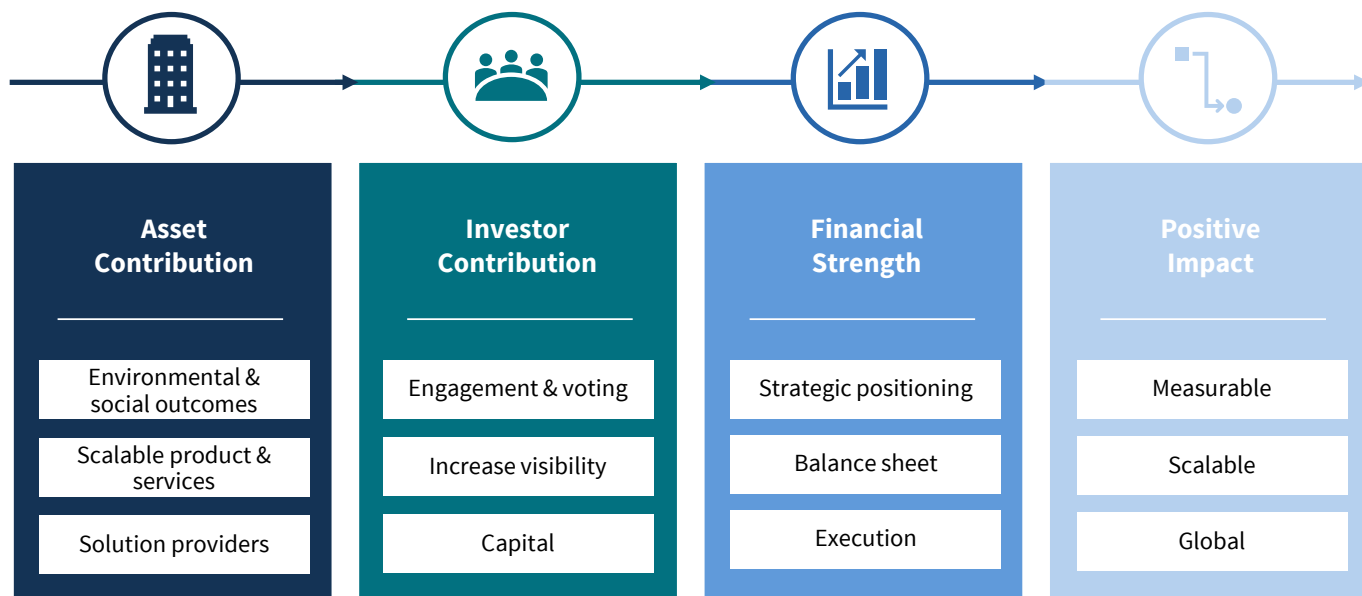
We believe this approach has the greatest potential to achieve the scale and meaningful impact that protecting the future of our natural capital requires; the case for allocating capital to companies that have a low biodiversity footprint, which generates little impact, or that are transitioning from having a very bad footprint to a lower improving footprint, hence only generating company specific/local impact, is less robust.

Global policy momentum and an increased appreciation of biodiversity’s role in economies and climate change is driving global commitments to stop biodiversity loss by 2030, and to have a net positive impact on biodiversity from 2050 onwards³. Our conviction is that we cannot address climate change without biodiversity. We are not alone – governments and regulators around the globe are working to common goals. Part of this activity has resulted in the formation of the Task Force on Climate-Related Financial Disclosures (TCFD), a set of disclosure requirements that larger organisations are already being held accountable to. The subsequent Task Force on Nature-Related Financial Disclosures (TNFD) is expected to achieve a similar set of requirements for the corporate disclosure of biodiversity impact.

The transition to more sustainable economies has created a multifaceted engine for innovation and growth, powering multi-decade growth opportunities. At AXA IM, we believe that innovative companies with sound business models which are providing commercial solutions to preserve nature will be the winners of the biodiversity transition. Investors don’t have to choose between positive biodiversity impact or the potential for strong financial returns - financial sustainability underpins both of these goals.

AXA IM’s Listed Impact Equity Approach

Generating positive measurable impact alongside financial returns



Our approach

Our Biodiversity strategy assigns equal importance to financials and positive impact. Impact investing starts from where responsible investing leaves off; responsible investing focuses on excluding companies or industries that fail to meet various criteria to avoid having investments that do harm. Impact investing tries to do more than avoid harm, it actively tries to do good while providing a financial return. We believe financial sustainability underpins both, and prioritise innovative companies with competitive advantages, robust balance sheets, visionary management teams and cutting-edge technology. We seek quality solution providers with commercial, scalable products and services, with potential for profitable growth and attractive returns through active, bottom-up stock picking. AXA IM puts the power of asset management to work at scale in high conviction, diversified portfolios with high active share backed by consistent engagement, thorough KPI tracking, and transparent reporting.

The definition of impact investing has widened with the global adoption of the United Nations Sustainable Development Goals (SDGs), established in 2015 to address global environmental and social challenges, and there

are different ways of generating positive impact through investing. Our listed equity Biodiversity impact strategy aims to generate positive measurable impact in two principal ways: by investing in listed companies which are making a positive contribution to the funds targeted UN SDGs based on AXA IM's bespoke impact framework, and through our long-term engagement and reporting activities which enable us to monitor our progress towards the biodiversity strategy's impact objective. Compared to impact investment in private markets, which generates positive social or environmental projects often on a local level, listed equities can provide scalable and commercial solutions that can generate positive change on a global level, transforming whole sections of society and the economy.

Having been an active member of the Global Impact Investment Network (GIIN)'s Working Group Advisory Committee defining best practices of impact investing for listed equities, our definition of impact investing seeks to align with GIIN's framework, which is based on five key pillars (Intentionality, Materiality, Additionality, Negative Externalities, Measurability).

The GIIN is a leading authority for impact investing in listed securities and has defined four key concepts for generating investors' impact:

1 | Strategy:

Aligned to the theory of change: understanding the problem, setting key investment themes, identifying required solutions, selecting suitable KPIs and enacting real-world change through voting and engagement.

2 | Portfolio design & selection:

Following a replicable consistent and quantifiable methodology based on quantitative UN SDG screening, a proprietary Impact Framework and financial analysis.

3 | Engagement:

Driving investor contribution through long-term active ownership, engagement topics linked to impact themes, and advocating transparency and KPI reporting.

4 | Use of performance data:

Measuring progress in line with the theory of change by reporting and monitoring KPIs on both company and portfolio level.

Our Biodiversity impact strategy does not consider biodiversity as a risk factor but as an investment opportunity to identify companies that can mitigate biodiversity loss either through innovative products and services, and/or to a lesser extent operational activities. Our investment approach is designed to identify the winners of the biodiversity transition: companies that drive positive impact on the targeted SDGs by providing scalable solutions and generate strong financial returns.

Biodiversity's biggest challenges

Below are some of the most significant threats to Biodiversity, and examples of leading solution providers providing positive impact potential alongside attractive long-term growth prospects.

Agriculture is responsible for 80% of deforestation and uses 50%⁴ of habitable land, while one third of all food produced is wasted⁵. The demand for global food security will persist, and so developing sustainable solutions is becoming a top priority, yet the agriculture industry is steeped in tradition and has arguably been slow to adopt innovations to reduce waste and improve efficiency. Precision agriculture provides new sustainable opportunities to meet growing demand for food whilst reducing the use of pesticides and water. Companies seeking to address this need include **John Deere & Co.** The agricultural equipment manufacturer has developed a proprietary 'See and Spray' technology, which captures images of crops and processes them in the cloud to enable more targeted application of herbicides. This can reduce herbicide use by up to two-thirds, offering both a positive impact on biodiversity and improved farmer profitability. The importance of technology's role as an enabler of cutting-edge solutions is proven by chips supplied by leading graphic processing unit (GPU) firm NVIDIA. Its advanced chips are present in both Deere's vision system, and in the data centre that processes imagery.

Humans are exploiting nature far more rapidly than it can renew itself: society's current rate of consumption equates to the resource use of 1.8 planets⁶ (2.8 in Europe⁷) annually – an unsustainable level that harms biodiversity, exacerbates climate change, and worsens global inequalities. It's crucial we move towards a more circular consumption model where more resources are re-used and recycled. Global habits must rapidly evolve towards more sustainable alternatives to plastic, particularly in the packaging market where virgin plastic still dominates. Republic Services offers a holistic suite of sustainable solutions across residential and business-scale recycling and waste services, as well as its environmental solutions division providing environmentally responsible waste treatment, exploration and production innovation⁸. The company seeks to build upon its already significant penetration into the sustainable waste management and recycling industry by continuing to embrace new technologies and open new facilities, such as its recent Polymer Centre in Las Vegas. The facility is expected to produce more than 50,000 (tonnes) of high-quality recycled plastics annually. Its rollout is enhanced by

a partnership with a specialist polymer processing company which enables Republic Services to supply the strict packaging quality requirements demanded by food and beverage manufacturers. Three more locations are planned to further establish its position in this growth market in the US by 2026⁹.

Software has the potential to boost productivity and efficiency in small businesses, with the social benefit of helping entrepreneurs make headway when they need the most help. In other areas, software can improve a business's overall sustainability. Leading Enterprise Resource Planning (ERP) software firm SAP's Sustainability Solutions can help a business to improve its environmental performance, transition to circular economy models, ensure transparency in their supply chains, accurately account for and report their carbon emissions, drive sustainable product innovation, and integrate sustainability data into their processes and thus improve resource-use efficiency. One example of this is SAP's Intelligent Agriculture⁷ software which enables agribusinesses to sustainably increase farming efficiency by digitising farming processes from plan-to harvest, increasing yields and farming efficiency.

Most of the water on Earth is saline (i.e. oceans), with freshwater making up just 3%¹⁰. The rising global population and climate change are increasing water scarcity and insecurity. Ageing infrastructure, often driven by poor water-related governance in some developed countries in North America and Europe, is responsible for the loss of considerable freshwater volumes on an ongoing basis. For instance, it is estimated that 2 trillion gallons of drinking water, which is equivalent to 15% of total fresh water supplies, is lost to leaks in the US every year¹¹. Innovative water technology, such as smart metering and analytics, help increase efficiency of water systems, identifying leaks and therefore reducing water loss. Companies which increase resource efficiency, facilitate recycling and advance the development of a circular economy should yield larger net gains within the global economy.

Xylem is a water technology company which develops and maintains solutions for the delivery and use of drinking water, as well as the treatment of wastewater on an industrial scale. The largest source of its revenue is derived from water infrastructure designed to collect, treat and distribute wastewater. It also offers water solutions and services to commercial, residential and industrial clients

alongside advanced, ‘smart’ water meters and analytics. The company’s commitment to research and development allows it to develop sophisticated ways to improve efficiency and reduce needless waste from inadequate water distribution systems or lack of detailed measurement capabilities. As global water demand rises with population

growth, it is estimated that almost six billion people will suffer from clean water scarcity by 2050, further strengthening the demand to minimise its loss¹².

Conclusion

Allocating capital to listed equity impact strategies should be considered by those seeking a combination of sustainable long-term growth, backed by strong fundamentals and financial performance potential (and bolstered by accelerating, complementary advances in technology) for decades to come. Identifying the winners of the biodiversity transition -which we believe to be quality companies with proven execution, and that provide scalable and commercial solutions to the worlds’ environmental challenges - should assist investors to seek out companies that could deliver profitable growth and strong financial returns over the long-term. Choosing an actively managed strategy from an experienced asset manager with tangible

credentials and biodiversity expertise could help investors towards a mutually satisfying future for their financial goals, the planet, and the continued viability of our global economies.

Companies shown are for illustrative purposes only as of 25/06/2024. It does not constitute investment research or financial analysis relating to transactions in financial instruments, nor does it constitute an offer to buy or sell any investments, products or services, and should not be considered as solicitation or investment, legal or tax advice, a recommendation for an investment strategy or a personalised recommendation to buy or sell securities.

¹ Half of World’s GDP Moderately or Highly Dependent on Nature, Says New Report > Press releases | World Economic Forum (weforum.org)

² \$5 trillion of nature-related economic risks will amplify climate change, says Oxford study | University of Oxford

³ 2030 Targets (with Guidance Notes) (cbd.int)

⁴ Half of the world’s habitable land is used for agriculture | Future of Food (ox.ac.uk) Half of the world’s habitable land is used for agriculture | Future of Food (ox.ac.uk)

⁵ 5 facts about food waste and hunger | World Food Programme (wfp.org)

⁶ National Footprint and Biocapacity Accounts 2022, overshootday.org/how many earth

⁷ National Footprint and Biocapacity Accounts 2022, overshootday.org/how many earth

⁸ About Us (republicservices.com)

⁹ Successful acceptance at Republic Services Polymer Center in Las Vegas - Food & Drink International (fdiforum.net)

¹⁰ BofAM, The World Is Not Enough - Scarcity Primer, 2022

¹¹ BofAM, The World Is Not Enough - Scarcity Primer, 2022

¹² Reassessing the projections of the World Water Development Report | npj Clean Water (nature.com)

Risk warning

No assurance can be given that our investment strategies will be successful. Investors can lose some or all of their capital invested. Our strategies are subject to specific risks including, but not limited to: equity; emerging markets; global investments; investments in small and micro capitalisation universe; investments in specific sectors or asset classes, volatility risk, liquidity risk, credit risk, counterparty risk, derivatives risk, legal risk, valuation risk, operational risk and risks related to the underlying assets. Some strategies may also involve leverage, which may increase the effect of market movements on the portfolio and may result in significant risk of losses.

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