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Investment opportunities in natural capital

Introducing the Aviva Investors Natural Capital Transition Global Equity strategy

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Key takeaways

Every year, humans consume 60 per cent more resources than the planet can provide. That is leading to a dangerous depletion, which in turn puts economic growth at risk.

The good news is investing in companies that can reduce humans' impact on nature presents huge opportunities to preserve nature and economies, but also reap solid returns.

Regulation, consumer demand and new technologies provide consistent tailwinds across four themes that align with the UN Sustainable Development Goals: SDG 12 on responsible consumption and production; SDG 13 on climate action; SDG 14 on life below water; and SDG 15 on life on land.

Our Aviva Investors Natural Capital Transition Global Equity strategy invests in solutions companies and transition leaders across those four themes, seeking to deliver long-term capital growth and nature-positive contributions.

Our capital allocation is complemented and bolstered by macro stewardship and company-level engagement with every firm in the portfolio to accelerate the transition to a nature-positive economy and ensure the companies we hold benefit from those changes.

Introduction

High-functioning biodiversity and ecosystems underpin 55 per cent of global GDP. But every year, humans consume 60 per cent more of these resources than the planet can provide and use them linearly, disposing instead of reusing and recycling them (Figure 1).[1] That is leading to a dangerous depletion of resources, from fish to tropical forests.[2,3]

Without action, the loss of these resources will put economic growth at risk. According to the World Bank, the collapse of wild pollination, marine fisheries and timber provision in native forests as they degrade into savannah could trim global growth by 2.3 per cent ($2.7 trillion) a year by 2030.[4]

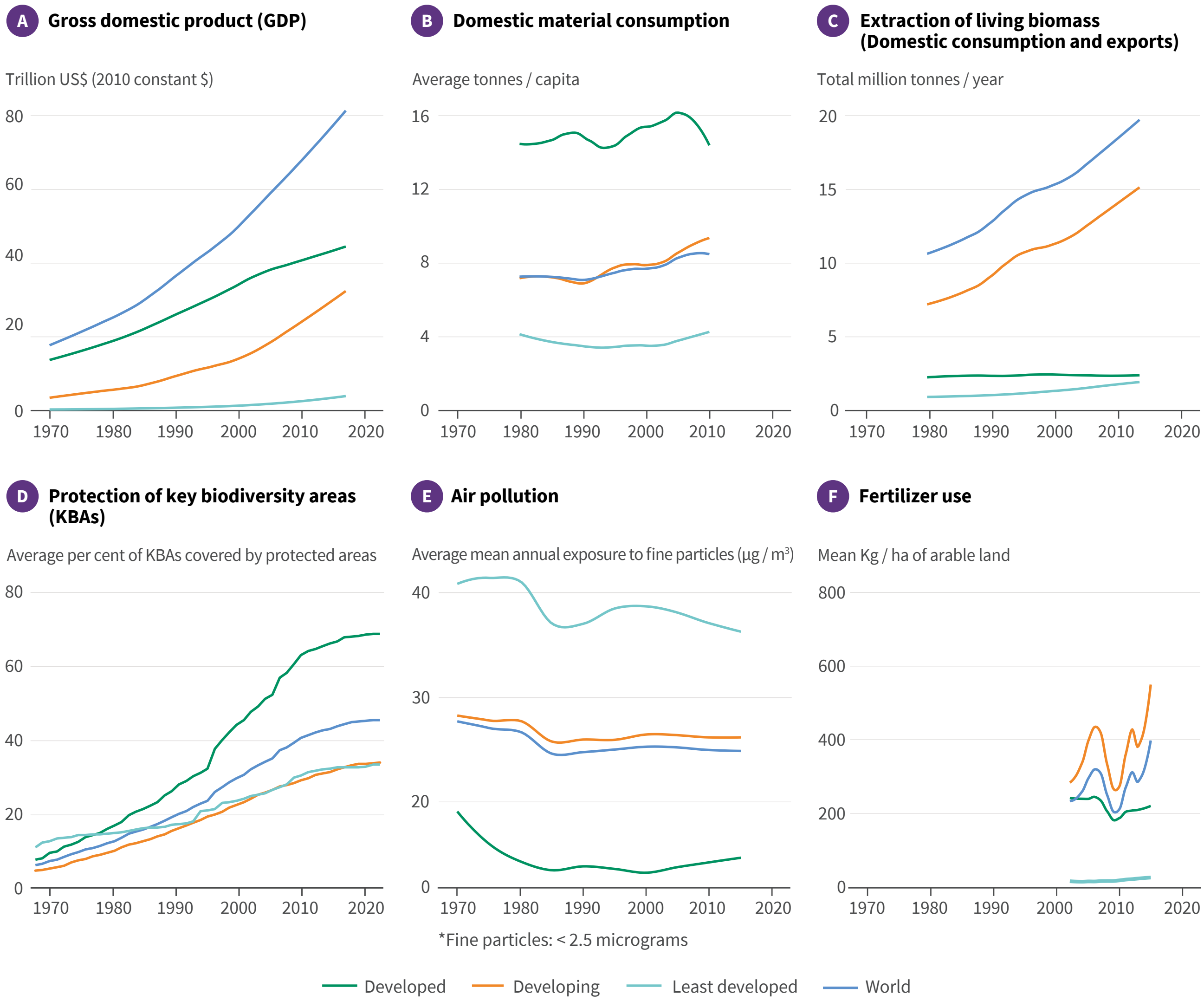
> The loss of natural resources will put economic growth at risk

The good news is investing in companies whose operations, products or services can reduce humans' impact on nature presents huge opportunities, not only to preserve future growth, but also to potentially reap solid returns. The World Economic Forum recently estimated the value of these opportunities at $10.1 trillion (see Figure 2).

This paper explores some of the main opportunities to invest in companies aiming to protect and support natural capital and explains our approach to deliver sustainable returns and nature-positive outcomes through the Aviva Investors Natural Capital Transition Global Equity strategy.*

** By "nature-positive" outcomes, investments or other actions, we mean outcomes, investments or actions that protect, restore and/ or nurture natural capital, be it biodiversity, water, air, geology and/ or soil.*

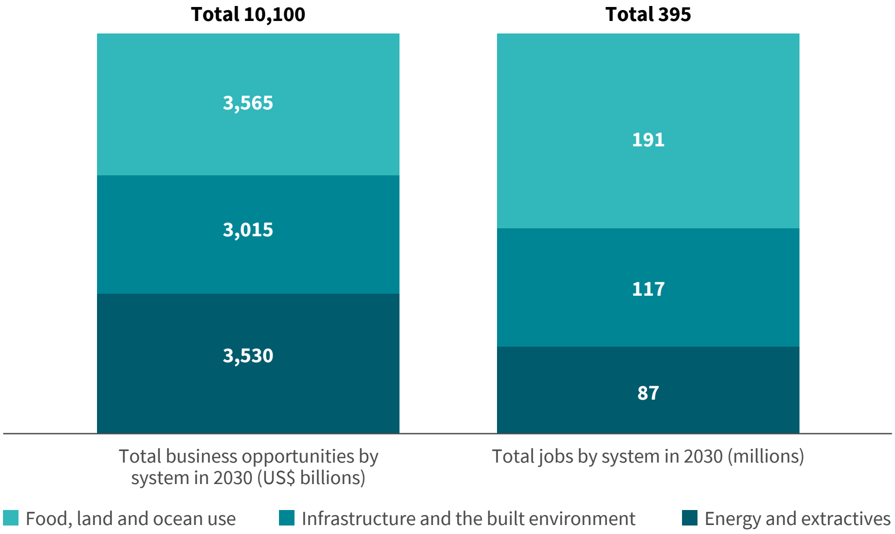
Figure 1. **Increase in economic growth and its impacts on nature**



Note: Countries are classified according to the United Nations World Economic Situation and Prospects. Global gross domestic product has risen fourfold in real terms, with the vast majority of growth occurring in developed and developing countries (A). Extraction of living biomass (e.g., crops, fish) to meet the demand for domestic consumption and for export is highest in developing countries and rising rapidly (B). However, material consumption per capita within each country (from imports and domestic production) is highest in developed countries. Overall protection of key biodiversity areas is rising, being highest within developed countries (D). Air pollution is highest in least developed countries (E), while the challenges of non-point-source pollution from the use of fertilizers are highest in developing countries.

Source: IPBES, 2019.[5]

Figure 2. **A possible $10.1 trillion of annual business opportunities and 395 million jobs by 2030**



Source: World Economic Forum, July 14, 2020.[6]

Why invest in natural capital

Four natural capital themes offer a broad universe of investment opportunities and link to the United Nations' Sustainable Development goals (SDGs): the circular economy (reuse and recycle – SDG 12 on responsible consumption and production); sustainable land (SDG 15 on life on land); sustainable oceans (SDG 14 on life below water); and climate action (SDG 13). Regulation, consumer demand and new technologies provide consistent tailwinds across these themes, which we discuss in more detail below.

Circular economy

The circular economy includes recycling and reuse technologies, sustainable packaging (like cardboard instead of plastic) and waste treatment. This theme derives from changing consumer demand and regulation, as well as cost benefits, a combination that could generate $2.3 trillion in annual business opportunities by 2030.[7]

The cost benefit from using more sustainable materials and from reusing and recycling is particularly prominent in industries like aluminium packaging, where recycling cans requires only five per cent of the energy needed to produce virgin aluminium.

There is also a growing tide of regulation requiring companies to use more recycled content, with potential fines or levies for companies that don't meet the minimum standards. For example, the UK imposes a Plastic Packaging Tax of £200 per tonne for manufactured or imported plastic packaging components containing less than 30 per cent recycled plastic.[8]

There is a growing tide of regulation requiring companies to use more recycled content

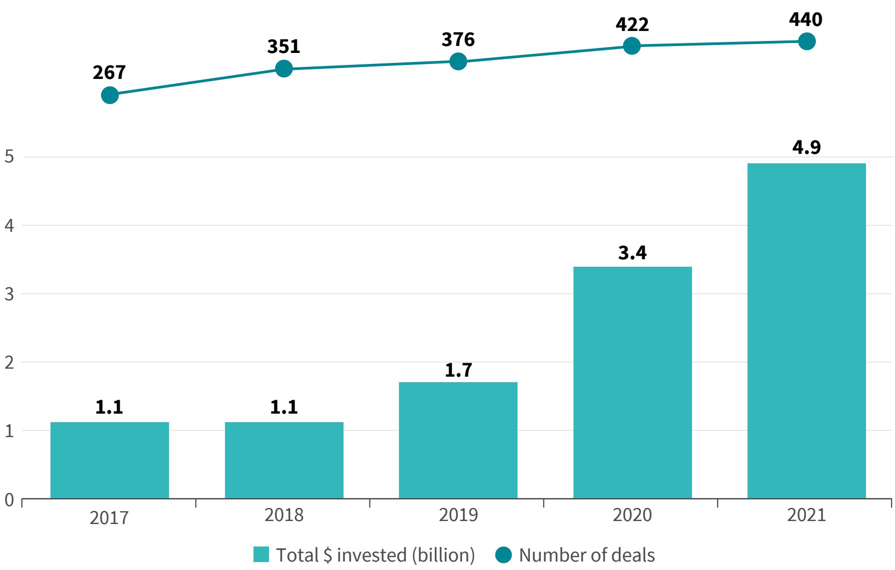
Finally, consumer demand is shifting away from plastic straws and other plastic packaging, like bottles. In 2021, an estimated 75 per cent of new beverage products launched in North America came in aluminium cans, versus 30 per cent in 2014.[9]

Sustainable land

Intensive agriculture is one of the biggest drivers of biodiversity loss and greenhouse-gas emissions. But innovation and consumer demand could be a source of significant growth in more sustainable methods. Backed by increasing regulation, investment in areas such as agricultural technology and alternative protein is surging (Figures 3 and 4) – and so is demand. The plant-based protein market is expected to see a compound annual growth rate of 7.3 per cent over the next five years, from $12.2 billion in 2022 to $17.4 billion in 2027.[10]

Intensive agriculture is one of the biggest drivers of biodiversity loss

Figure 3. **Venture capital in agricultural tech is growing**



Source: Crunchbase, February 10, 2022.[11]

Similarly, drones allow farmers to use water, fertiliser and pesticides with precision, in areas that need it rather than over their entire crops, and identify diseases like northern leaf blight, saving entire crops from failure. The revenue opportunity associated with the sale of commercial drone technology could reach nearly $40 billion by 2024, with a sizeable portion in agriculture.[12]

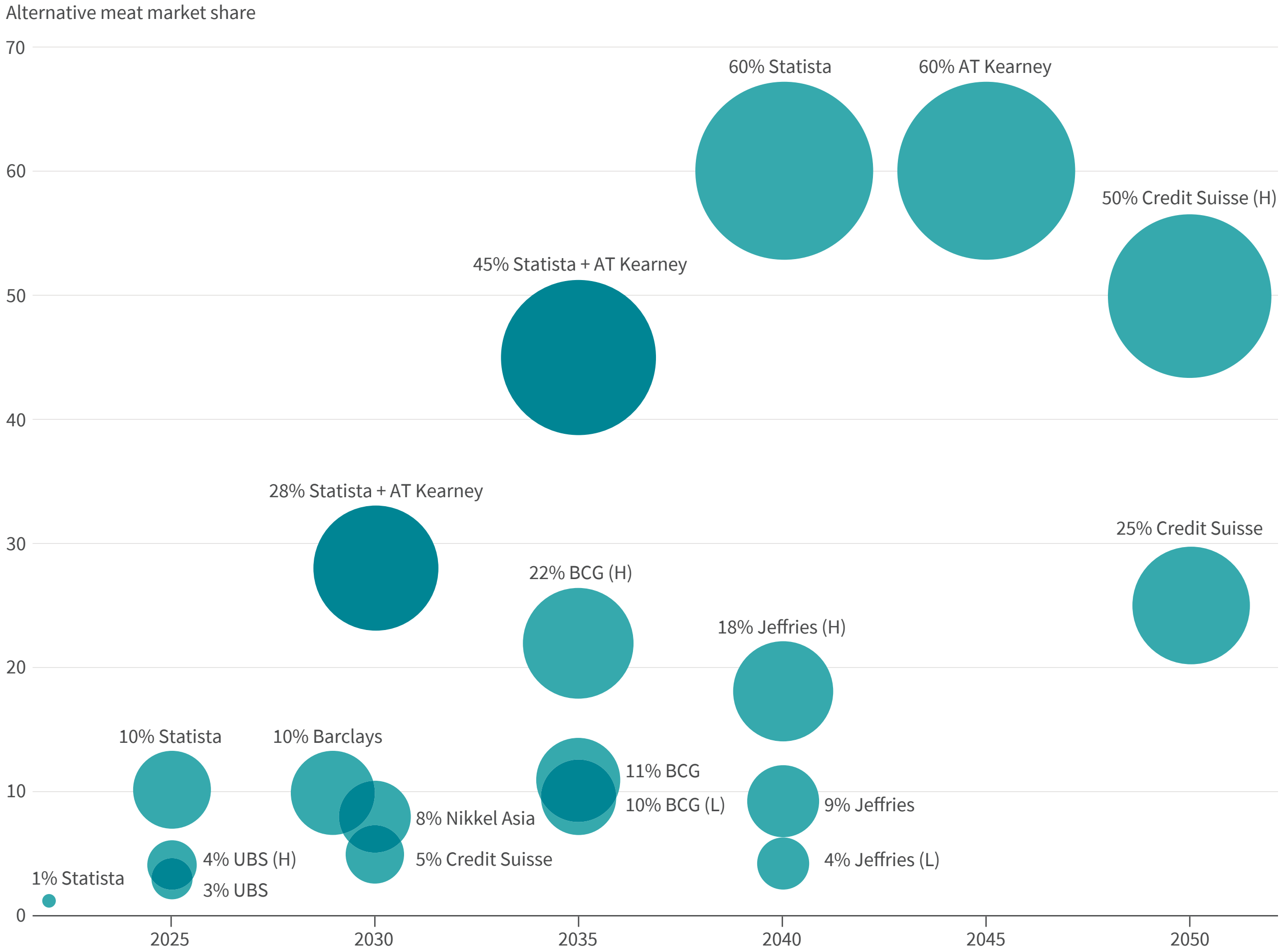
Sustainable oceans

As the danger to oceans becomes clear, regulatory and consumer pressure is growing for companies to improve water treatment, develop sustainable aquaculture, reduce plastic production and use more biodegradable materials.

There is a global push to protect water systems

There is a global push to protect water systems from antibiotic pollution, creating opportunities for investments in water-treatment companies.[13] And given widespread overfishing and plummeting fish stocks, feeding seafood with fish is no longer economical or environmentally prudent, so there is innovation and opportunity in novel feed sources, particularly insect-, algae- and microbial-based feeds. Most are still at a nascent stage of development, but we anticipate strong growth in the coming years.[14]

Figure 4. **Projected growth in alternative proteins**



Note: H = High growth scenario. L = low growth scenario. Remainder are base case scenarios.
Source: FAIRR, October 25, 2022.[15]

Climate action

Climate change is a well-known theme with over $4 trillion of potential business opportunities across the built environment and energy and extractives (aside from the circularity opportunities mentioned above).[16]

The three tailwinds of cost, regulation and consumer demand all come into play in this theme, and particularly attractive opportunities can be found in niche areas such as green transport and animal feed that reduces methane emissions from cows.

Delivering returns through nature-positive investments

The Aviva Investors Natural Capital Transition Global Equity strategy sees long-term capital growth and nature-positive contributions as equally important and aligned objectives. The strategy seeks to outperform broader global equity markets, as measured by the MSCI ACWI, by two per cent per annum gross of fees over three-year rolling periods and help accelerate a sustainable transition towards a nature-positive economy through investments in solutions and transition companies (see definitions below).

We typically have an equal balance between transition and solutions companies, with each allocation running between 40 and 60 per cent over time. There is no structural bias towards one or the other, which we believe will mean performance better reflects stock-specific fundamentals rather than momentum in a given area or investor sentiment, as well as delivering resilience over market cycles.

Both types of companies are supported by the long-term tailwinds for each theme discussed in the previous section – the circular economy, sustainable land, sustainable oceans and climate action.

Solutions

Solutions companies offer technologies, products and services that actively protect or reduce human impacts on nature. To identify these, we draw on the insights of our equity analysts, ESG sector analysts and sustainable outcomes team, using multiple data sets. They typically have strong growth potential and future earnings trajectories, which we believe are often underestimated. This creates potential opportunities to capture the upside in the medium to long term.

We apply a minimum threshold to ensure the materiality of these companies' contributions; at least 20 per cent of their revenues must be derived from solutions relating to the prevention of destruction or restoration of natural capital. We retain a level of flexibility to target companies developing new and emerging solutions that may not yet have reached the 20 per cent threshold but have the potential to make crucial contributions to the transition and generate strong returns.

Transition

Beyond solutions providers, increasing physical risk, anticipated changes in regulation and growing consumer awareness will lead to winners and losers in a wide range of industries. Those that anticipate and adapt to change are likely to prosper, while others will fall behind. The ability to pick such winners can therefore lead to sustainable returns uncorrelated to broader financial market performance, so we also focus on sector leaders backing the transition to a nature-positive economy – those able to better manage their exposure to biodiversity risks than peers.

This approach allows us to consider the whole economy instead of focusing narrowly on solutions providers, and the size of some of these firms should mean they can have a much greater impact on the natural environment than smaller solutions businesses. As a result, investing in transition leaders supports nature-positive outcomes by encouraging the whole economy to better protect and restore natural capital.

Risk, regulation and consumer awareness will lead to winners and losers in a wide range of industries

It may be surprising to some to see the likes of BNP Paribas, AstraZeneca or Kering included in a natural capital transition strategy. But BNP Paribas has sector-leading lending practices with regards to sustainability and deforestation; AstraZeneca is a leader on water issues, in particular, discharge of active pharmaceutical ingredients; and Kering is a pioneer in how it measures and reports on its natural capital impacts.

If more companies as entrenched in their own sector, with many employees and far-reaching operations, improved their practices to protect and restore natural capital, the world would be in a better place.

> If more companies with far-reaching operations improved their practices, the world would be in a better place

In that sense, allocating to transition leaders helps our strategy deliver both strong returns and nature-positive outcomes:

- It expands the investment universe, particularly compared to strategies only focused on solutions providers, increasing our ability to construct more diversified portfolios across sectors, company sizes and geographies. We believe this should lead to greater risk-adjusted returns over the cycle.
- It promotes change across sectors and geographies and rewards companies transitioning their business models to stop taking natural capital for granted.

A bespoke risk model to identify transition leaders

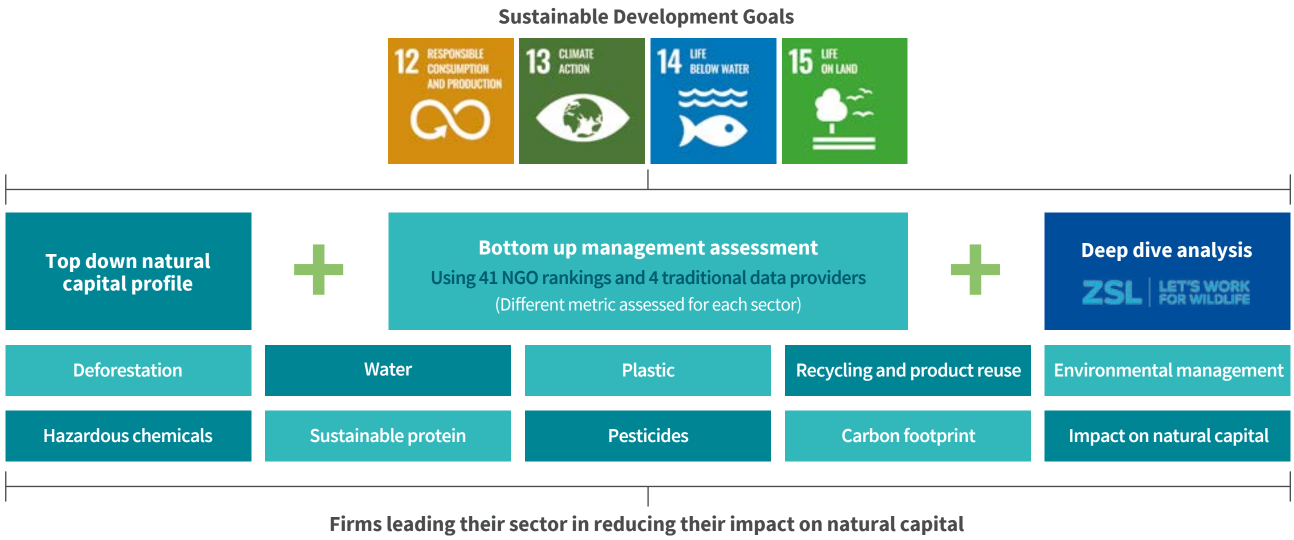
Our natural capital transition risk model enables us to assess companies' positive or negative impacts on nature and identify transition leaders in their sector.

1. We take a top-down approach to classify industry sectors with a low, medium or high impact. Because every sector affects nature in different ways, and there is no universal standard metric to monitor these impacts in the way carbon emissions are used to track climate change, we use different sets of indicators for each sector. Firms in higher-risk sectors are subject to more demanding thresholds.
2. We conduct a bottom-up risk assessment using data from specialised NGOs on specific issues like deforestation, sustainable proteins, packaging and chemical use. We measure companies' performance on the most material metrics for their sector.
3. Working in partnership with the Zoological Society of London (ZSL), we have created a proprietary framework through which ZSL provides specialist, independent assessments on each company in the portfolio, in addition to our own reviews.

Our approach reflects sector nuances. For a bank, we assess activities such as lending practices, particularly with regards to deforestation and fossil fuels, whereas for a beverage company, we look at metrics related to water usage, packaging and sustainable sourcing of ingredients.

We will only invest once we feel comfortable a stock meets the dual mandate of potentially delivering strong long-term returns and contributing to a nature-positive economy.

Figure 5. **Our natural capital transition risk model**



Source: Aviva Investors, December 2022.

Engaging to maximise value

We use three levers to maximise the strategy's contribution to a nature-positive economy: the way we allocate capital, as discussed in the previous section, bespoke engagement with every company we hold and engagement with governments, policymakers and other key stakeholders to correct market failures on sustainability issues – a practice we call macro stewardship (see *AIQ: The macro stewardship edition*).[17]

> We conduct bespoke engagement with every company we hold

Company engagement

When engaging on environmental issues, we ask firms to carry out a biodiversity assessment and set SMART (specific, measurable, achievable, relevant and timebound) targets on key impact areas. We also identify a specific gap for each company, which we ask them to address. For example, we are asking a car manufacturer to increase the recyclability of EV batteries and recycled content of its cars. We may divest from any company that does not make sufficient progress towards these engagement asks within a three-year period.

Although we invest in transition leaders in their sector, this escalation pathway shows a clear consequence if they waver in their commitment. It also provides a positive feedback loop into our investment process, with position sizing and company holdings influenced by our engagement successes and failures. Over time, we believe this will help the strategy deliver consistent returns and positive environmental outcomes.

Macro stewardship

Complementing our engagement at a company level, our macro stewardship team actively engages with governments, policymakers, NGOs, academics and other key stakeholders to try to correct the market failures that lead to the destruction of nature. We have a long track record in this area, having helped fund or create many leading sustainability initiatives, such as the UN Principles for Responsible Investment (PRI).

Aviva is chairing the Finance for Biodiversity Foundation Advisory Group, which lobbies on the role of the financial sector in addressing biodiversity loss, and our macro stewardship team provides key input and recommendations to this work. As part of these efforts, we called on finance ministers to support an ambitious global biodiversity framework ahead of COP15 in Montreal in December 2022, the biodiversity equivalent of the climate COPs.[18] In Europe and the UK, we are campaigning to increase company directors' liability for environmental pollution.[19]

Encouraging governments and supranational institutions to accelerate the transition to a nature-positive economy, tighten standards and implement regulation should help solutions companies and transition leaders benefit from such changes compared to transition laggards.

Case studies

Nature-positive solutions: Driving precision agriculture to protect the environment

Trimble is an American mid-cap industrial technology company supporting global industries in a range of sectors. It offers precision agriculture products, which help farmers monitor and map field information in real-time, make planting and seeding operations more efficient and reduce wasted inputs and fertiliser use. It also provides products to help farmers distribute water efficiently, controlling excess water to minimise topsoil disturbance and reduce erosion.

This is an example of a company offering solutions for a nature-positive economy. As it expands its software offerings on top of its core hardware products, we believe this will help Trimble generate more resilient, recurring revenue streams. In time, we expect this will lead to a re-rating of its equity valuation.

Transition in action: Finding a leader in the chemicals sector

Royal DSM N.V. (DSM) is a large-cap Dutch multinational corporation active in the fields of health, nutrition and materials. Our transition model identifies it as a transition leader: it has committed to a science-based target on climate change and is one of only 58 companies globally to have received an A-rating from CDP on both climate change and water security. Its leadership position was corroborated by multiple other data sources, including a strong ranking in the ChemScore index.[20]

Furthermore, DSM has an attractive investment outlook, with its increased focus on animal and human nutrition following divestments of non-core industrial assets and completion of a transformational merger with leading European flavours and fragrance business Firmenich. Volumes in the nutrition market, which were hit by rising prices in 2022, are also expected to recover once inflation normalises, which will benefit DSM too.

In addition, its pipeline of innovative products should offer enhanced long-term revenue opportunities, while being aligned with the natural capital transition. These products include Bovaer, an enzyme used to reduce cows' methane emissions by more than 30 per cent, and Veramaris, an algae-based fish feed that is significantly more environmentally friendly than standard fishmeal.

Finally, as part of our partnership with the charity, ZSL provided an assessment highlighting the company's strengths and weaknesses. The report stated DSM could make significant contributions to addressing environmental challenges through its "Brighter Living Solutions" range, but said the company scored relatively poorly on deforestation indices. This informed our engagement programme with DSM, and we have asked it to improve its deforestation policy and management of hazardous chemicals.

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Key risks

Investment/objective risk

The value and income from the fund's assets will go down as well as up. This will cause the value of your investment to fall as well as rise. There is no guarantee that the fund will achieve its objective and you may get back less than you originally invested.

Emerging market risk

Investments can be made in emerging markets. These markets may be volatile and carry higher risk than developed markets.

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Where relevant, information on our approach to the sustainability aspects of the fund and the Sustainable Finance disclosure regulation (SFDR) including policies and procedures can be found on the following link: https://www.avivainvestors.com/en-gb/capabilities/sustainable-finance-disclosure-regulation/

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