SEPTEMBER 2023

POLLINATION

THE POLLINATION OVERVIEW ON NATURE AND CAPITAL MARKETS

NATURE FINANCE FOCUS

Tracking global trends in nature investment

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ABOUT POLLINATION & NCIA

Pollination is a specialist climate change investment and advisory firm, accelerating the transition to a net zero, nature positive future. Our people are the key to unlocking change. Brought together from across industries, we are global leaders in finance, investment, technology, business, law and policy.

We combine our diverse expertise to connect dots and see around corners where others can't. With strong relationships at the highest levels of government and the private sector, we shift barriers and catalyse transformative partnerships.

Our clients span governments, businesses and public and private capital. Using our broad experience, we help navigate the climate transition, and design and invest in breakthrough ideas that deliver financial returns.

Pollination is proud to Chair the Sustainable Markets Initiative's Natural Capital Investment Alliance Task Force (NCIA). The NCIA is an alliance of asset managers working to demonstrate the opportunity for private capital investments into nature, and mobilise $10 billion of funding into investments that protect, restore and regenerate natural capital.

RESEARCH METHODOLOGY

Censuswide is our global research partner on this report. The research is generated from a globally informed audience of institutional investors across 6 countries – the US, the UK, Australia, Singapore, Japan and France with AUM ranging from US$10Bn to US$500Bn+. Working in close collaboration with Pollination on the questions, Censuswide managed an online survey. Censuswide complies with the MRS Code of Conduct based on the ESOMAR principles.

For more information about Pollination and our range of services, please contact our Head of Business Development, Marisa Chiarella at marisa.chiarella@pollinationgroup.com

Nature is an opportunity we're all growing into

MARTIJN WILDER
Founder & CEO

The private sector's relationship with nature has undergone a long journey across the past fifty years. Initially, nature was simply seen as a resource to be largely exploited and enable economic growth and not an integral part of the economic system, despite the increasing role for conservation and preservation. However, over time we have begun to understand nature as a foundational presence for our economic and social lives, and alongside this, a great opportunity to improve them.

As the critical role that nature plays comes into focus capital providers have become increasingly engaged in thinking about the natural world. This is in part because material stakeholders such as regulators and consumers have begun to move on the topic, prompting economies into the beginning of transition pathways which will play out over decades. These pathways create significant economic risks, but also create sizable opportunities for growth and for the creation of more effective economic models. Alongside this structural change, capital market actors are also being urged by a growing set of material stakeholders to deepen their understanding of their relationship with the natural world.

While this recent growing recognition of the intersection of nature and capital markets may seem sudden, it actually represents a maturing of understanding as to what is required to build truly sustainable economies. Without this ability to fully integrate the role of nature that we are setting out to build today, we have little chance of reaching an economic model that is viable long term and can provide for our civilization today and in the future.

In this report we set out to improve our understanding of how this effort is affecting capital market participants. We surveyed investors globally to understand what is motivating their work, where they see risk and opportunity, and how the investment footprint on nature is evolving today. We found that although investor motivations and views vary widely, major investors across the globe are beginning to identify nature-related risks across the economies they cover, and dedicating capital to multiple nature opportunities. This is hugely encouraging, and also vital.

Investors have a lot of work ahead of them as they build their ability to understand, observe, and manage their relationship with the natural world. This work will require a significant and sustained build in capability across capital markets, including skills and human capital, information infrastructure and new models and norms.

However, they're not alone in this work. Companies across all sectors, consumers, regulators and policy makers are all on the same path – working to better understand their relationships with the natural world, and to evolve these relationships into better forms. Investors should think of themselves as part of a wide and varied group facing the same challenges, and this group as a source of insight and support.

It has long been Pollination's commitment to support the full integration of nature into economies and capital markets, working to find models and approaches which provide a bridge between these and the natural world. From the creation of Climate Asset Management through to our ongoing work with financial institutions across Europe, Asia Pacific and the Americas, our work is focused on supporting investors as they evolve their interactions with nature. Our findings in this report reinforce our hope and our determination to support global capital markets on this journey.

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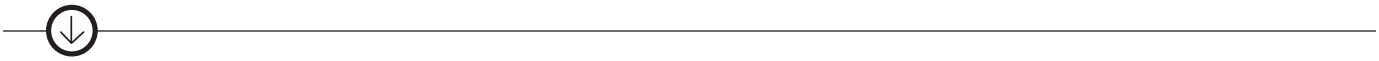
POLLINATION

Nature underpins our economies and portfolios, but we have only just started to understand it.



The contributions of the natural world to modern economies are foundational – providing core infrastructure without which economies cannot function. However, to date these have been largely invisible for capital markets. Economies world over are now being asked to understand and manage their use of these foundations, before they are further eroded.

As nature becomes a greater concern for commercial stakeholders, its business case for investors will build, and so will the risk it presents. Like climate change, the degradation of nature more broadly will drive structural economic change as economies work to use less of nature to achieve their ends. Countries will move to manage increasingly insecure resources, and these movements will drive changes in access and cost which will reverberate through investment portfolios. Alongside these changes, preferences for nature-friendly models which are already emerging among business and retail consumers are likely to grow. This demand will only be accelerated by climate change, as business models which support nature improvements provide direct and indirect solutions for climate change mitigation and adaptation. This growing interest paired with increased disclosure requirements will drive changes in competitive dynamics, with some business models elevated and others revealed to be fragile.

As a consequence, the business case for nature among investors is threefold. Investee companies will face increasing constraints on their use of and access to nature. Companies and investors will face increased investment and customer interest in

business models which use nature wisely and have fewer negative impacts. Finally new industries which make this possible will emerge and present new opportunities.

HOW ARE INVESTORS RESPONDING ACROSS THE GLOBE?

To get a sense of how investors are responding to these challenges and opportunities, we asked over a thousand institutional investors about their experiences working on nature to date. We identified a cohort of investors who are thinking about or working on nature and surveyed them to understand where they see risks and opportunities. Our sample of 557 engaged investors was distributed across the globe and across investor types. These investors run the gamut of sizes, ranging from less than US$10bn AUM through to US$500bn+, and their average size was ~US$195bn. The vast majority of these investors have responsibility for between US$30bn and US$500bn AUM. This tells us that a significant population of institutional investors is actively working on nature and investing in nature opportunities.

Although a growing group of investors is engaging on nature, this engagement is still often one-sided. Approximately 46% of the above group indicated that they are primarily focused on the risks posed by nature across their portfolios. On the other axis, 37% are focused primarily on opportunities which arise from nature as a theme, including direct investments in nature improvements, nature markets or nature solutions. Only 18% were considering both of the above angles. This polarised response is likely emblematic of the early nature of work on nature in the investment space. We expect that these worlds are likely to increasingly overlap as investor work on the topic builds. At Pollination we firmly believe it is important both to investment and nature outcomes that investors consider both risks and opportunities in their work on nature.

Investor engagement on nature is unsurprisingly different in different parts of the world, but we found some commonalities. Motivations driving investor activity and views on risk vary in different regions. For example, only 16% of UK investors who are engaged on nature cite activist pressure as a driver of their work in the space, while 50% of Singaporean investors give the same answer. We found that 40% of US investors have integrated nature into their core investment strategy, while this is true for just 20% of Australian investors. Nonetheless, between 71% (Singapore) and 50% (Japan) of investors we engaged with highlighted returns as a major motivator for their work in the space, telling us that the mix of core motivations doesn't differ too widely.

Some of these differences were initially surprising, including very high levels of engagement on nature in the US. Despite significant polarisation on sustainable and responsible investment, US investors are among some of the most active on nature. US investors were more likely to integrate nature into their broader risk framework than any other nation except Singapore (with 45% of investors engaged on nature in the US implementing these actions vs 61% in Singapore), and also the third most likely to be carrying out active portfolio risk assessments.

We were also interested to find that investors in Singapore see greater risks and greater returns potential in nature than all other regions surveyed. 71% of Singaporean investors working in the space cite returns as a primary motivator, compared to 60%

globally. Singaporean investors observe major risks in more sectors than investors in other jurisdictions. This orientation is also evident in investor response, with 61% of Singaporean investors engaged on the topic are working to embed nature into their risk governance frameworks, compared to 42% of investors globally.

A substantial group of investors globally are focused on opportunities in the nature space. Investors the world-over appear to be very interested in nature opportunities, with particular emphasis on nature-based solutions and nature markets. Around 50% of investors working in the space highlighted investments in both categories, significantly higher than technology solutions (38%), real assets with nature overlays (34%), and responsible mining (32%). Investments in nature opportunities are more prevalent among investors responding from Australia (61% of engaged investors have exposure), Singapore (54%) and the US (53%), and surprisingly less prevalent among French investors (40%). Finally, investors in many regions share the view that some or all nature-related investments can usefully be classified as an asset class (75%), with larger investors much more likely to hold this view.

HOW SHOULD INVESTORS CONTINUE TO BUILD THEIR WORK ON NATURE?

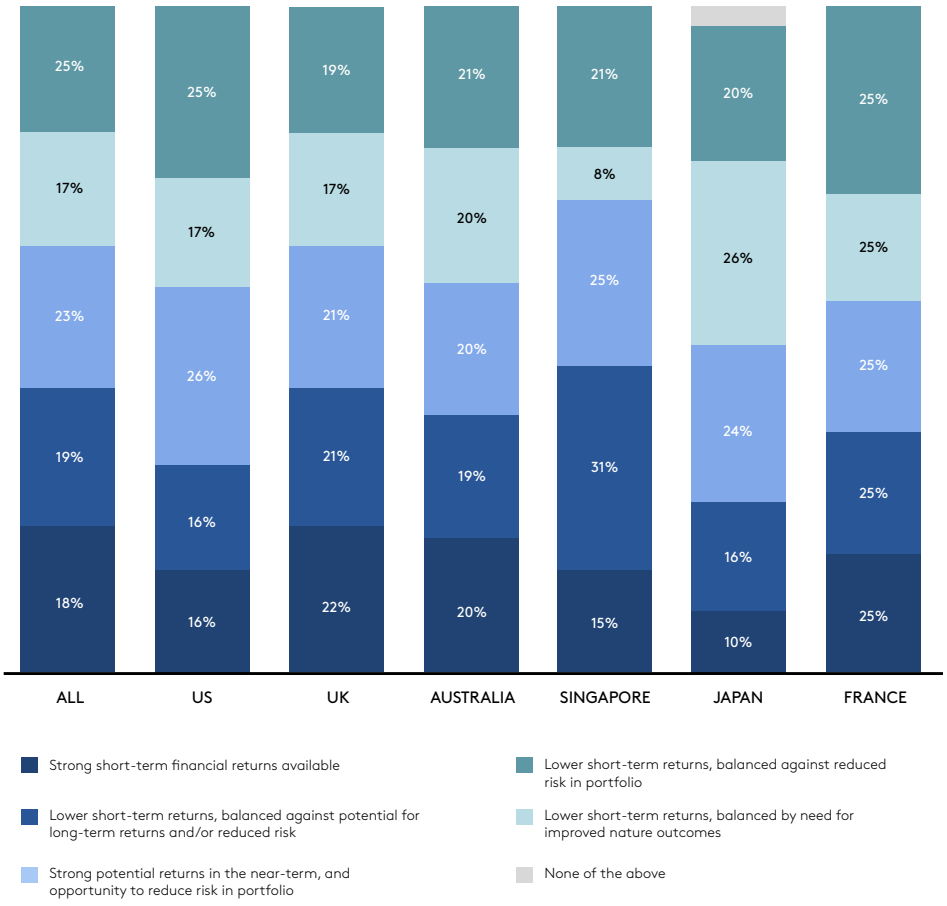
Investors may find nature overwhelming to approach, but it isn't all new and doesn't need to happen all at once. Instead, investors can and should start with the bits that are most material to their portfolios. To help with this process, we increasingly talk about nature as a series of natural asset groups, from atmosphere through to oceans. Climate change is particularly dangerous to a large group of people, and for this reason work on atmosphere began first and with high urgency. Many of the capabilities needed to manage climate are also relevant for other groups of natural assets. As such, investors are extending and strengthening these capabilities, rather than needing to start again.

Investors should think of their work on nature as a medium-term exercise in building competence, rather than a sprint. Nature as a full domain of activity can seem incredibly complex and expansive, especially as investors begin to grapple with the challenges presented by both value chains and

FIGURE 1

Although investor motivations vary globally, all regions have significant groups responding in each category

Source: Pollination (2023)



geography. However, in our view the exercise can be broken down into very manageable parts. Investors are essentially embarking on building awareness of and management capability across a number of new groups of natural assets. This should be a medium-term exercise, that starts immediately but also takes a number of years to execute.

Investors can use new core capabilities to manage risks and opportunities across different natural assets. At Pollination we think it is productive for investors to approach the integration of nature as the process of building a central set of management capabilities across different groups of natural assets. Although the capabilities needed to deal with different groups of assets do differ somewhat, many of them are common. Furthermore, many of these common capabilities (engaging systematically on specific issues, establishing and comparing targets, and so on) have already been somewhat developed for climate. Many investors will extend these capabilities into the different groups of natural assets which encompass nature, rather than replacing them.

FIGURE 2

Investors' view of sector risk exposure vary widely by jurisdiction

Source: Pollination (2023)

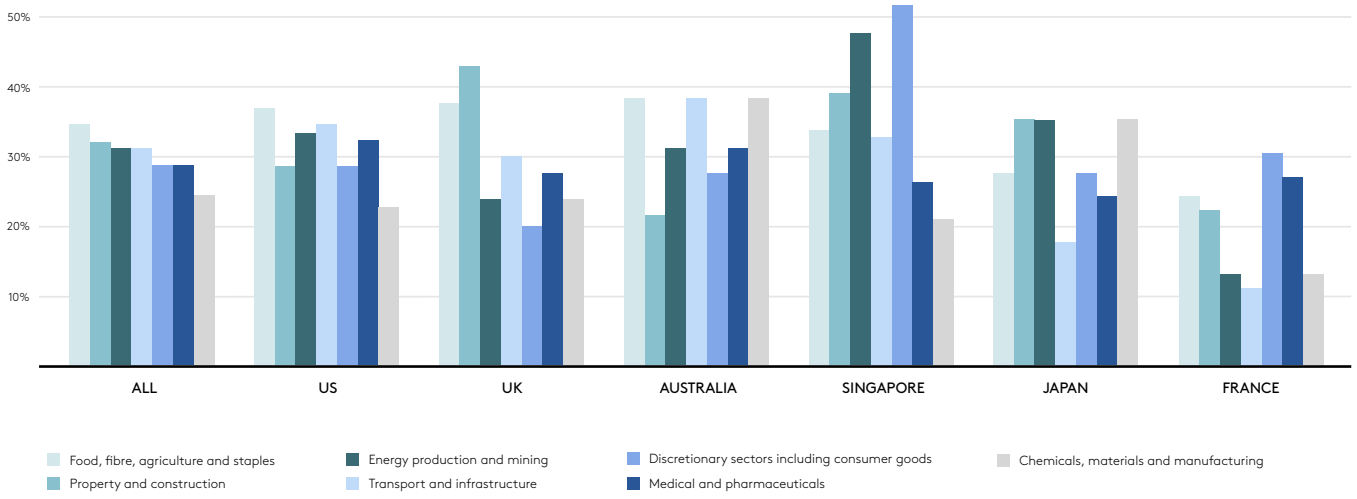
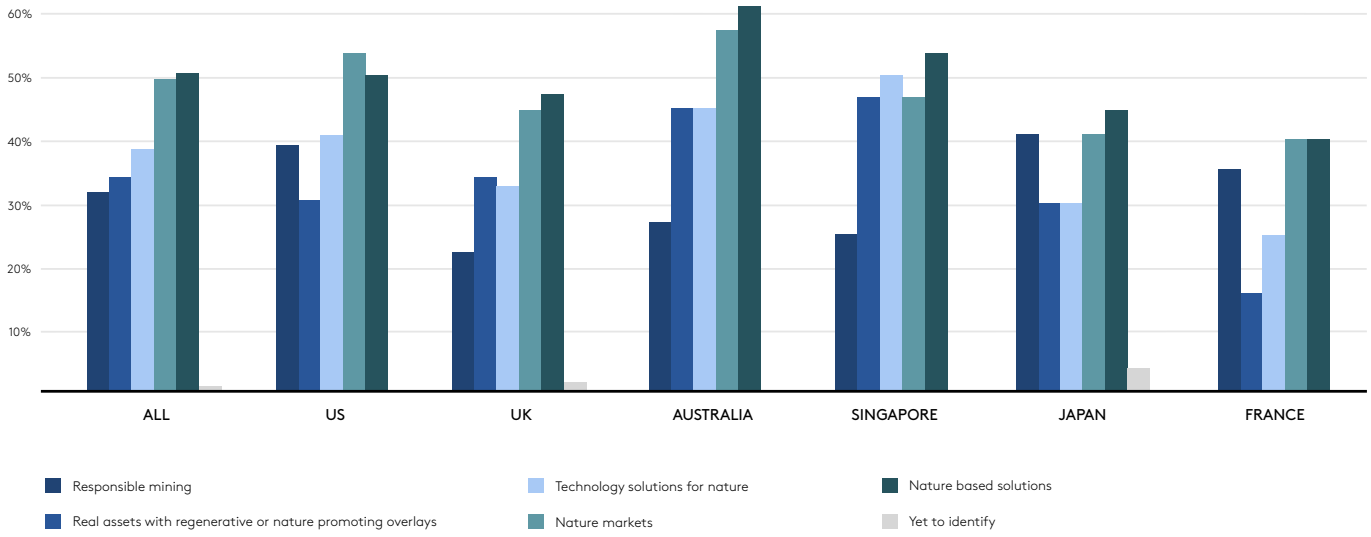


FIGURE 3

A significant portion of investors engaged in nature are leaning into nature-related opportunities

Source: Pollination (2023)



US INVESTORS LEAN INTO IMPACT, AND ARE ACTIVE ON NATURE ACROSS THE BOARD

Impact is a major driver for investors in the US who are engaging with nature, with 68% of investors in the country citing impact as part of their core motivation to invest. Of all regions, American investors are the most likely to expect short-term returns alongside impact (such as improved nature and system risk outcomes), with 26% of engaged investors in the US highlighting that they expect both from their investments. Across all regions, American investors are the second-most likely to state that nature is already part of their investment strategy (41% of engaged investors respond in the affirmative).

American investors are more interested in nature markets and nature-based solutions, with more than half of investors in our sample highlighting investments in these opportunities (versus 30-40% for other nature-related investment opportunities). American investors were also the second-most likely to believe that investments in nature would become a distinct asset class, with 71% of respondents taking this view.

A significant portion of US investors identify major nature risks in almost every sector: American investors had a fairly even view on the sectors facing significant nature-related risks, with around a third of investors highlighting risks across Property & Construction, Transport & Infra, Energy & Mining, Medical & Pharmaceuticals, Discretionary, and Food

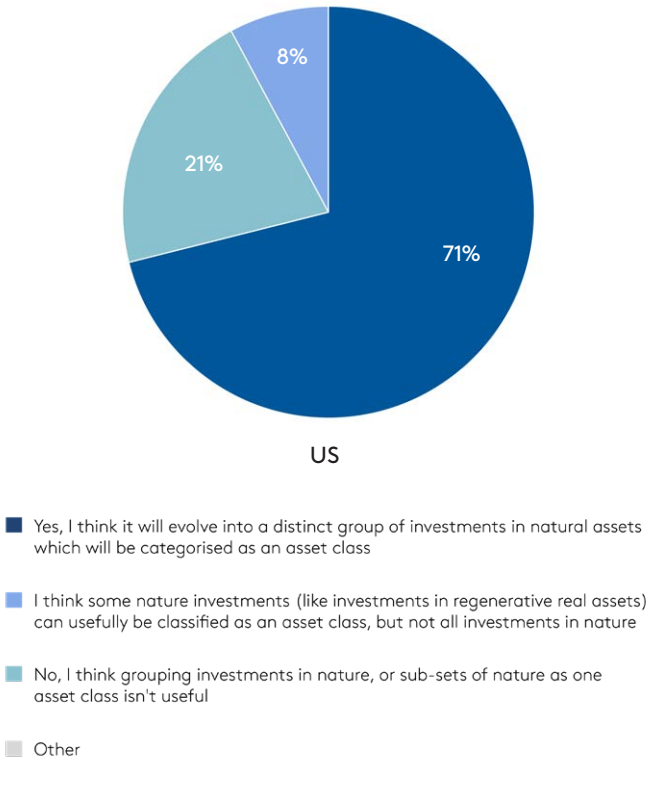
Agriculture and forestry

is the asset class with **the greatest risk** according to US respondents.

FIGURE 4

Do you think of investments in nature as a new asset class?

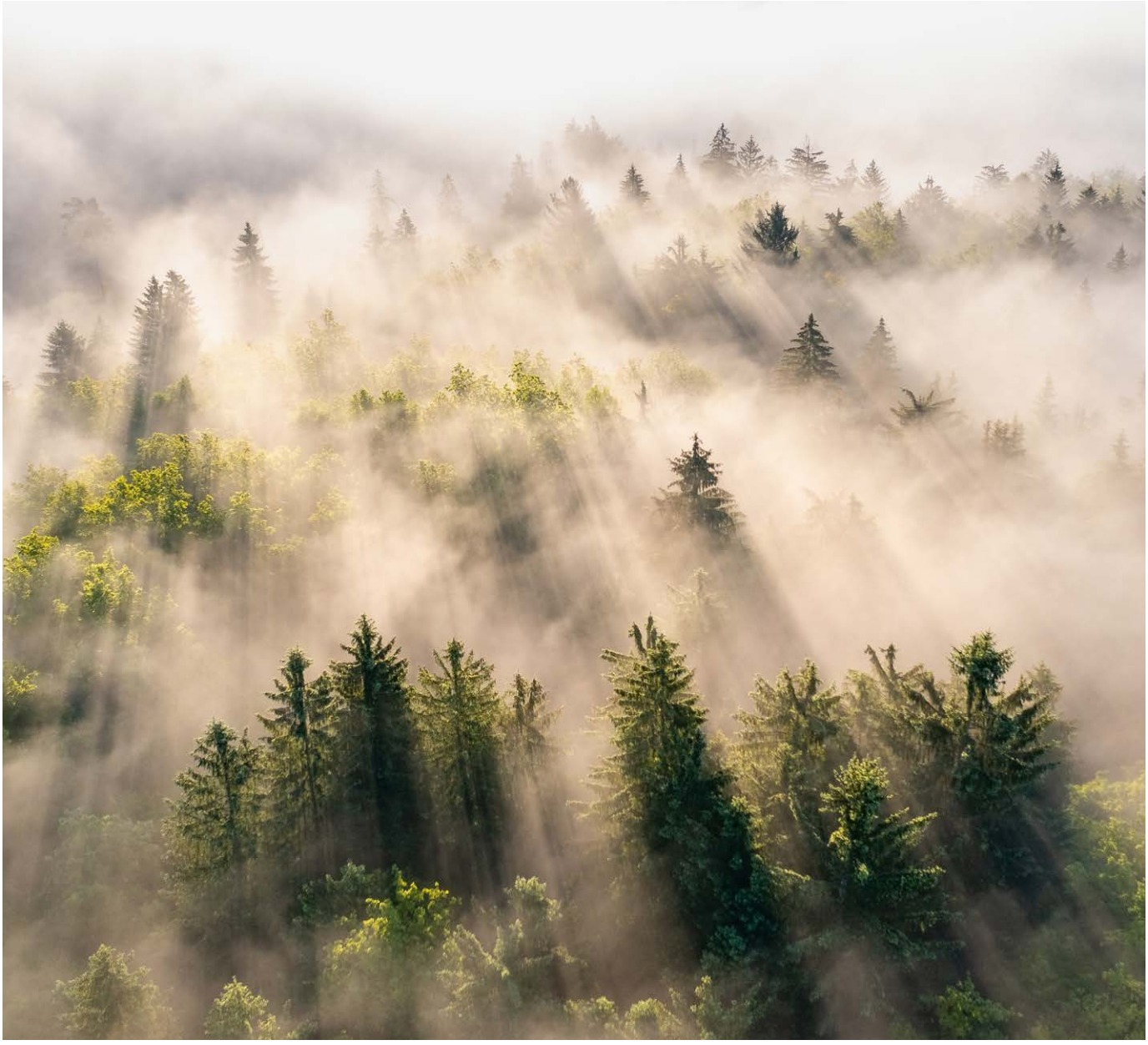
Source: Pollination (2023)



& Fibre sectors. Chemicals, Materials & Manufacturing was highlighted by the fewest investors (23%).

American investors view Agriculture & Forestry as the most risk-exposed asset class by a large margin, with 49% of engaged institutional investors in the country highlighting the asset class as presenting the most significant risk. Indeed, American investors were the most likely to highlight Agriculture & Forestry as a major source of risk. PE & Alternatives comes a distant second, with 40% of engaged investors highlighting risks in this asset class as a major source of risk.

Despite significant polarisation on sustainable and responsible investment, US investors are some of the most active on nature overall. US investors were more likely to integrate nature into their broader risk framework than any other nation save Singapore, and are second most likely to be engaging with investee companies on the topic (with 47% and 39% respectively of investors engaged on nature in the US implementing these actions). US investors are also the third most likely to be carrying out active portfolio risk assessments (41%).



EUROPEAN INVESTORS DISPLAY DISTINCT APPROACHES TO NATURE IN TWO MATURE MARKETS

We surveyed European investors in two locations: the UK and France. Responses from the two countries in many cases show significant contrast.

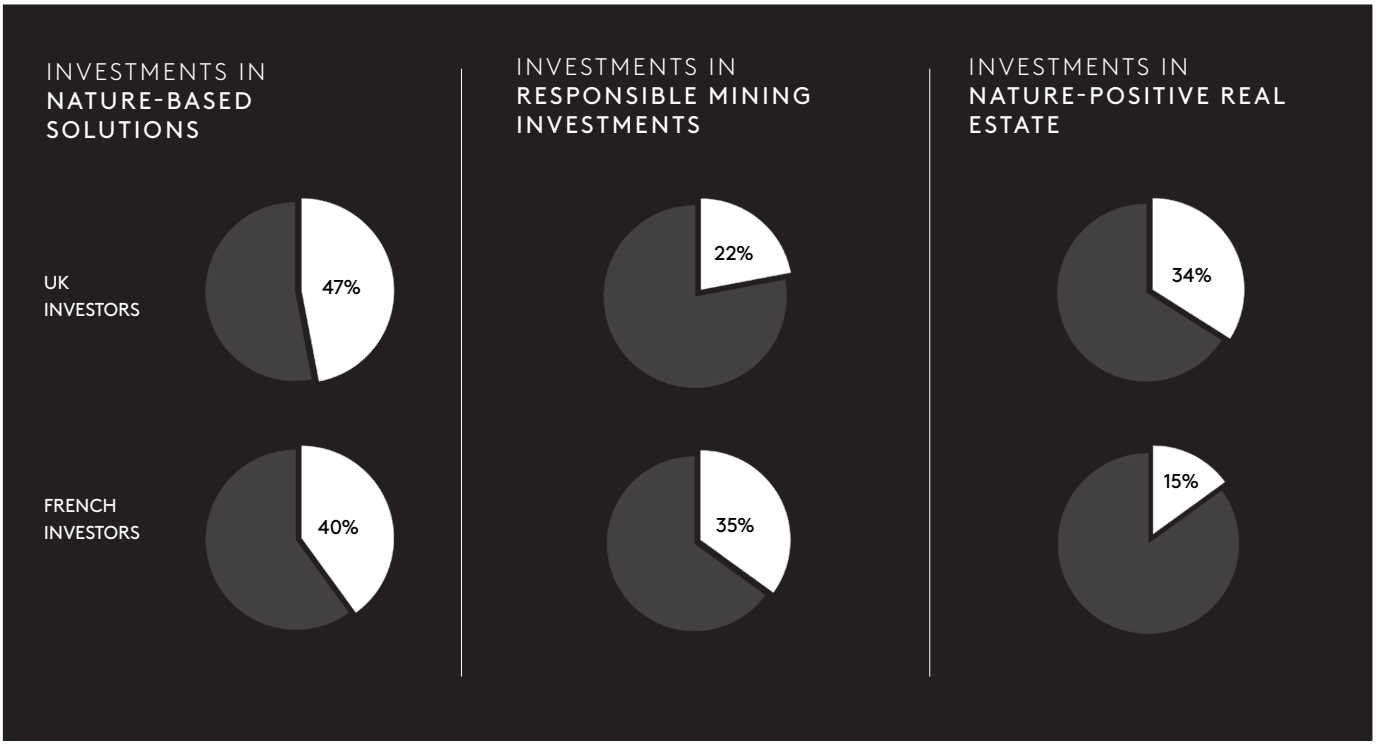
French investors highlight nature improvement and environmental outcomes: French investors were the second-most likely globally to highlight an interest in environmental outcomes as driving their interest in the nature space. They were the most likely to highlight investment motivations specifically related to nature improvement, with 28% of engaged investors responding that the improved management of nature outcomes was a primary motivator. They were also (alongside Australians) the least likely to expect combined outcomes (short-term returns, system risk and nature outcomes).

UK investors more likely to highlight returns: By contrast, UK investors were the least likely to highlight improved nature outcomes as a primary motivator (19%), and the most likely to highlight short-term returns as a singular motivator (22%). UK investors were also the least likely globally to highlight activist pressure as a driver of their engagement with nature (16%).

UK and French investors have widely varying exposures to nature-related investments: Investors in the UK reported slightly higher exposures to nature related investments, with 47% of UK investors having investments in nature based solutions vs 40% in France. French investors flagged a much higher exposure to responsible mining investments (35%) versus UK investors (22%). Conversely, 34% of UK investors among our engaged sample had investments in real assets with regenerative or nature promoting overlays, while only 15% of French investors held these investments.

French investors were the least likely to hold the view that nature investments as a broad group might eventually become an asset class (32%), but were the most likely by a large margin to hold the view that a subset of nature investments can usefully be considered an asset class (42%). Just shy of a third (31%) of UK investors hold the view that categorising any set of nature-related investments as an asset class is not useful, higher than any other region.

When it comes to sectoral risks, French investors are the least likely to flag major risks across sectors, and by a large margin. The largest share of French investors highlighting sector risk is in Discretionary & Consumer Goods (31% of respondents), and is notably smaller than maximums on other regions. Similarly, the lowest share is for Transport & Infrastructure (11%),



which is almost half the next lowest sector response. UK investors are the most likely to highlight significant nature risks in Property & Construction, with 44% of engaged investors highlighting the sector. They are the least inclined to identify major risks in the Discretionary & Consumer Goods (21%).

French investors are also the least likely to identify risks in specific asset classes. Only 17% of engaged French investors identify major risks in Fixed Income, 22% in Property & Infra and 22% in Listed Equities. This compares to averages of 31%, 34% and 38% across all regions. French investors do identify more risks in PE & Alternatives, and in Agriculture & Forestry. UK investors also identify greater risk in PE & Alternatives, with 46% highlighting this asset class as exposed to major risk. Agriculture & Forestry are a close second, with 42% highlighting risks in the asset class.

ASIAN INVESTORS HAVE POLAR OPPOSITE MOTIVATIONS ON NATURE

In Asia, we surveyed investors in two locations: Japan and Singapore.

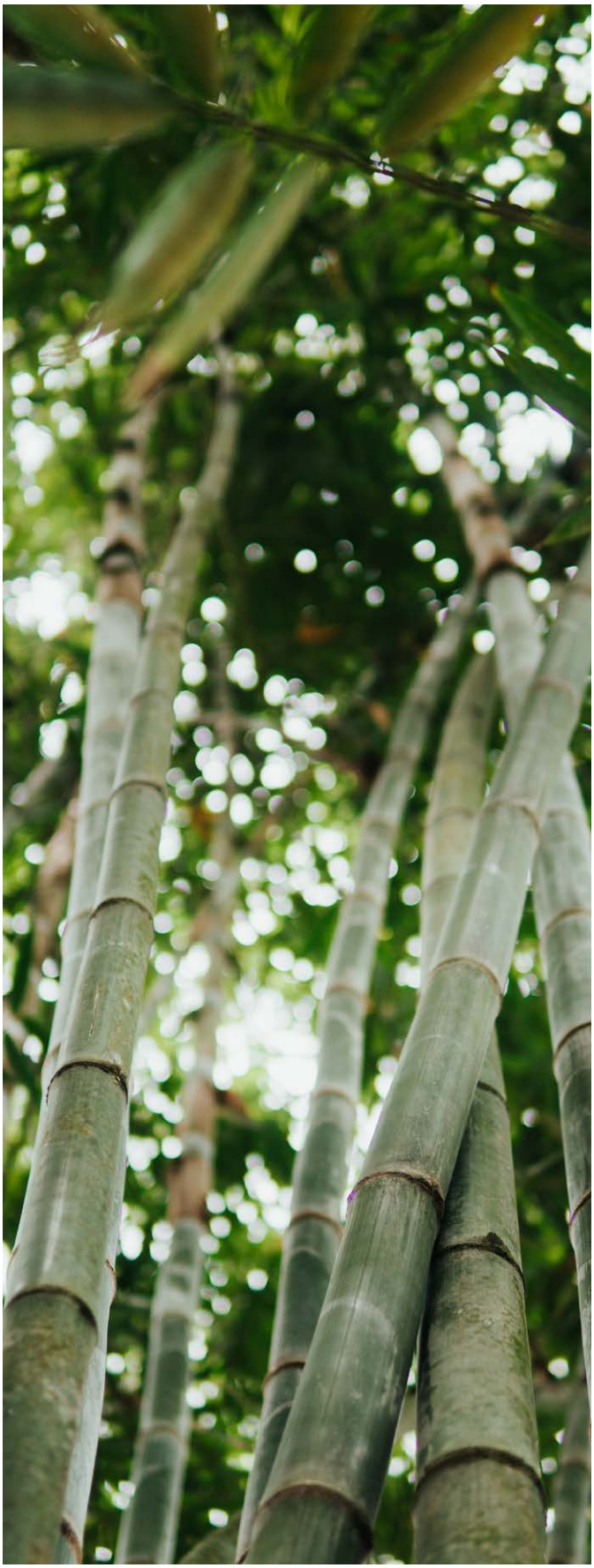
Investors in the two countries have sharply differing motivations, landing at either end of the global spectrum despite their proximity. Investors in Japan appear to be primarily motivated by impact, with 70% of investors highlighting impact outcomes among the primary motivators for their investments in the space (the highest of all regions). By contrast, 71% of Singaporean investors in the space highlight returns as a primary motivator, with 46% of these being motivated only by short or long-run returns (the highest portion of any region).

Singaporean investors seem to face a need to engage on nature driven by multiple factors. They were the most likely to highlight that their engagement in the nature space was in response

70%

of respondents in Japan identify **impact as a primary motivator** for nature investment

71% of respondents in Singapore **identify returns as a primary motivator.**



to external pressure (from activists, regulators, and client demands), but also the most likely to highlight that they expected increased returns, and reduced risk. Perhaps unsurprisingly (given these pressures) Singaporean investors were the most likely to highlight that nature is now considered part of their investment strategy (68%).

Singaporean investors have a notably higher exposure to nature investments than Japanese investors. Nature-based solutions was the highest investment category in both regions, with 54% of investors engaged on nature in Singapore investing in this space, and 44% in Japan.

The two countries also differ widely in their views regarding natural capital as an asset class. 60% of respondents in Japan thought that all or some investments in nature might eventually become a useful asset class (the lowest of all regions), while 81% of Singaporean investors responded the same (the second highest of all regions).

Japanese and Singaporean investors identify risk in different sectors. Singaporean investors have views on risk across sectors which vary widely compared to other regions. Singaporean investors identify the highest risk exposures of any region, with 49% of engaged investors flagging risks in Energy & Mining, and 51% in Discretionary sectors. Japanese investors have a milder view of risks, with investors highlighting the greatest risks in Property & Construction, Energy & Mining, and Chemicals, Materials & Manufacturing (all at just over a third of engaged investors).

Japanese and Singaporean investors both have relatively high views of risk across asset classes. In Singapore risks are considered to be particularly concentrated in PE & Alternatives, Property & Infra, and Listed Equities. 51% of engaged Singaporean investors highlight risks in Property & Infra, which is the highest response for any asset class across all regions. Japanese investors also highlighted Property & Infra and Listed Equities, followed closely by Agriculture & Forestry.

External pressures motivate

50%

of Singaporean investors vs. 22% of Japanese investors

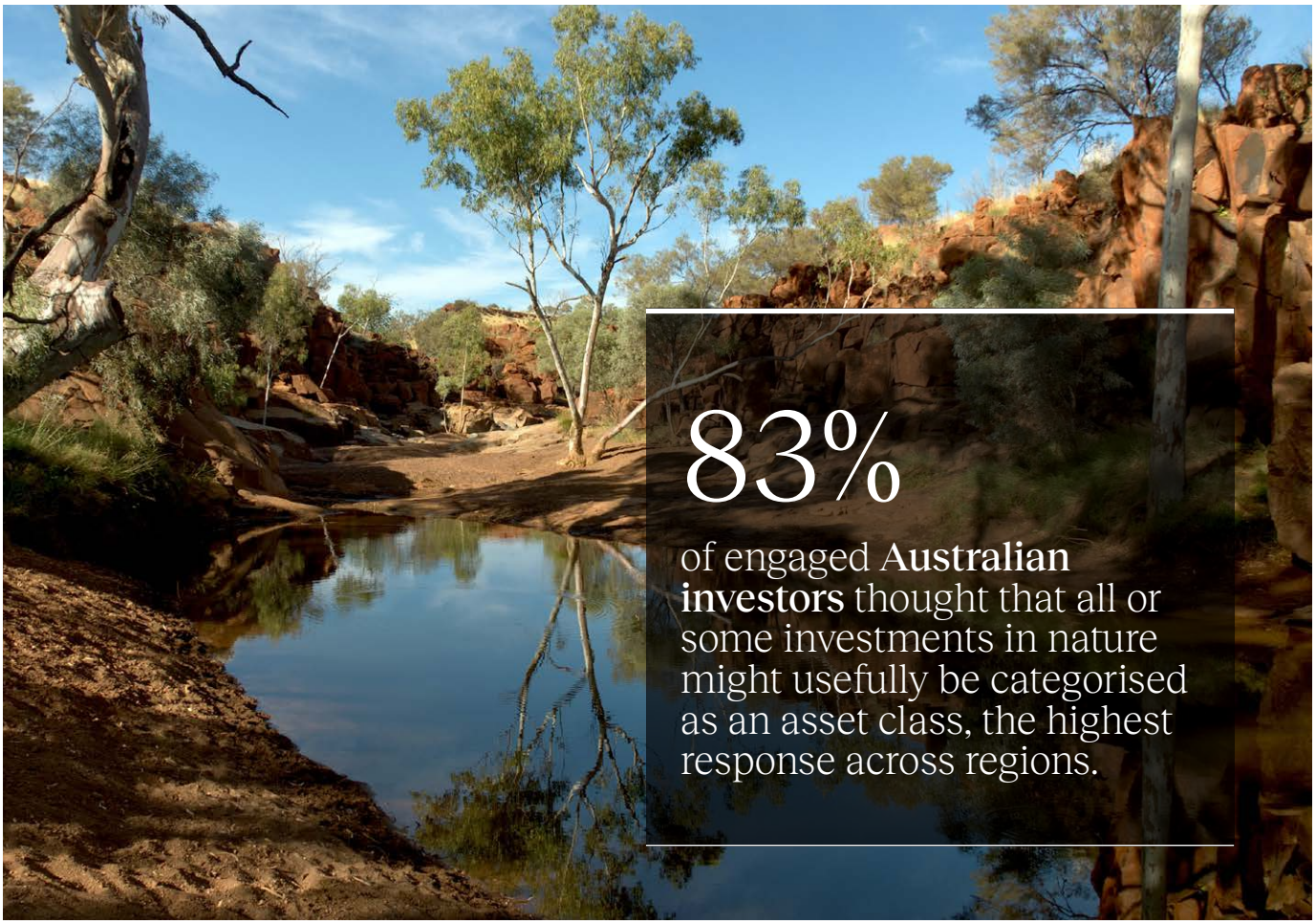
AUSTRALIAN INVESTORS ARE HEAVILY ENGAGED IN NATURE OPPORTUNITIES

Australian investors seem to be particularly focused on nature as an area of investment opportunity. Australian investors reported the highest exposure to investments in nature of all regions, with 61% flagging investments in nature-based solutions and 57% in nature markets. 83% of engaged Australian investors thought that all or some investments in nature might usefully be categorised as an asset class, the highest response across regions.

Despite this particular focus, Australian investors engaged in the nature space have a very even distribution of motivations. 39% highlight returns as their major driver, 41% highlight system risk or nature impact, and 20% expect a combination of the above.

Australian investors also identify a different mix of risks to other regions. Investors globally have a slightly higher tendency to identify risks in Property & Construction, Transport & Infra, Discretionary & Consumer and Food & Fibre, with Chemicals, Materials & Manufacturing having a lower risk exposure. By contrast, Australian investors identify the highest risks in Food & Fibre, Chemicals, Materials & Manufacturing, and Transport & Infra.

Australians also observe the highest expectation of nature-related risk in fixed income. 44% of engaged investors highlighted fixed income as an asset class with major risk exposure, more than ten percentage points above the highest response from other regions (the US). Australians also view PE and Agriculture & Forestry as highly exposed classes (44% and 47% respectively).



CHAPTER 1

1. What is nature to investors, and what should it be?

Nature as an invisible foundation

Nature has been climbing the agenda for investors over the past five years. In May of 2019 the Global Assessment Report on Biodiversity and Ecosystem Services was released, outlining a significant and growing threat to economies the world over. As the 15th Conference of the Parties of the Convention for Biological Diversity (COP15) emerged on the horizon, investors across Europe, Asia Pacific, and the Americas were already working their way beyond climate change and into the topic we now call nature. Work on deforestation, water use and circularity was well underway in many quarters. Although the COP15 conference itself was delayed until 2022, the intervening time has seen the emergence and now final development of the Taskforce on Nature-related Financial Disclosures (TNFD) framework, the creation and launch of the International Sustainability Standards Board (ISSB) and its recommendations, and the formation of the Science Based Targets Network (with an extended focus on nature). Alongside these developments we have seen an increase in the number of investors working on issues considered related to nature.

Today, our conversations with investors abound with questions that relate to nature. In Asia investors ask us about deforestation as the issue rockets to prominence in investment circles, and about opportunities to deliver net zero via nature-based solutions. In Europe we are asked to help investors grapple with the rapid development of nature-related investment opportunities – where are they, how do we access them, and what are they worth? In the US we help investors as they work to identify new structures to blend public and private finance to support nature-based solutions. And globally, we are asked again and again – what is the investment case for nature?

NATURE PROVIDES A (PREVIOUSLY-FREE) FOUNDATION FOR THE ECONOMY

Nature is the foundation of economic value generation which was until recently largely invisible to investors. It affords infrastructure that undergirds the global economy, providing a myriad of services and products which make our economic activities possible[1]. This infrastructure has been invisible to most investors because in most cases it is still available largely for free or for very little cost. In most regions and across most products and services provided by nature, companies are able to take advantage of the infrastructure nature provides without having to spend much. In many cases companies are asked to manage their environmental footprint by regulatory entities – there are various impacts companies are forbidden from making on the world around them or which are limited by regulators. Nonetheless they access most products and services (which include clean air, disaster protection, and water provision among a very long list) for free. As such very few investors have historically had to think about nature, or indeed know about it in much depth.

However, nature is about to become more visible. Nature is, as we hear often, in a state of crisis. What this means materially for investors is that the above infrastructure is wearing down and running out, and in some cases is at risk of rapid collapse.

1. WEF 2022 Nature dependence report, Dasgupta review, UNEPFI 2023 report

This depletion and the associated risk is visible in surveys of nature globally[2]. In response to this rapid decline, regulators, customers and policy makers are beginning to focus their attention on nature which will create greater scrutiny for companies and investors. For example, it is likely that within 24 months, large companies across Europe will be required to report their relationship with nature as part of their mandatory reporting. The TNFD and the ISSB will provide another global wave of visibility. In five years we will live in a world in which many of the now invisible products and services provided by nature will need to be mapped, understood, disclosed, and increasingly priced.

Nature use will also become more constrained. Alongside the above, policy makers are also considering exactly how they can improve the state of the natural assets (including biodiversity) that comprise what we think of broadly as 'nature'. One lever for this improvement is obviously changing the ways companies interact with these assets. These efforts have been hastened particularly by the creation of the new Global Biodiversity Framework. This work will, in many cases, change which natural assets companies can and can't use, and how much they have to pay for them. This change is likely to be material.

The value of the products and services provided by nature that economies rely on is significant. The value of nature is often estimated either by considering the value of these products and services themselves (which are not reflected in our current economic model), or the value of the economic activity which is underpinned directly by natural assets. Interestingly, estimates of the value of the former have often been larger than the latter. A recent estimate of the extent of global GDP which is highly or moderately dependent on nature puts the figure at US$44tn, or around half of global GDP at the time of estimate[3]. By contrast attempts to estimate the replacement cost for nature generated products and services have often been multiples of global GPD[4]. This might seem startling, and indeed these numbers may turn out to be wrong. Nonetheless, they emphasize the potential extent of economic value underpinned by nature, albeit via contributions which are presently largely invisible.

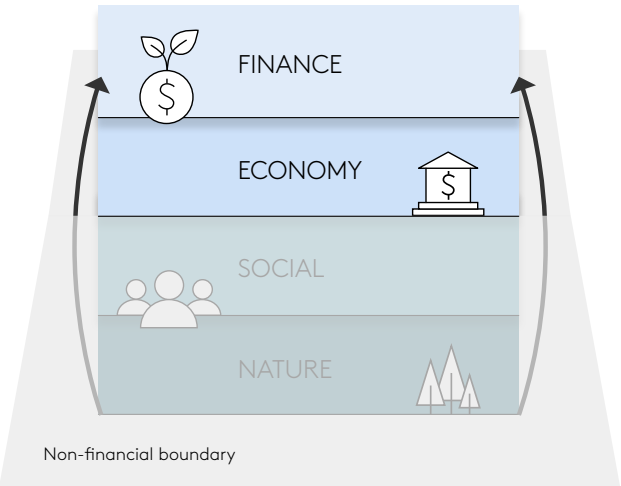
These two movements mean that nature will become more material for investors across the next few years. The above constraints and visibility will impact many business models by changing the resources and services which are available to companies, their relative competitive positions, and their relationships with their stakeholders. They will also change what they're liable for. As a consequence, increasing visibility and policy development will change the world for investors as well.

FIGURE 5

Source: Pollination (2023)

Nature is about to become more visible...

infrastructure is under immense pressure, and in some cases is at risk of rapid collapse.



2. 2020 WEF and PwC Nature Risk Rising report

3. World Economic Forum (2021)

4. Costanza et al (1997), Costanza et al (2014), Costanza et al (2017)

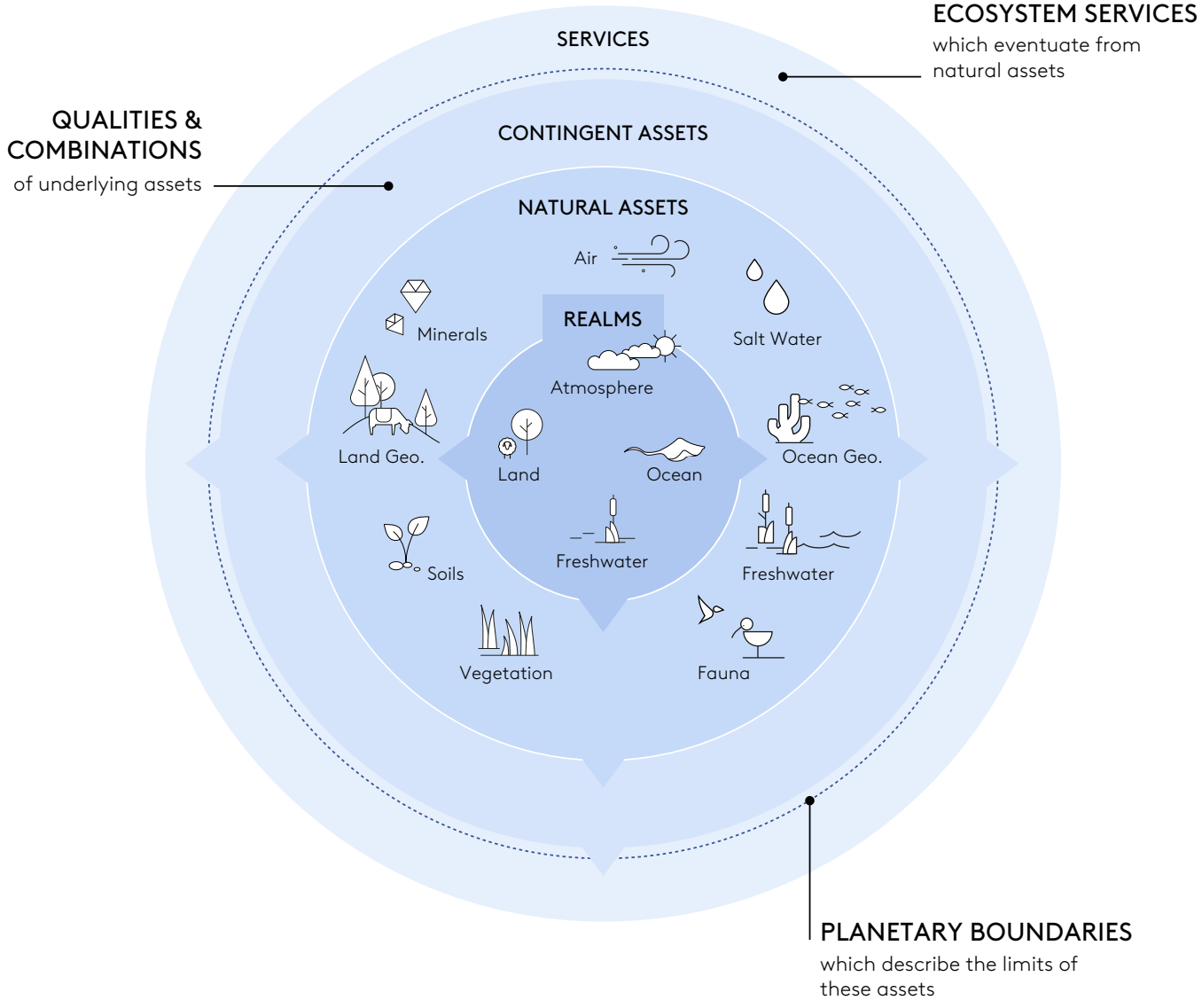
FIGURE 6

Natural assets and ecosystem services

Source: Pollination (2023)

The value of the products and services provided by nature that economies rely on is significant.

As nature becomes more material, constraints and visibility will impact many business models by changing the resources and services which are available to companies. Categorising a company's reliance on nature within the Earth's planetary boundaries is a useful tool in visualising risk and opportunity in nature.



NATURE IS COMPRISED OF GROUPS OF NATURAL ASSETS WHICH INVESTORS ARE LEARNING TO THINK ABOUT AND MANAGE

We increasingly talk about nature as a number of groups or types of natural assets. We use the term natural assets to refer to things like vegetation, water and soils – all parts of the natural world which provide products and services to our economies. The crises discussed above are effectively instances in which these natural assets have been damaged extensively, and this means that they might cease to provide these products and services. Climate change is effectively the erosion and damage of one group of these natural assets – those that have to do with the functioning of the earth's atmosphere. Its consequence is that (among many things) economies world-over will no longer have access to an ecosystem service they previously relied upon – climate regulation.

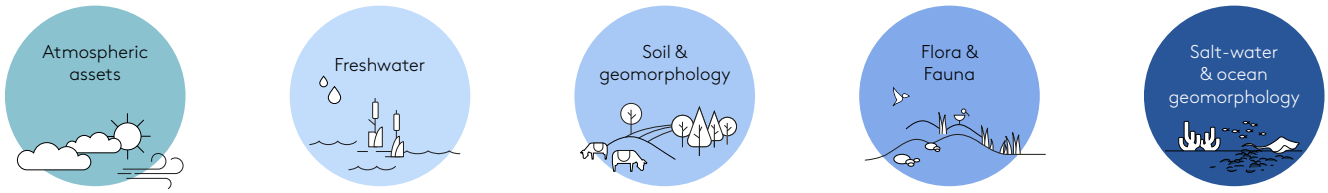
We can group natural assets to help us think about and manage them. Beyond climate, we often frame nature as including four further groups of natural assets, a picture which is similar to those used in a number of evolving global frameworks[5]. This portrayal is highly reductive, as these groups of assets are of course wholly interconnected - operating as a series of complex systems rather than as separate groups. Nonetheless, it provides a workable bridge between the commercial world and the natural world. We find that categorising natural assets into groups helps commercial actors conceive of them and relate to them, particularly when these groups include factors and issues which are especially closely related.

These groups of natural assets are impacted by a set of major damage drivers or pressures, many of which are generated by companies. These include the conversion and use of land and water (e.g. land conversion for development), the use of resources (e.g. the use of water), the release of pollutants (e.g. the release of plastic waste or nitrogen runoff into waterways), the impost of invasive species (such as

FIGURE 7

Characterising nature as a series of groups of natural assets can make it easier to consider

Source: Pollination (2023)



The natural assets which make up the atmospheric system, and moderate the climate sufficiently for people and industries to flourish.

Companies depend on these when they rely on consistent weather patterns and conditions, including consistent rainfall and temperature.

Companies impact these largely when they produce or induce emissions, or contribute to land use change.

Freshwater in its many forms, including rivers, lakes and ground water, which provides critical inputs for many industries and for human survival.

Companies depend on these when they directly use water, or when their supply chain relies on water use.

Companies often impact these when they overuse water, or where they produce pollution which affects water supplies.

Land including soils and geomorphology, which provides critical infrastructure and space for primary production among other activities.

Companies depend on these when they require land for development or agricultural production, and when they mine the land.

Companies often impact these when they over use land or convert healthy land into industrial developments.

Flora and fauna and their diversity, which provide ecosystem services and inputs to medicine, agriculture, construction and manufacturing.

Companies depend on these when they farm, harvest resources from the natural world, or build IP based on plants and animals.

Companies often impact these when they over use land and water, when they produce pollution and other disturbances, and when they overuse species or introduce

Salt water and oceanic geomorphology, which provide critical infrastructure for transport, industrial production and food production.

Companies depend on these when they rely on over-ocean travel, in-ocean production and often coastal production.

Companies often impact the ocean by producing pollution, by overusing ocean species, and by undertaking disruptive production within the ocean.

5. Both the ENCORE framework and the SBTN frameworks categorise nature in similar ways.

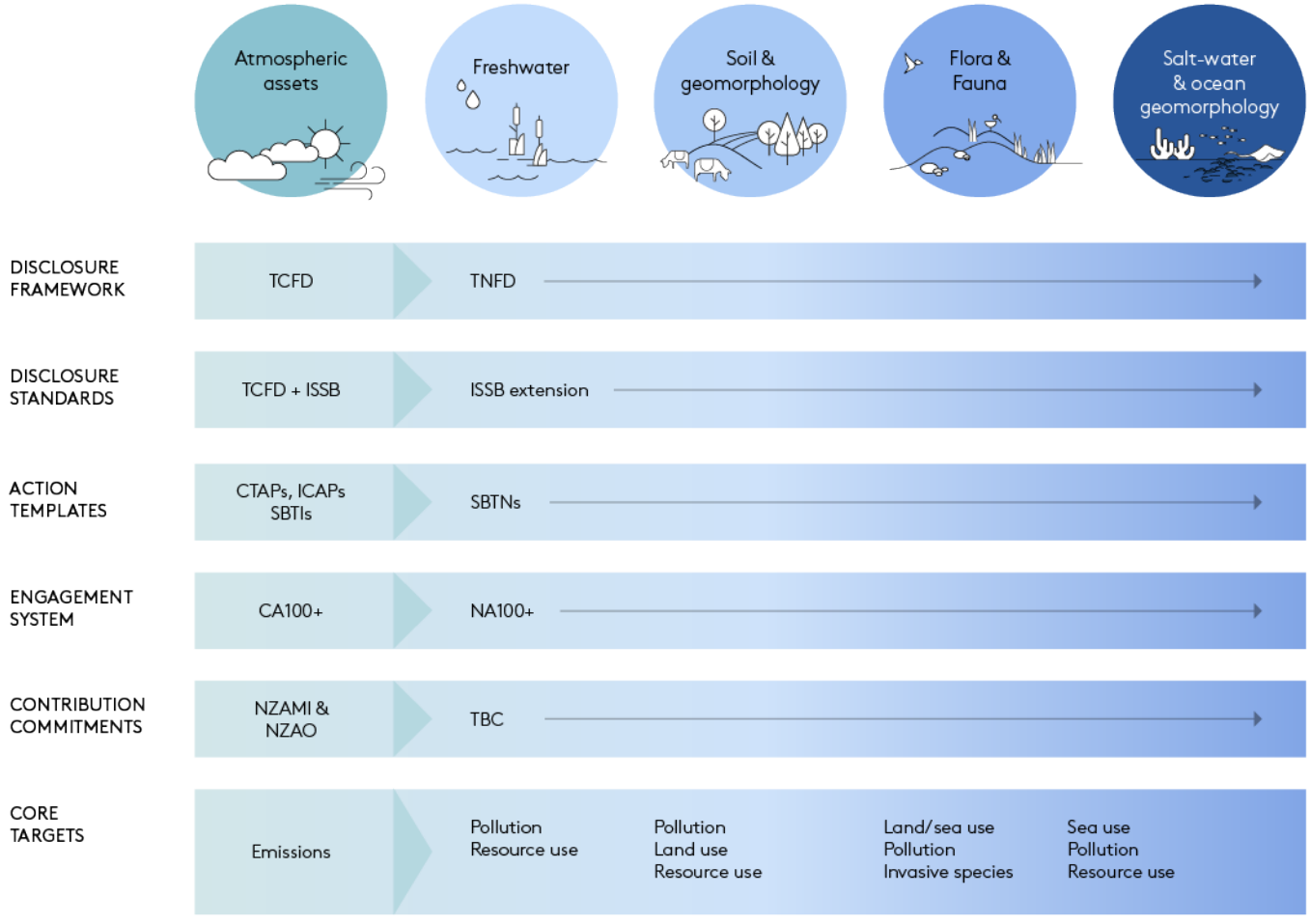
feral rabbits), and climate change. These pressures are not only hugely relevant for companies and investors to understand, but are also likely to be one of the main lenses for risk management and ambition.

The natural assets that provide climate regulation has been the first group considered in the journey to map the economy's relationship with nature, and the journey from here will use many similar tools. Atmosphere is arguably the group of capitals which present the greatest near-term threat to human wellbeing via climate change. The size of this risk warrants early attention and action. However, the frameworks, tools and governance approaches developed to deal with climate change will be broadly (and in many cases directly) useful for dealing with other groups of natural assets. The evolution of the TNFD and the ISSB frameworks both present examples of this shift, with governance and disclosure systems initially developed with a focus on climate change being rolled out to encompass a broader set of natural assets.

FIGURE 8

Frameworks and tools which were developed for climate will be used for nature more broadly

Source: Pollination (2023)



09

INTERVIEW

WITH MINDY LUBBER, CEO AND PRESIDENT, CERES
***JOINED BY* LESLIE CORDES, CERES' VICE PRESIDENT OF PROGRAMS**

In this interview, Pollination's Global Head of Advisory John Morton was joined by Mindy Lubber, CEO and Leslie Cordes, Vice President of Programs at sustainability nonprofit organisation Ceres to discuss their approach to nature. Ceres is working to mobilise the most influential investors and companies to drive action on the world's greatest sustainability challenges.

How have the views of CERES's members evolved over the last few years towards nature?

ML: Nature has definitely evolved, and continues to evolve, as a financial material risk and opportunity for CERES members. I don't think all of the companies and investors we work with have all of the information they need, and organisations which are further removed from nature might not fully grasp this and need examples that show materiality. CERES, and advisory firms like Pollination, have a growing opportunity and responsibility to help businesses get the right tools, methodologies, and disclosure systems in place, as well as understand the financial risk of nature loss. The growing challenge to all of us is how to get our hands around the complexities of nature, show them, document them, and explain them to allow us to both mitigate the risks and take advantage of some of the opportunities.

The implication of nature loss to productivity and key industries is in many ways as startling and as apparent as that of climate change. As investors are further along with factoring in climate risks, how can we speed up this process with nature and expedite investors' ability to act in a more nature positive way?

ML: We cannot limit global warming to 1.5-degrees without bringing nature-positive climate solutions into the mix. Much of the discussion with investors is focused on the risks associated with nature loss and mitigating those losses. But there's a big opportunity to explore natural climate solutions. To get there, the first thing we need to do is make sure we can provide credible, scientifically sound climate change mitigation benefits, and contribute social and environmental benefits to the communities where projects are located.

The complexity and diversity of regions and jurisdictions when discussing nature related risks and opportunities are immense, so we really need tailored, precise approaches. For example, when we look at land use change in the Amazon versus water availability along the Colorado river as just an example, the risks are different, the opportunities are different, and the social impacts are different, so we're not only looking at the science, but also what it looks like to local communities and stakeholders.

I'd say right now investors are facing challenges in assessing the nature related risks and opportunities in their portfolios due to a lack of company disclosures. For companies, that challenge is traceability, a key prerequisite for understanding risks and opportunities. It's extremely difficult to track the origin of commodities and understand all the risks. So we need better disclosure, and better traceability. We've all worked so hard for the right disclosure standards for the last 20 years for climate risk – we can capture those metrics for nature risk.

What do you think it is that's making financial leaders consider the issue of nature risk – is it a personal endeavour, a challenge to their business, or are their hands being forced by government regulations?

ML: Investors have so much on their plate. Their capability or bandwidth to look at these issues is sometimes 1% of what they're all doing on any given day. From our perspective, we're not rushing to answer why investors are caring about nature, we're just glad when they are.

The current anti-ESG movement in the USA – which I'd like to say is running its course – is having a little bit of a chilling impact overall and is creating some trust issues towards nature. So consistent regulation and messaging is extremely important.

In our experience, most companies are actually off with firm regulations, especially with the support of companies like Ceres and Pollination. We've been watching the regulatory changes develop across Europe, and investors are moving forward and engaging with nature at a faster pace. That might be because their hands are forced, but it's more likely that they recognise that's where the opportunities lie, and they want to be on the front foot.

It took 20 years to make the case that climate risk was a material financial risk, and nature is so much more complex than climate. While the impacts of climate risk are huge, for nature we're looking at basic earth systems like food and freshwater – so the implications are extraordinary. Eventually, investors and companies will realise what this truly means – and if they weren't motivated before to act quickly on nature risk, they will be when that happens.

In our experience that realisation is happening first amongst our food and fibre client base where the most jarring examples of nature risk exist. We are hoping this flows on quickly other investors who aren't necessarily directly linked to this industry.

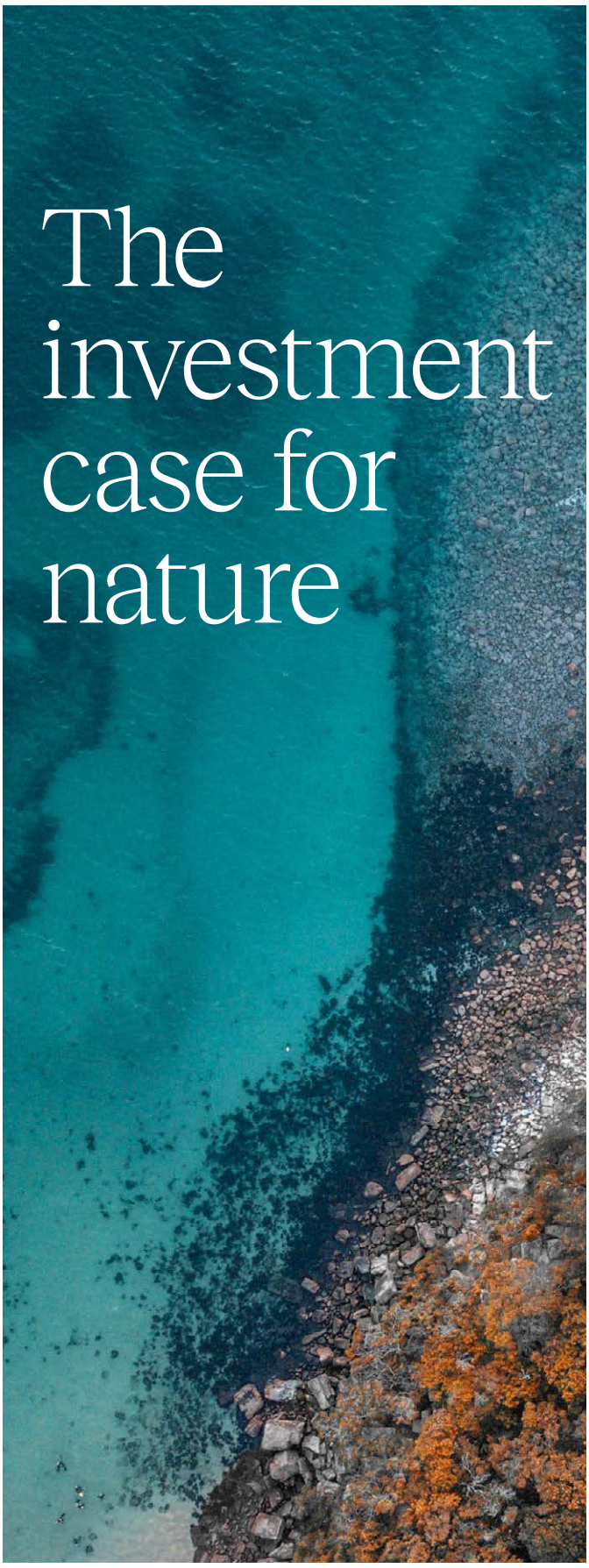
Leslie, you're running Nature Action 100 (NA100), an initiative to bring investors into this debate. What level of uptake are you seeing?

LC: The collapse of natural systems is happening so fast, and it's not a linear collapse. A group of committed investors noticed that the impact of nature collapse on their investments in real time, either falling or rising, with a direct correlation with nature. These investors made up the initial core group at NA100. Initially, we weren't sure how fast the interest would grow, but it's been fantastic. We have had huge interest in our webinar and other knowledge sharing initiatives, and the interest is growing faster than we can sign people up. We're also seeing companies like Dow saying nature is now more important to us than climate in terms of impact and dependencies on our work, and so that's a huge shift.

I think the momentum is very much there. Climate has a leg up in terms of resources, and we can tap into that using nature-based climate solutions. But Mindy is right – we're seeing an admitted lack of capacity amongst investors who want to tackle nature risk, but they're overwhelmed and do not know where to start. Organisations like Ceres and Pollination can provide that support, that backstop.

NOTE FROM POLLINATION'S JOHN MORTON

Mindy and Leslie's experience at Ceres is uniquely suited to this report. Ceres has been an early adopter of nature risks and opportunities and works with a wide variety of members, so many could learn from the insights they can provide. This interview proves the urgency at which we need to move, the importance of working together to address the complexity of nature and the opportunity to leverage climate resources to grow nature-based solutions.



The investment case for nature

Investors will be affected by nature on multiple fronts, with stakeholder, regulatory and customer demands growing by the day. Many investors will need to respond to the recommendations and guidance put forward by the TNFD, including making nature-related risk disclosures of their own in the coming years. Investors will also have to increasingly engage with the ISSB, whose domain increasingly includes nature. Investors will field asks from their customers and their stakeholders to have greater diligence over nature-related issues, and will also have to respond to growing interest in nature from regulators – particularly those who drive disclosure and police greenwashing. Investors will also be faced with a growing set of opportunities and products which engage with nature themes.

Alongside these demands, investors will face a world in which nature in its many forms also presents increasing financial risks and opportunities for investee companies. Although the above demands will drive a lot of investor activity, financial outcomes are obviously core for investors. Pollination is constantly engaged in conversations with investors and other capital providers about nature, and in these discussions the question of financial impacts comes up over and over again.

This is framed by some as the business case for nature – why is it that businesses or investors should be cognisant of and dedicate capital to the improvement of nature? It can also be framed as the action case for the broad investor community – why is it that investors should pay attention to nature in its many forms? This question is not front of mind for everyone, as many investors have a broad set of motivations regarding nature (including the above) which go well beyond the financial case. However, given its relevance for a significant cohort of investors it is worth unpacking the financial impacts which will likely emerge as nature becomes increasingly high profile.

INVESTORS ARE ALREADY FINANCIALLY AFFECTED BY NATURE...

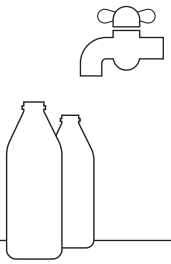
Nature presents financial consequences for investors today. As noted above, many businesses presently rely on products and services provided by nature which are real, but which are largely free to access (and therefore external or invisible to the economy). However, not all of these are free. Many resource

executives can talk at length about the extent to which the conditions of nature surrounding their assets and their interaction with these conditions can make or break an investment. Indeed, the growing set of conditions included in environmental approvals in many jurisdictions are a constant topic of debate in the industry. Similarly, many can speak to the extent that these controls have grown (and consequently grown more expensive to navigate and address) over time. Many companies with real assets in developed markets have to take greater care of their surrounds today than in decades prior.

Similarly, the decline of nature and its ability to provide products and services is not new, particularly not in specific localities. This has been combined in most cases with an increased demand for these same products and services. As such, in a number of cases those free products and services have become very expensive or inaccessible. Clean water is a good example, having been run down and under increasing demand in a number of jurisdictions, with impacts for companies in those regions. Arizona gives us a proximate example of this dynamic in play, with officials in the state determining in August 2023 that groundwater supplies were insufficient to meet development needs. This decision is likely to affect approvals for housing developments in the region, and to increase the costs for new developments[6]. Recent challenges issued to miners in the Atacama region of Chile over the use of relatively scarce ground water provide a different experience of the same issue[7].

Clean water

is a good example of how **essential nature services** have gone from free to very expensive or even inaccessible.



Nature also presents financially material opportunities now. A growing set of companies differentiate their products based on their nature-related credentials, such as their use of fewer chemicals, less water or their avoidance of deforestation. In 2022 Euromonitor's Sustainability Survey found that food products with sustainability attributes fetched on average a 15% premium[8]. When surveying consumers in the US in the same year, IBM found that just under half (49%) had paid a premium for sustainable products in the past twelve months[9]. In Nature We Trust survey found that just under a third of Australian consumers were willing to pay a material premium... for a selection of products with improved nature credentials[10]. Researchers at the Stern School of Business surveyed the market performance of consumer goods across 36 categories of goods, finding that goods with sustainability-related marketing took market share across the board between 2013 and 2018[11]. As many of these sustainability characteristics relate to nature and its treatment, these findings illustrate that nature is already delivering material opportunities in some sectors.

Alongside these consumer-facing opportunities, a growing set of investors are investing directly in nature-based solutions and in nature markets. 50% of our sample of global investors have investments in nature-based solutions, and 49% in nature markets more broadly. Both of these areas present significant opportunities not only as a consequence of their direct ability to address nature loss (a quality increasingly demanded by paying stakeholders), but also due to their ability to support climate mitigation and adaptation.

6. Bloomberg (2023)
7. Reuters (2022)
8. Euromonitor Sustainability Survey (2022)
9. IBM institute for Business Value (2022)
10. POSSIBLE (2023)
11. Kronthal-Sacco et al (2019)

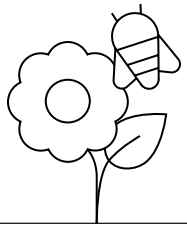
...AND THE FINANCIAL CASE FOR MANAGING NATURE WILL GROW

Nature will present greater financial risks and opportunities in the future for a number of reasons. These include the continued decline of natural assets which, if exhausted, would mean some companies would lose access to them. They also include increasing constraints on accessing these assets as regulators increase their ambition to conserve them, which similarly poses the risk of loss of access or increased cost to access.

Further decline in the health of natural assets will increase cost to access them. Natural assets are under incredible stress globally, which is leading to decreased availability of many nature-provided products and services. One example is clean air, which is also highly significant for economies and in decline, the lack of which is viscerally experienced by millions of people already. Clean air is particularly important for economies because it has direct and often inescapable impacts on human health. Humans are healthier and smarter when they breathe clean air, which means they are also more productive. They also last longer. Estimates put mortality related directly to air pollution in Europe at 8% of total mortality – around 500 thousand people per annum[12]. The direct healthcare costs associated with air pollution in 2015 were estimated at US$21bn, with broader welfare cost (the cost borne by citizens and their employers or goods and service providers) at US$3tn. At their current trajectory, these costs are expected to grow six-fold by 2060[13]. Importantly for investors, these costs are costs to companies, not only to governments.

Pollinators

are a **commonly-cited example** of how a decline in health of nature can increase cost to access its services.



The continuing decline of various other natural assets will present the same trend of increasing costs and declining productivity in many facets of the economy.

Actions by policy makers and regulators to recover natural assets will also increase the effective cost of access. In response to the above decline, many national and subnational governments are working to limit impacts on nature by companies, and to recover natural assets through various pathways. The target to reach 30% of land and seas as preserved areas by 2030 which is enshrined in the recently minted Global Biodiversity Framework is a headline call-out to this ambition, and highlights its size. As of 2020, 15.3% of land areas and 7.5% of marine areas globally are protected,[14] meaning that many presently un-protected areas will need to become so. These areas are likely to presently be under use by entities including companies. As such, even this single target is likely to affect access to nature provided products and services for some.

This increased constraint will sometimes be direct, and at other times will be indirect. The EU Deforestation Regulation (EUDR) asks companies importing certain commodities to conduct extensive due diligence across their suppliers to ensure that no deforestation took place to facilitate their production. Although the law is not a law targeted at companies regarding their environmental activities within the EU, it is designed to affect the commodities that companies have access to. For the companies in question this is likely to affect the price of access. For companies exporting in Europe it will introduce greater compliance costs, and for those whose supply chains are heavily implicated in deforestation it may force significant adjustments in procurement (including the cost of procurement) or prompt the loss of major customers.

In addition to these impacts, as nature becomes more visible it will become a competitive advantage for some and disadvantage for others. As noted above, within five years many companies will be mapping and reporting their use of nature-provided products and services. Many consumers already find this information compelling in their purchasing decisions. As efforts to manage nature footprints roll out across businesses and financial institutions, B2B

12. Frankopan (2023)

13. OECD (2016)

14. Maxwell et al (2020)

customers and capital providers are likely to start to demonstrate similar preferences. Effectively these stakeholders may now ask which nature provided products and services a company uses, and then choose to direct their custom and investment to companies and assets which are more efficient.

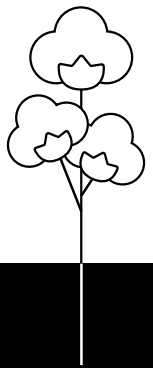
This structural and competitive change will also create significant opportunities. As nature slowly becomes a day-to-day concern for commercial institutions, demand for solutions which help companies use fewer of these products and services is likely to rise. Solutions will come in two broad forms: approaches to producing existing products or services which are more efficient and utilise fewer contributions from nature, and specific products or services which support and enable that efficiency. This demand footprint is already visible in certain quarters. One example is the demand for organic cotton, which is forecast to grow at 40% p.a. between 2021 and 2028, more than twice the growth rate of the broader cotton market[15].

This all comes together to support the view that although nature is already financially material, it will become increasingly so in the next five years. A combination of declining underlying assets, growing regulatory appetite and growing customer interest will mean that the costs and competitive dynamics businesses presently bear regarding nature today will only grow, likely substantially.

THE DEMAND FOR ORGANIC PRODUCTS IS INCREASING, FOR EXAMPLE ORGANIC COTTON IS FORECAST TO GROW BY

42% p.a

between 2021 and 2028.



This is more than twice the growth rate of non-organic cotton.

15. FB Insights (2020)

What are investors being asked for on nature?

As a consequence of the risks outlined above, investors are today faced with many asks regarding nature. These include the ask to respond to the TNFD, including its implied ask for the establishment of governance and risk management systems. They also increasingly include the ask to reduce investment in specific sources of damage (such as deforestation), and to engage with rapidly growing environmental markets (via nature-based solutions and carbon and biodiversity credits). Increasingly often investors are also asked to find ways to mobilise capital for the repair and improvement of nature.

It is our view at Pollination that underneath the above requests there are two broad tasks for investors. In our view these tasks encompass most of the work investors will be asked to establish on nature across the next decade. We characterise these broadly as follows.

1. **Understanding the exposure and impact of your current portfolio, and working to improve it.** This first task requires that investors build knowledge of the foundations nature presently provides for the companies or assets in their portfolio, and the effects that portfolio has on nature today. In the TNFD framework these are respectively dubbed dependencies and impacts. This knowledge includes how specific sectors, companies and portfolios interact with the products and services provided by nature, and the natural assets which underpin these. These interactions are already in place, but most investors don't have a good understanding or account of them. They present risks and opportunities to existing investments and new investments.

   Actions to address these impacts and dependencies will reduce risks, and will also improve the nature footprint of the portfolio. Activities relevant to this task include materiality mapping, nature risk and opportunity assessments (including on specific issues), company engagement programmes and the establishment of specific nature-related targets.

2 **Investing in enabling opportunities and in nature improvement.** The second ask for investors is to invest in specific companies and assets which enable the improvement and recovery of natural assets. Some of these investments will provide capital to specific initiatives by companies which improve their existing nature footprint. Some will be specific investments in those providing new products and services which help companies manage, reduce and improve their relationship with nature. Finally, some may be direct investment in natural assets themselves.

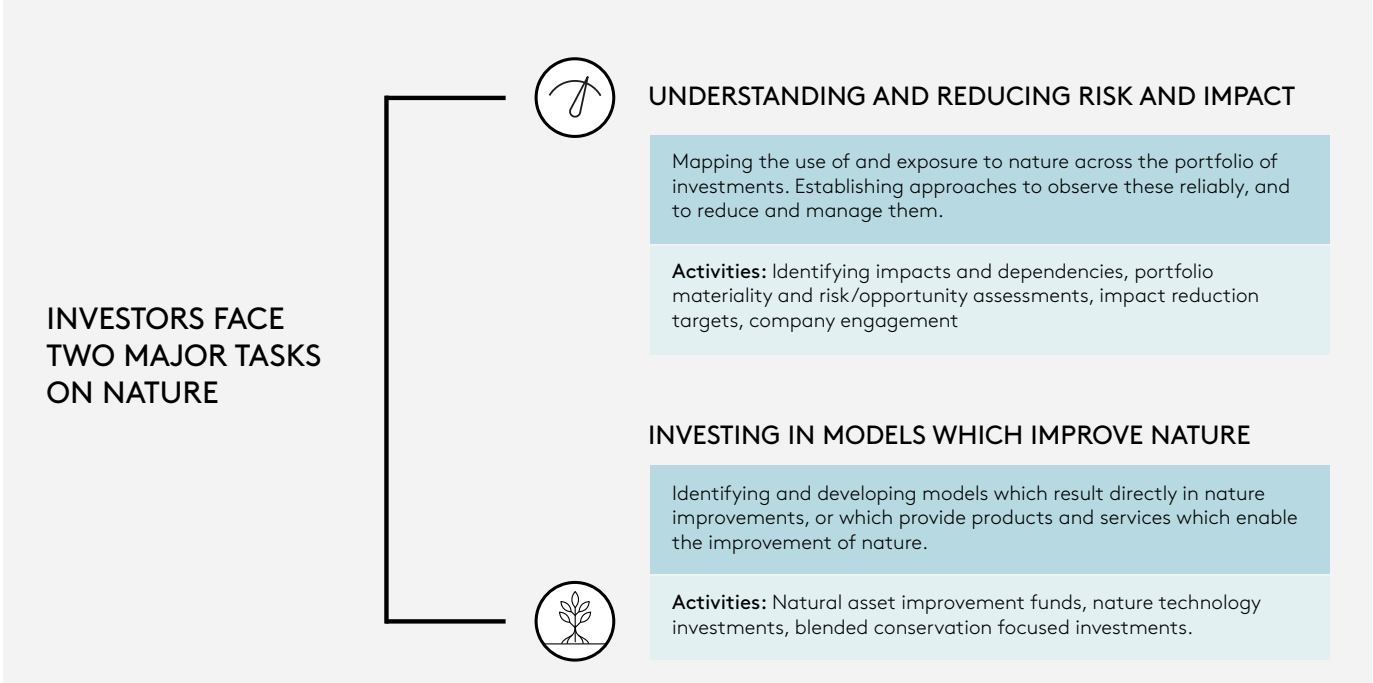
The underlying theme of this second category is making investments directly in the improvement of the natural world. Real asset improvement funds, nature technology plays and blended conservation focussed investments all fall in this category.

Investors need to pivot to reduce risks (and harms) and engage with opportunities at the same time. Many investors we speak to find different parts of the above two tasks more intuitive. Some have high interest in new opportunity sectors, while others have a strong focus on minimising risks and reducing the negative nature footprints of their portfolios. At Pollination our view is that the two tasks complement each other, with many risk reduction activities requiring investee companies to source solutions which present investment opportunities. Engaging with both risks and opportunities will help investors keep pace with these emerging trends, but at a systemic level will also help ensure that capital is in place to support their growth. As such, we believe that the early work for investors (within their relevant domains) should include both minimising and managing material risks and engaging with material opportunities.

FIGURE 9

Investors face two major tasks on nature

Source: Pollination (2023)



09

INTERVIEW

WITH ANDREW DREANEEN, HEAD OF NATURAL CAPITAL, SCHRODERS

Andrew Dreaneen is the Head of Natural Capital at Schroders, where he is responsible for managing the $15bn Alternatives (as at 30 June 2023) capability, covering natural capital and carbon, hedge funds, fixed income alternatives, commodities and hybrid public-private strategies.

Schroders works with investment clients to build successful portfolios across a wide range of global industries, and are a member of the Sustainable Markets Initiative's Natural Capital Investment Alliance. Pollination Executive Director Dr Gemma Cranston spoke to Andrew about Schroders' approach to natural capital investment.

Why did Schroders want to create a natural capital unit, how did it come about?

Firstly, most of our clients have some adjacency to natural capital – whether indirect or direct. This alone is reason enough not to ignore natural capital for us. However it is an area that is still relatively nascent and under-resourced in the market, so we felt if we could build deep expertise we would be valuable partners for our clients in their discovery and journey into natural capital investing.

Secondly, we started thinking about the lack of income and proven return streams from natural capital, especially when you start looking at biodiversity. We wanted to address the challenge of making a positive impact while still getting a return on investment – ultimately helping to prove nature can be investible as well as sustainable.

Lastly, it happened from the top down. Our Group Chief Executive Peter Harrison has been very proactive in recognising opportunities in natural capital, for example writing about why we must make nature investible last year as we shared our Plan for Nature.

You mentioned the lack of income from investment in natural capital – especially biodiversity. How do you think we can get around that in the immediate future so that we're not waiting for that growth in ROI?

If you can start with impact first, generally there's more tolerance for lower returns or less proven payments, but at least there's demonstrable impact. Most clients will ask where they can have the most impact, or "bang for their buck". This could be, for example, in emerging markets, especially if you're looking around biodiversity and social impact.

It does depend on the client type, their motivations and goals, and understanding where to start the conversation. There's an opportunity for more tailored approaches, instead of offering the same suite of impact opportunities to everyone and then wondering why they're not interested in certain natural capital assets when others are. We see the perceived safety and security of developed markets being important for many institutional clients with a fiduciary responsibility - and when it comes to nature there is often a strong home bias to start off with.

In terms of those opportunities to allocate capital, what do you think the biggest opportunity that you can take to scale at this point is?

Definitely commercial forestry and farmland in developed markets. One can already deploy $1 billion in this space through a globally diversified portfolio over 12-24 months. But it may not necessarily come with high integrity carbon credits or excel in terms of social and biodiversity impact. There are certainly plenty of examples where this

is the case, and in particular in smaller sized deals, but to deploy capital at speed and scale it can be more difficult without overpaying. You need to ask – is this really ticking all the boxes, or is this effectively just commercial forestry and farmland with a sprinkling of biodiversity on the side? The answer might often be, "yes we do some regen, yes we do some pollinator support, but 90% of what we do might be extractive and potentially quite harmful for the environment", and this is where companies need to be more cautious of greenwashing.

Out of natural capital investments, traditional real assets, nature-based solutions (NbS), and the growing private equity market, which is Schroders is most excited about?

I think we're equally excited about all of them, but we observe that many clients are less keen to invest in something where carbon is the sole revenue stream given how fragile and volatile the Voluntary Carbon Market (VCM) has been.

With real assets, you can potentially invest in land and benefit from existing (proven) revenue sources, as well as an embedded optionality to optimise for higher and better use cases which can potentially have a triple bottom-line effect and be positive for climate, community and biodiversity or at least one of these three.

With NbS, there's potentially greater impact but often higher risk so more careful assessment required. That's where companies like Pollination can play a part – addressing challenges around where the capital should go, investigating the legislature associated, ensuring investment in high integrity projects. There's certainly a role to demystify, procure, deliver in that area, so we're excited about that.

In terms of private equity, we are in the first innings so it's hard to say what kind of business will win at this stage – but there will be huge opportunities for nature investing over time whether it's in the data and technologies for Measurement, Reporting, and Verification (MRV), specialist forestry and agriculture service providers, nature financing solutions and other financing mechanisms such as companies creating biodiversity credits. But we do think there are great opportunities currently at the picks and shovels level.

Some investors prefer not to take a view on which technology wins given it's hard to tell in the short term, but there is undoubtedly a strong need for businesses that can source and acquire natural assets and get the nature restoration work done, whether that is for asset owners, corporates, large landowners or governments, and municipalities doing the actual work on the ground, design and site management, driving the diggers, replanting, rewilding. These businesses are immediate winners in the green revolution.

You mentioned volatility. What blockers do you think exist in terms of accessing a full spectrum of investible projects? What needs to happen to be able to stimulate that project supply?

If you have commitments from corporates to allocate small amounts of capital towards doing the feasibility studies, making projects more investible, getting through the registries, then that is great, but most aren't there yet. I've seen probably 200 NbS projects but very few would pass any risk, compliance, or investible set of criteria.

As soon as you scratch beneath the surface, you see issues around safeguarding, corruption, benefit sharing and more, even on some of the largest and well known projects. I don't know how we solve that other than saying "buyer beware, if you want the credits and you like the spec, you are just going to have to perform thorough due diligence and to some extent run the risk that many projects have the potential of getting called out by media at some point". As long as companies are afraid of being accused of greenwashing, but aren't willing to foot the bill for feasibility, there will be very few bankable projects. It's going to take time, but it has to happen.

NOTE FROM POLLINATION'S GEMMA CRANSTON

Andrew's insights are highly valuable to this report and understanding the current temperature of natural capital investments on a global scale. Andrew's points around the need for thorough research into project feasibility and integrity are consistent with Pollination's experience with our own clients, as are his thoughts on tailored approaches to natural capital portfolios. And, while there is generally an expectation of limited immediate initial return on natural capital investments, we are excited to see the momentum and competition building quickly.

CHAPTER 2

2. How are investors engaging with nature today?

Nature engagement is increasing amongst investors regardless of size

At Pollination, we are constantly in conversation with investors and other capital providers within out networks regarding their growing work on nature. However, as investor interest on nature has grown we have become more interested in how the broader space is unfolding. We wanted to understand how investors are engaging with nature across risk and opportunity, across regions, and across asset classes and scale. We also wanted to understand what is motivating them, and where are they seeing risk and opportunity.

To get a better understanding of the approach investors globally are taking to nature, we surveyed 557 investors across the US, the UK, France, Singapore, Japan and Australia. The investors we interviewed ranged from very small investors (5.7% of our sample had AUM of US$10bn or less), through to very large investors (32% of our sample had AUM of US$250bn or more, and 8.4% had US$500bn or more). Our responders were spread across insurance, pensions, asset management, Private Equity specifically, foundations and family offices. Although this sample is far from exhaustive (encompassing only a subset of investors across a subset of regions) it does help us build our understanding of how investors are engaging with nature across developed markets.

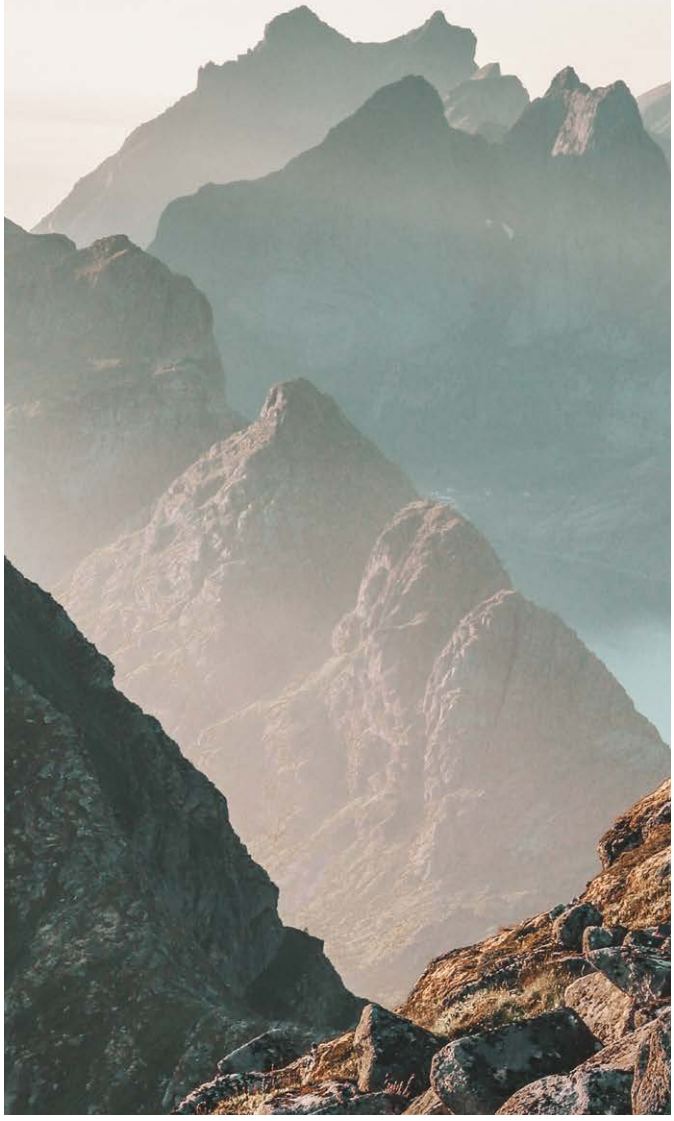
This finding was surprising, as we expected to see smaller investors, including investors with a thematic focus, making up a larger portion of our sample. The majority of investors responding were sizable, with 74% of investors in our sample were responsible for between US$30bn and US$500bn. We also saw significant responses across asset managers, asset owners, insurers and private equity managers specifically. This tells us that institutional investors are well and truly active on the topic, with what appears to be a significant chunk of the institutional market engaging with the topic across jurisdictions.

We also found that investors are very interested in opportunities in the space. We asked investors to identify whether their work on nature was focused primarily on identifying specific nature-related investment opportunities, primarily on managing and identifying nature-related risk across their portfolios, or on both. 49% of investors in our sample responded that their interest in the space was investing in nature-related opportunities, and another 16% said they were focused on both nature-related opportunities and risks.

This focus on specific opportunities is encouraging, and suggests that investors might be more prepared to deploy capital to viable nature solutions than they have been on climate. This strong focus on specific opportunities relatively early in the investor journey on nature sits in contrast to previous experiences on climate change. Investors were much slower to gain interest in specific climate-related investment opportunities, with the industry conversation on climate change focused largely on risks for a long time. This may reflect investor views on the significance and mix of risk and opportunity, but it likely also reflects growing investor experience on environmental issues. This is in some sense encouraging, as investors are likely to be willing to deploy capital against nature-related solutions earlier than they were on climate change.

However, it may also present a challenge for stakeholders looking to achieve nature positive. As outlined above, nature will present significant risks for portfolios in the coming decades, and across multiple sectors. Identifying and mitigating these risks across the wider scope of investor portfolios will be an important part of engagement with nature for capital providers. Furthermore, these broader set of risks in many cases stem from the impacts that portfolio companies presently have on nature – the same impacts that many governments and stakeholders are now setting out to manage. Without significant engagement on this broader risk landscape, it is unlikely that many companies will respond fast enough to materially contribute to nature positive in coming decades.

Investors are motivated by impacts and returns



We were also curious to understand what investor motivations in the space have been to date. Pollination speaks to investors who enter the space with an array of motivations, from shorter-term returns through to system risk mitigation outcomes or nature improvement. We wanted to get a sense of which of these motivators were driving investor activity across the board. As such, we asked investors whether they were motivated by short-term or medium-term returns, by portfolio or system risk outcomes, by nature improvement outcomes or by a mix of the above.

Many investors are looking for returns and impact when they make investments in nature. Investors highlighted both returns and impact in their responses, and indeed the most popular response was that investors were expecting both (23.3% of the group gave this answer). From one angle, we can note that the majority of the group highlighted short or medium-term returns as their main or one of their main motivators. 18% listed short-term returns as their main motivator, and 19% listed reliable medium-term returns as their key motivator. A further 23.3% highlighted that they expected short-term returns and impact outcomes, for a total ~60% of the group. However, investors were obviously also very focused on impact, with the second most popular answer being that investors were motivated by environmental outcomes (22.6% of the group).

60%

OF GLOBAL INVESTORS CITED RETURNS OF SOME SORT AS A PRIMARY MOTIVATOR

Environmental outcomes was the second-most popular motivator, at **23%**.

Insurers are more likely to invest for nature improvement than other categories of investment. Somewhat unsurprisingly, larger investors were slightly more likely to volunteer returns as a primary motivator, but this preference was very slight.

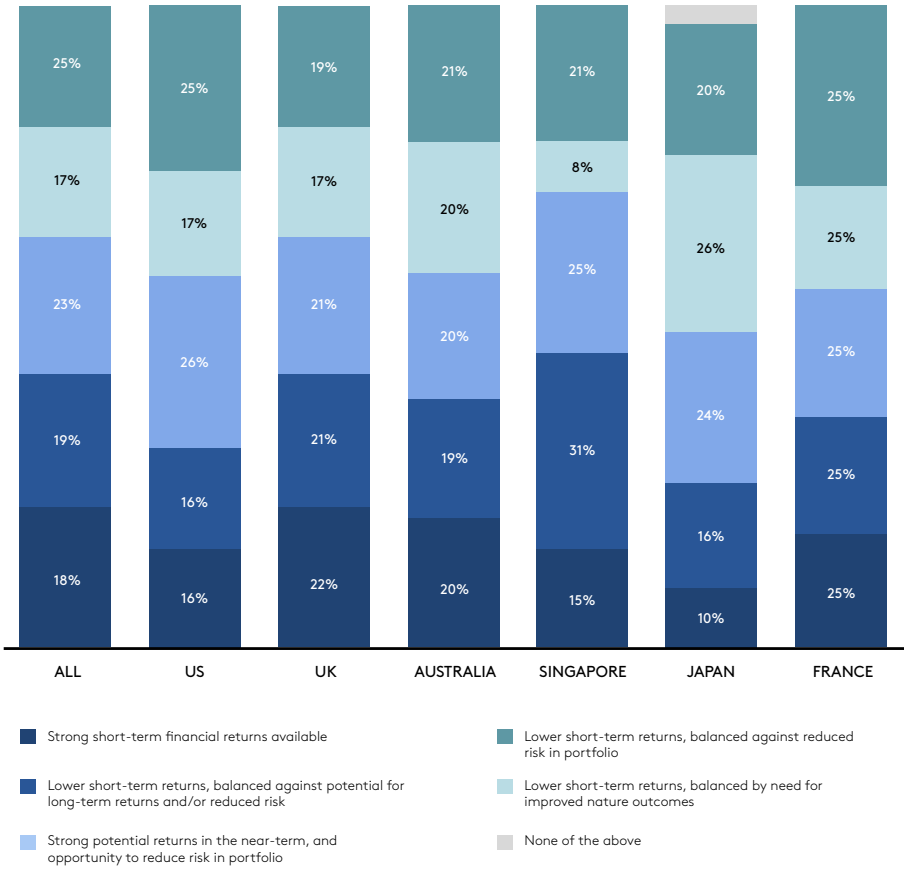
Retirement funds were the most likely to identify combined impact, return and risk outcomes as their motivation set, with 28% or respondents highlighting this category. PE funds were the most likely to identify short-term returns as a core motivator (25%), and investors from the insurance industry were the most likely to identify nature improvement as a core motivator (27%).

Investor motivations vary by region, with Japan the most interested in risk and impact, and Singapore the most interested in returns. Interestingly, investors in Japan and the US were the least likely to highlight returns as a motivator, with 26% of Japanese investors and 32% of US investors giving a response focused on returns. However, American and Japanese investors were also the most likely to say that they were expecting combined outcomes. Singaporean investors where the most likely to highlight motivations based primarily on returns and on returns and combined outcomes, with 46% of investors in the region highlighting returns as a primary motivator, and 71% highlighting either returns or combined outcomes. Investors in the UK have a similar profile, being the most likely to highlight short-run returns as their primary motivator, and the least likely to flag nature improvement outcomes.

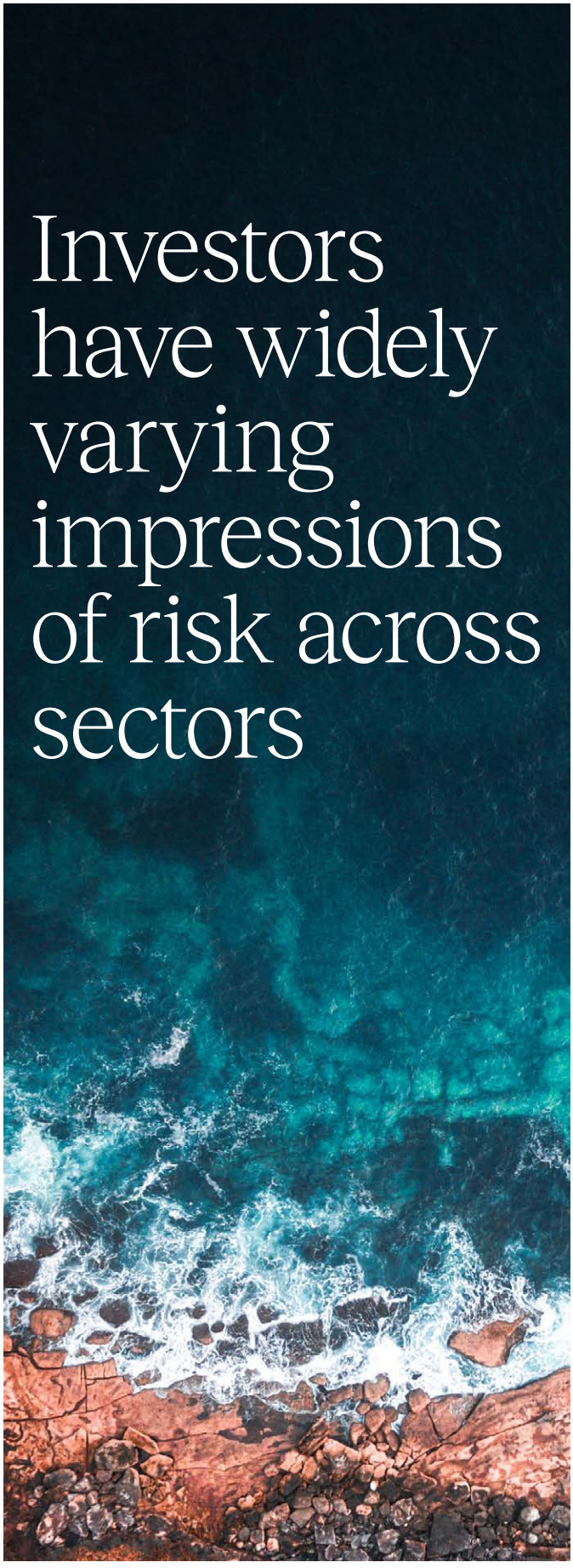
FIGURE 10

Investors are driven by returns and by impact
% of respondents who selected a particular motivation by location

Source: Pollination (2023)



Investors have widely varying impressions of risk across sectors



Where are investors seeing nature-related risks? A significant portion of investors in the group identified nature-related risks across their portfolios. One of the first questions many capital market participants ask is where they should expect these risks – in which sectors and which locations. Although we could not engage with specific location-based risk in this survey, we were able to ask investors which sectors they view as being risk exposed, and interpret these responses across different jurisdictions.

Perceived risks seem to vary by jurisdiction, sometimes widely. Although no more than 35% of investors across the group highlighted risk in any given sector, a significant minority of investors did highlight risks in every sector. Observed risks across sectors are fairly level across the global group (with between 25% and 35% of most investors highlighting risks in any given sector). However, the views of risk in given sectors vary more widely in different jurisdictions. For example, although only 11% of French investors view the transport sector as presenting nature-related risks, 37% of Australian investors view this sector as risk exposed. Although 22% of French investors observe significant risks in the Property and Construction sectors, 44% of UK investors view the sector as highly exposed. Overall, fewer French investors identified nature-related

RISK IN FOOD, AGRICULTURE AND STAPLES

13%

of very **small investors (sub-$10bn)** observe risk in this sector

44%

of **investors in the US$250bn-US$500bn** class observe risk in the this sector.

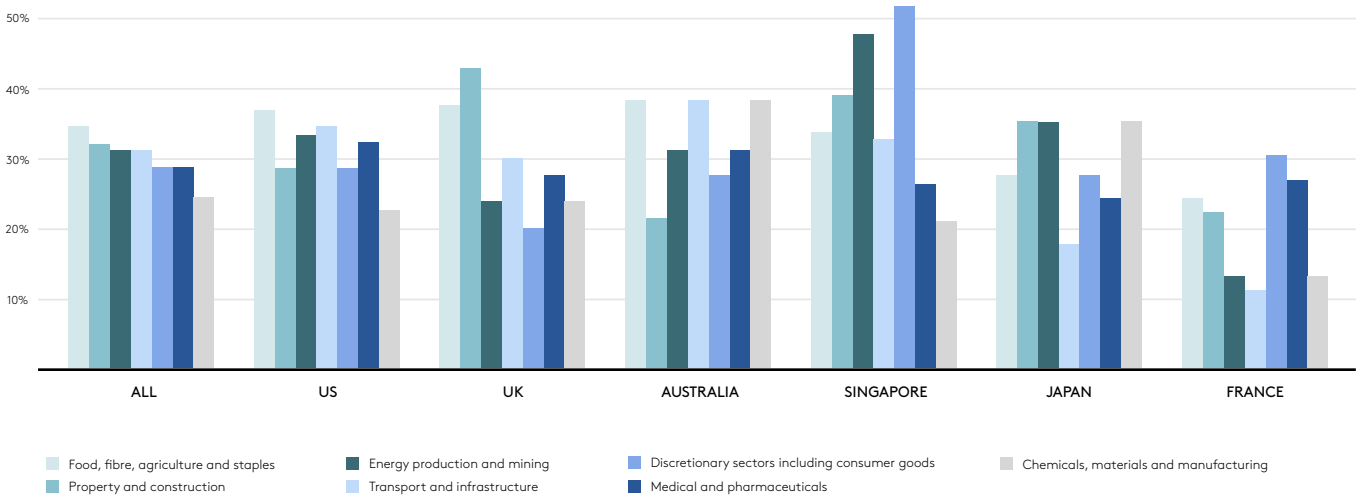
risk in general, while Singaporean investors observe the greatest prevalence of risk (with particular emphasis on Property and Construction, Energy and Mining, and Discretionary). Chemicals, materials and manufacturing was the least likely sector to be identified as exposed to significant risks globally.

Observed risks also vary widely with size and sector. Although no particular size class of investors has a predominantly greater or lesser view of risks, the view of risk in specific sectors again varies widely. Only 13% of very small investors (sub-$10bn) see risks in food, agriculture and staples, where 44% of investors in the US$250bn-US$500bn class observe risk in the same sector. The results are similarly dispersed by investor type, although diversified asset managers and insurers appear to have a slightly higher overall impression of risk exposure.

FIGURE 11

Which sectors present nature risk?
% of responders who identify nature risk in a sector, by region

Source: Pollination (2023)



Investors are building exposure particularly to nature markets and nature based solutions

As outlined above, investors have many options when it comes to seeking opportunities in nature. Given the strong emphasis on opportunities in our conversations to date, we were keen to understand where investors were currently building exposure to nature opportunities. To do this, we asked our investor group about where they were presently holding nature-related investments, from across specific sectors (responsible mining) through to nature markets and specific nature-based solutions.

Among investors who are investing in nature-related opportunities, we see a surprisingly strong emphasis on nature markets and nature-based solutions. Close to half of the group have investments in these types of opportunities, with higher numbers in the US, Singapore and Australia. In Australia, over 60% of respondents were invested in opportunities in nature-based solutions, and 57% in nature markets. Fewer investors (30% in the full group) have investments in real assets with nature overlays (such a regenerative agriculture).

Asset managers in our sample appear to be slightly more exposed than asset owners. Investments in different categories of nature opportunity are relatively even across the size of the investor, although larger investors do have a slightly greater exposure to nature markets and a slightly smaller exposure to responsible mining. Interestingly, diversified asset managers appear to have relatively high levels of exposure to almost all categories of nature opportunity.

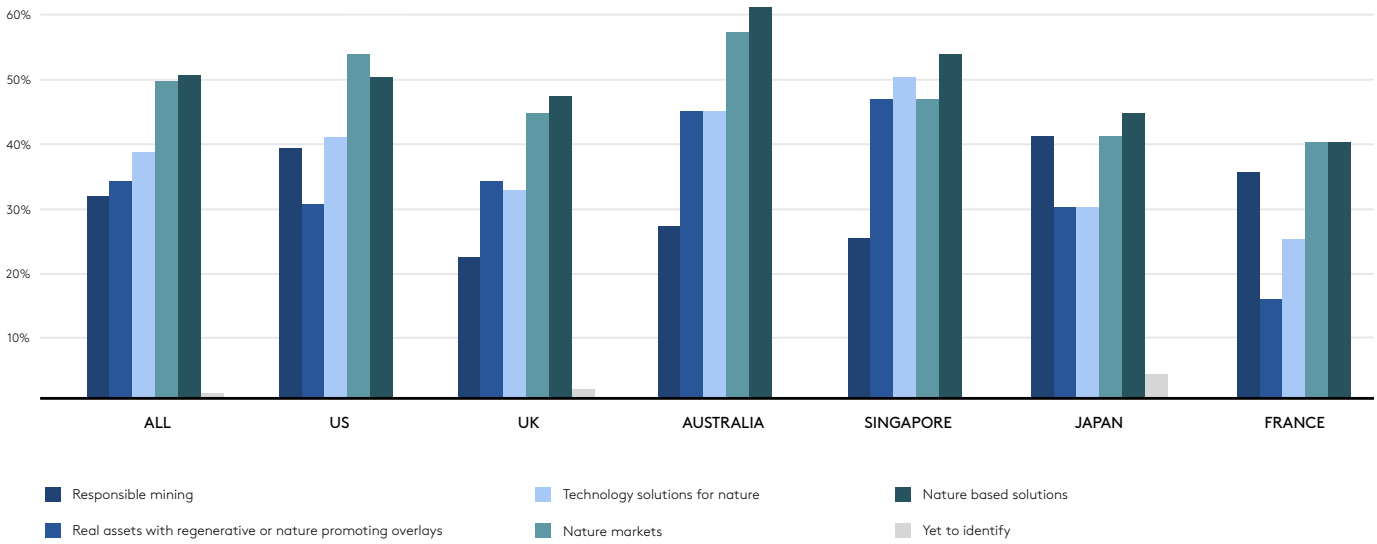
~50%

of global investors engaged on nature hold investments in **nature markets or nature-based solutions.**

FIGURE 12

Investor exposure to different nature opportunities by region
% of responders who highlighted exposure in a category

Source: Pollination (2023)



Could nature or natural capital be an asset class? The question of whether nature, nature opportunities, or sub-sets of these should be considered an asset class have been raised in a growing number of industry conversations, with arguments for and against. Some have argued that as nature is relevant as a risk and opportunity theme across most asset classes, conceiving of nature in a separate asset class is unnecessary. Others have argued that natural capital-focused assets specifically may have sufficiently distinct risk, return and volatility profiles to constitute an asset class.

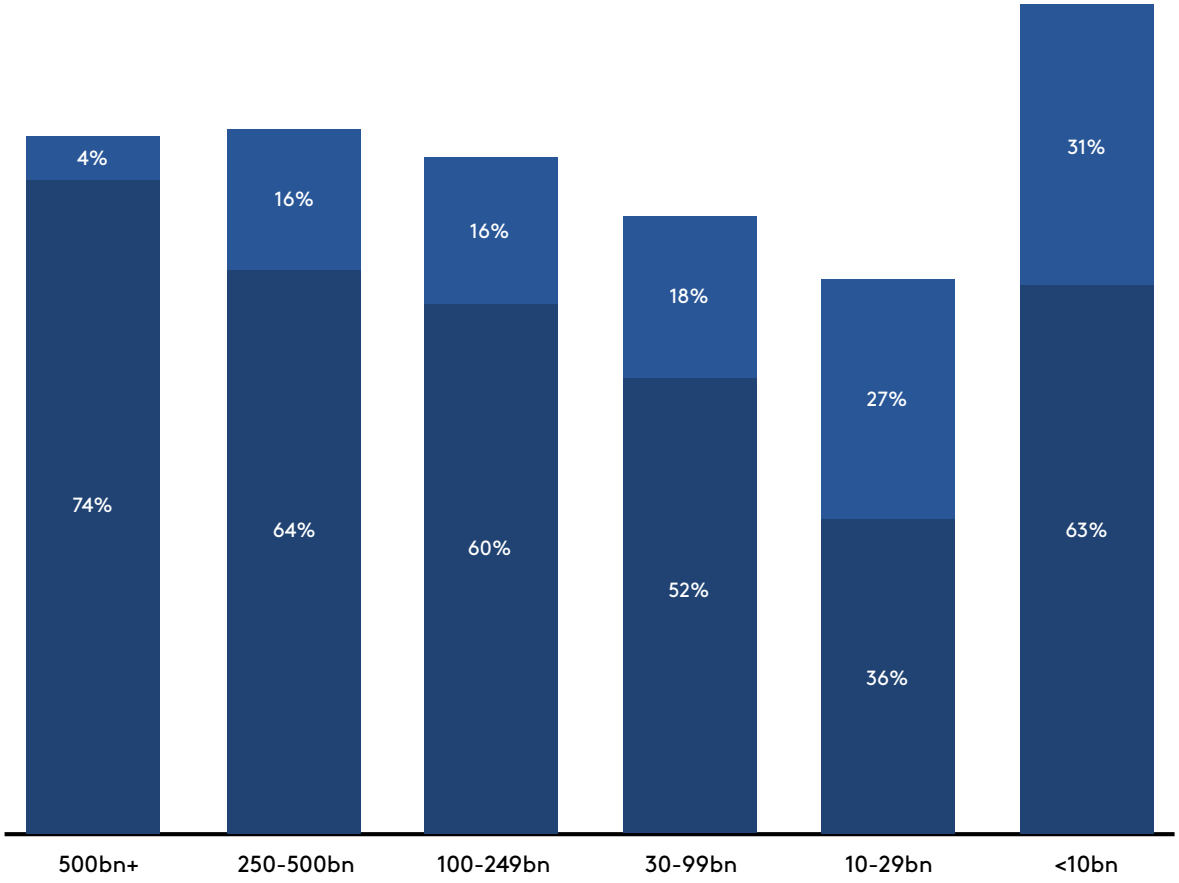
Interestingly, investors in our sample found the idea of nature as an asset class compelling. Among our responders, a significant portion (58%) hold the view that investments in natural assets will eventually evolve into a distinct asset class. In contrast, 25% thought the asset class characterisation was unhelpful. 18% were of the view that a sub-set of assets (such as regenerative agricultural assets) might be usefully categorised into an asset class of their own.

Larger investors are more inclined to view nature as an asset class. The view that natural assets should become an asset class was particularly strong in Australia (73%), the US (71%), and Singapore (58%). By contrast, 40% of Japanese investors were of the view that the categorisation is unhelpful (the highest against response across regions), and French investors were predominantly of the view that some nature-related investments might usefully be classified as their own class, but not all. As the size of the investor grows, so does the tendency to think of natural capital assets as an asset class. Indeed, other than very small investors, this relationship is monotonic. 74% of investors with AUM of US$500bn+ were inclined toward this view. Finally, diversified asset managers and insurers were substantially more likely to take this view, at 71% and 70% respectively.

FIGURE 13

Is nature an asset class, or not?
% of responders who shared this view, by company size

Source: Pollination (2023)



09

INTERVIEW

WITH MARTIN BERG, CEO, CLIMATE ASSET MANAGEMENT (CAM)

Pollination Executive Director Christie Clarke spoke to Martin Berg, CEO of Climate Asset Management, a joint venture of HSBC Asset Management and Pollination, to get his view on how natural capital investment will evolve, as well as both the opportunities and challenges. Climate Asset Management has the ambition to grow the world's leading asset management company dedicated exclusively to natural capital, and is a member of the Sustainable Markets Initiative's Natural Capital Investment Alliance.

CAM was built on the premise that there are significant opportunities available from investments in nature and natural capital as an asset class. How would you describe those opportunities to outsiders or people who are new to this space?

MB: We frame nature in terms of risk, and, whenever there's a risk, there's an opportunity. At Climate Asset Management, we provide scale and investment opportunities in and around nature. Granted, that's very broad. In the wider definition, this could include anything that relates to nature, not just agriculture or forestry, which are two core components, but also oceans, even recycling and the circular economy. In terms of our real asset strategy, our focus is investing in real projects on the ground.

Do you see those opportunities as being distributed in certain jurisdictions more than others? How do you view them on a global scale?

MB: When people think about natural capital, the assumption is that this must be an emerging market investment opportunity. This is definitely true for opportunities to generate carbon credits and many of the most prominent investment opportunities are in the tropics, which means that they are mostly in emerging markets. However, the fact is that there are many nature-related opportunities in developed markets too. When we were developing our investment strategies, we found that these developed market opportunities are in many respects preferred by investors due to the lower country risk for return seeking investment strategies. This might seem surprising, however, the need to change agricultural systems and improving forestry offer interesting opportunities in Australia, New Zealand, North America and Europe.

How do you generally tackle the balance between impact and returns and what opportunities are there to do so?

MB: In our experience, impact is not sufficient in its own right for most investors. Impact therefore needs to be married with a very solid thesis around how the strategy can generate risk-adjusted returns. Some investors do genuinely prioritise impact within their strategy, but others view the ESG impact bucket as much broader than just nature. With ESG factored in, there are additional considerations like regulatory compliance, disclosure and potential future regulations. As a result, we try to take all these factors into account in our approach, and so far, forestry and agriculture generally offer the best solutions.

To what extent are your stakeholders and investors thinking about nature *risk*, and is that driving decision-making around investments in CAM?

MB: I think partially. The perceived risks are generally around regulation, not necessarily specific risks within a portfolio. This many come in the future as data sets get more sophisticated. We've seen much the same process happen with climate risk. Now with better data, investors are becoming much more sophisticated when it comes to accessing their portfolios, are starting to recognise the role nature-based solutions can play in mitigating climate risk. Encouragingly, we're seeing increasing demand for a blended approach, combining carbon markets with environmental markets, and that's an approach we are uniquely positioned to offer.

What has been some of the bigger challenges for CAM in setting up and delivering investment strategies centred around natural capital, and how might that look for the market as a whole?

MB: There is a great interest in nature, natural capital, and the nexus between climate and biodiversity. What is more difficult, especially from an investment perspective, is finding the appropriate allocation for natural capital within an institutional portfolio. Some investors still struggle to see nature as an asset class and tend to view it merely as an investment theme that can be integrated into some of the more established asset classes they already cover. Many investors want to understand the asset allocation first before they invest – for example, very few investors are saying, 'let us try out one investment or two and then see actually what fits'. This is difficult because it slows the process down significantly. I believe this was similar for other asset classes in their early days, for example when infrastructure emerged in the 1990s.

Are there any solutions, for example technological or financial, that you think will be critical to scaling up investment, or gaps in the market to find solutions?

MB: One of the key gaps in the market is a proper valuation methodology for natural capital and one of our lessons is that this has proved to be more challenging than we probably anticipated. There are some market participants trying to accelerate developments, but a gap will likely remain until we have a proper valuation methodology for nature to influence investment decisions. But, on the positive side, we have been genuinely surprised at the influx of technological solutions, such as satellite imaging, coming into the market, which have made significant improvements to processes such as due diligence.

If you were to look forward five years in the future, what would your vision for success look like?

MB: With the TNFD a few years along, I would hope we would find ourselves in in a similar situation that we were maybe five years ago on the TCFD. What I mean is that that there will be a clear risk framework for nature, that investors acknowledge that nature is a real issue for them and that they need to address internal risk in their portfolios but also in the supply chains of their investee companies. Ten years ago, everyone was wondering if you can really invest in climate, but nobody asks that question anymore because they can see the opportunities. I strongly believe that it will be the same with nature.

NOTE FROM POLLINATION'S CHRISTIE CLARKE

Climate Asset Management has developed a pioneering approach to investing in nature and developing natural capital as an asset class. The barriers and enablers articulated by Martin will be critical considerations as these investments scale and as the industry builds its sophistication to both managing nature risks and capitalising on the emerging opportunities.

CHAPTER 3

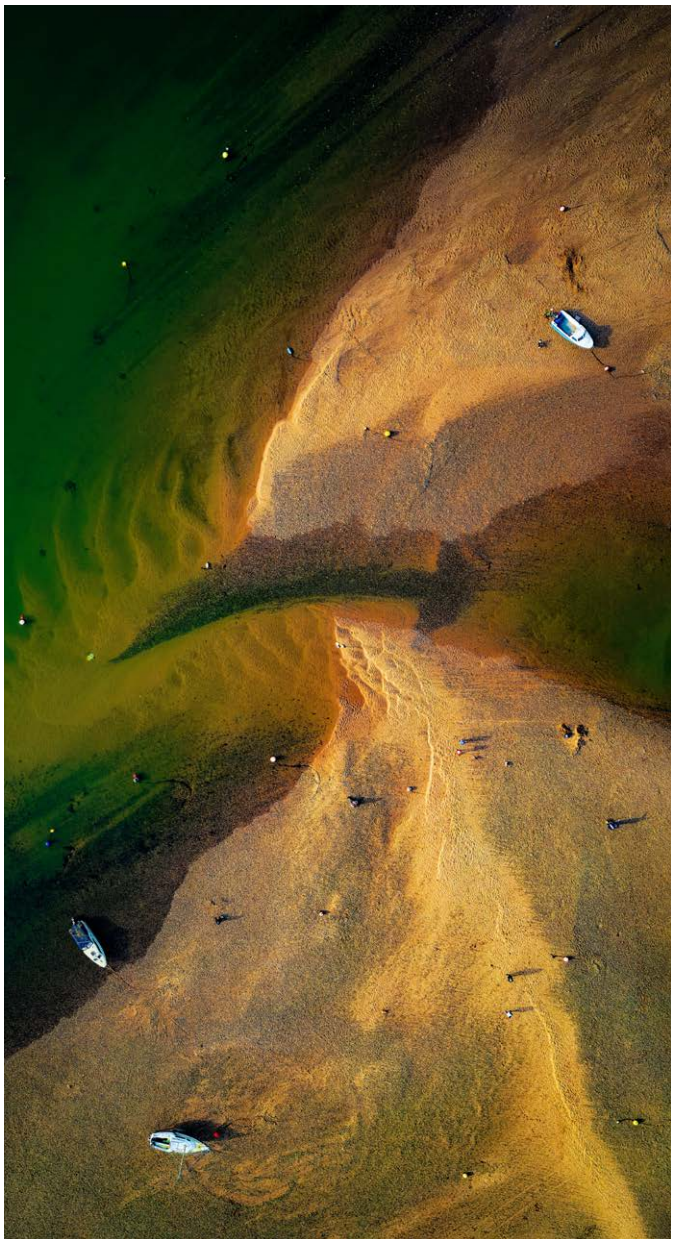
3. What should investors focus on now?

Take first steps where you can make tangible progress

In the fullness of time the challenges and asks outlined above will require significant response and capacity from investors, but investors shouldn't feel the need to do everything at once. We believe that in time many stakeholders will hold the expectation that investors should have capability, governance systems, integration and specific targets and products in place across the groups of natural assets relevant to them. However, although investors should keep this in mind, they should not attempt to begin work on all fronts and at full scale.

AT POLLINATION, WE BELIEVE A FEW HIGH-LEVEL PRINCIPLES ARE USEFUL FOR INVESTORS AND CAPITAL PROVIDERS BEGINNING THEIR WORK ON NATURE.

1. **Investors should feel comfortable starting where they are.** The full set of activities outlined within the growing body of global frameworks will be overwhelming for many investors on the first read. These frameworks describe a level of information about existing portfolios and their location and relationship to nature which well outstrips the reality of the majority of those operating in the sector today. Investors will need to build to this level of visibility and sophistication over time. They must also start where they are and with the data they have, and avoid getting overwhelmed by the size of the ask on the first day.



2. **Investors should focus on areas they believe are most material first.** As outlined above, nature denotes a wide field of work and inquiry. Investors are heterogeneous in their asset class, geographic and portfolio exposures, and some will be far more exposed to specific nature issues or damage drivers than others. Investors should avoid overwhelming their teams and organisations by starting with specific high priority focus areas first (e.g. land use in a private assets portfolio) and then building out to other areas and pressures.

3. **Investors should use the approaches which suit their unique businesses, and shouldn't be bound to one methodology for all of their activity.** In particular, investors should take different approaches based on their asset class exposures. As their concentration, control, and access to information changes, so should their approach:

   A. In settings where investors often have more concentration, more control and more information (such as private markets) investors should utilise a bottom-up approach similar to that which will be used by companies themselves. This should involve situating assets and working through their specific local exposures (as outlined in the TNFD LEAP framework).

   B. In settings where investors have less concentration, control and access to information (such as public markets), investors should start from the top-down, while simultaneously establishing the infrastructure required for an eventual bottom-up approach. These investors should initially use approaches which rely on aggregated or high-level views of their portfolio's exposure to nature. The bottom-up approach is likely to be viable in time, and indeed they should begin to work towards the infrastructure needed to do this. However, at present the bottom-up approach will be overwhelming for the vast majority of investors in these settings.

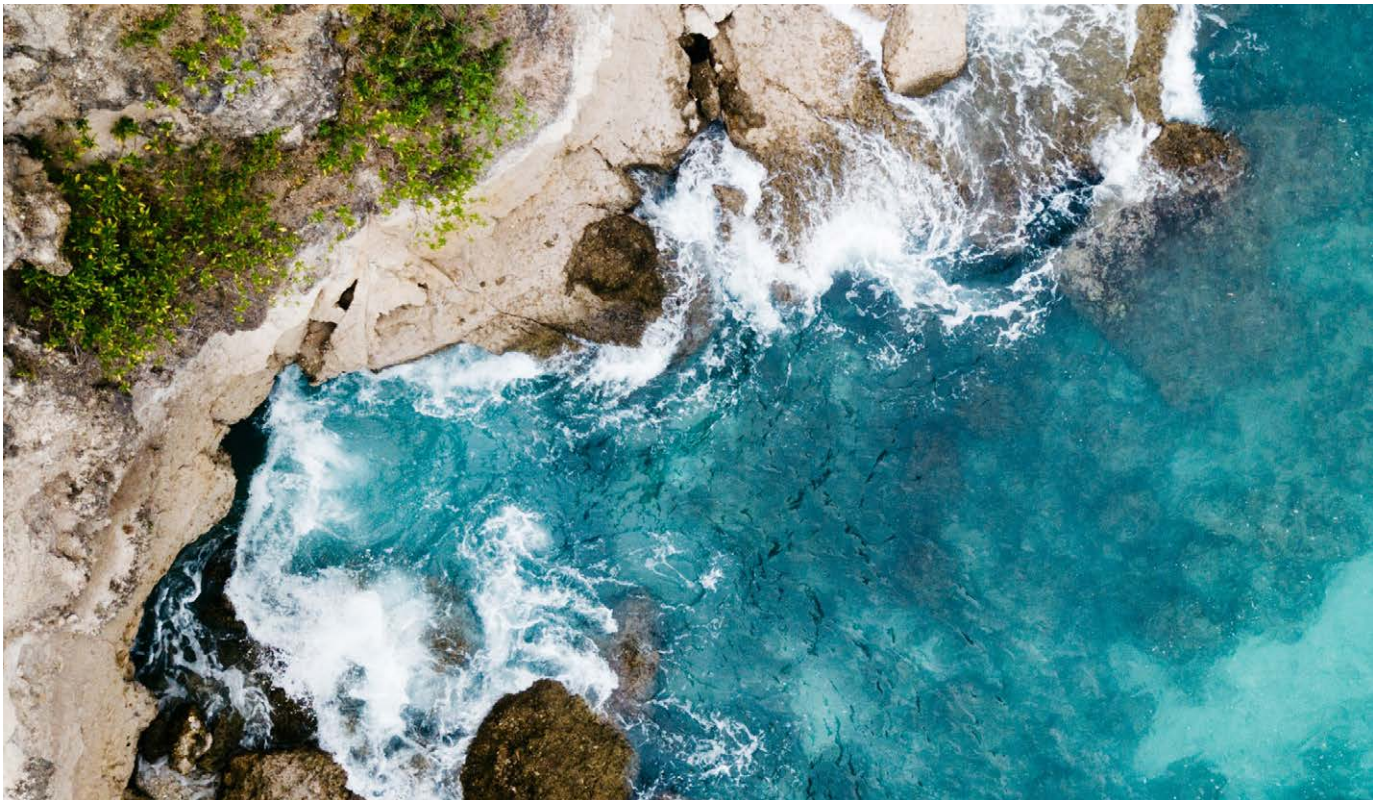
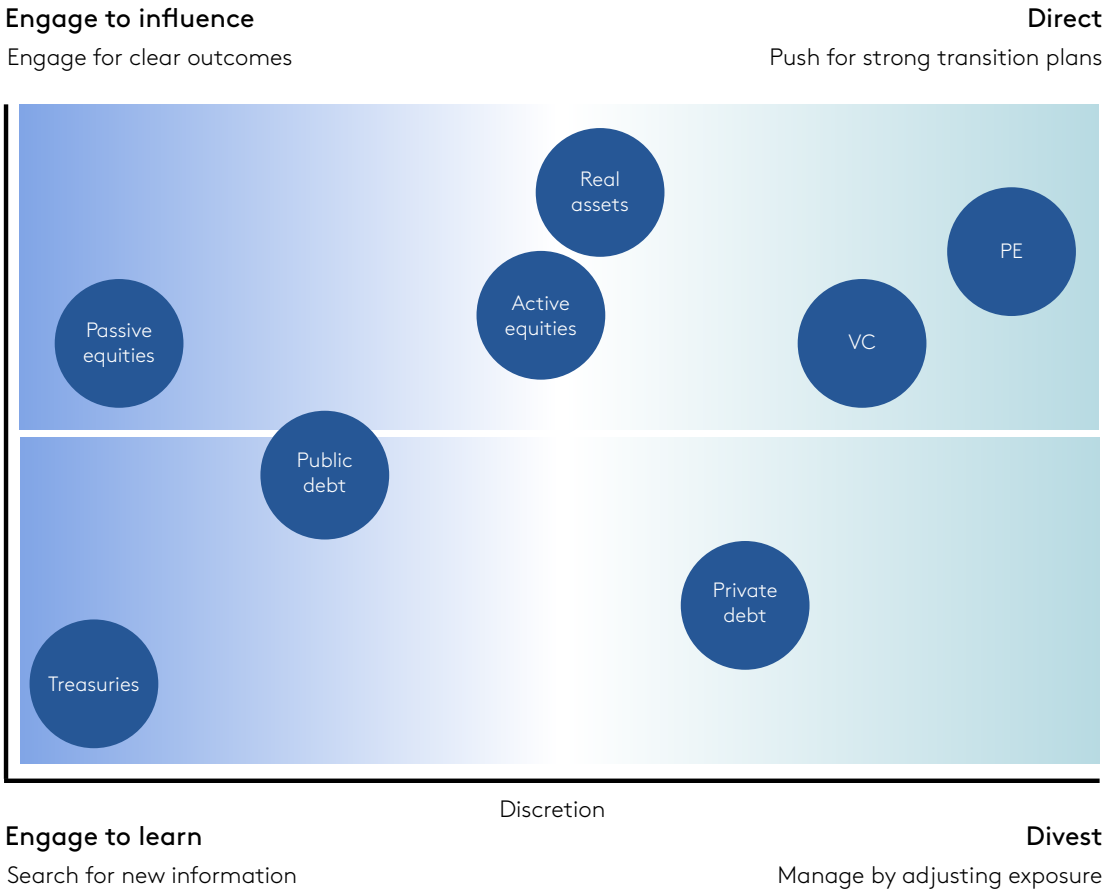


FIGURE 14

Different asset classes warrant different approaches

Source: Pollination (2023)



INVESTORS CAN BEGIN THEIR WORK ON NATURE WITH A FEW INITIAL ACTIONS.

Building a working understanding of the relationship between an investment portfolio and nature will take a while, but there are a number of ways investors can get started:

1. **Get your bearings:** In our view, investors are well served by beginning with a very high-level view of their initial exposures and priorities. This doesn't have to be a complex exercise, nor one mired in issues of tool or data availability. Indeed, it should be a quick assessment which identifies clearly why the exercise is being undertaken, what level of depth and complexity is warranted, and what the likely highest priority exposures and needs in the existing portfolio are. This reflects the 'Scoping' stage outlined by the TNFD guidance and recommendations. At this stage, investors should particularly establish a clear rationale for why they're engaging with the issue – for example, is the investment risk driving the conversation, or is it a specific ask from a stakeholder?

2. **Within your high priority areas, begin engaging with your portfolio in a structured way.** We work with numerous companies and financial institutions on nature, often beginning with risk or materiality assessment and strategy setting. We find that engagement is both a first step recommended by these initial exercises, and is also in itself one of the most useful pathways for investors to build their understanding of risk. Working with investors in climate has also taught us that engagement contributes quickly to risk management, as it prompts increased attention, capability development and governance on the issue at hand among investee firms. As such, we encourage investors to engage early with simple initial asks to support learning on behalf of the investor and medium-term risk management.

3. **Begin to deep-dive using the TNFD 'LEAP' framework in sites of particular materiality.** The LEAP framework (Locate, Evaluate, Assess, Prepare) is part of the broader TNFD system of recommendations and guidance. The framework outlines a rigorous process that investors and companies can use at different levels of resolution to deepen their understanding of and response to nature related risk and opportunity. When implemented in high resolution the framework can be quite energy intensive, and is particularly useful for deeper dives on specific high risk assets or sectors.

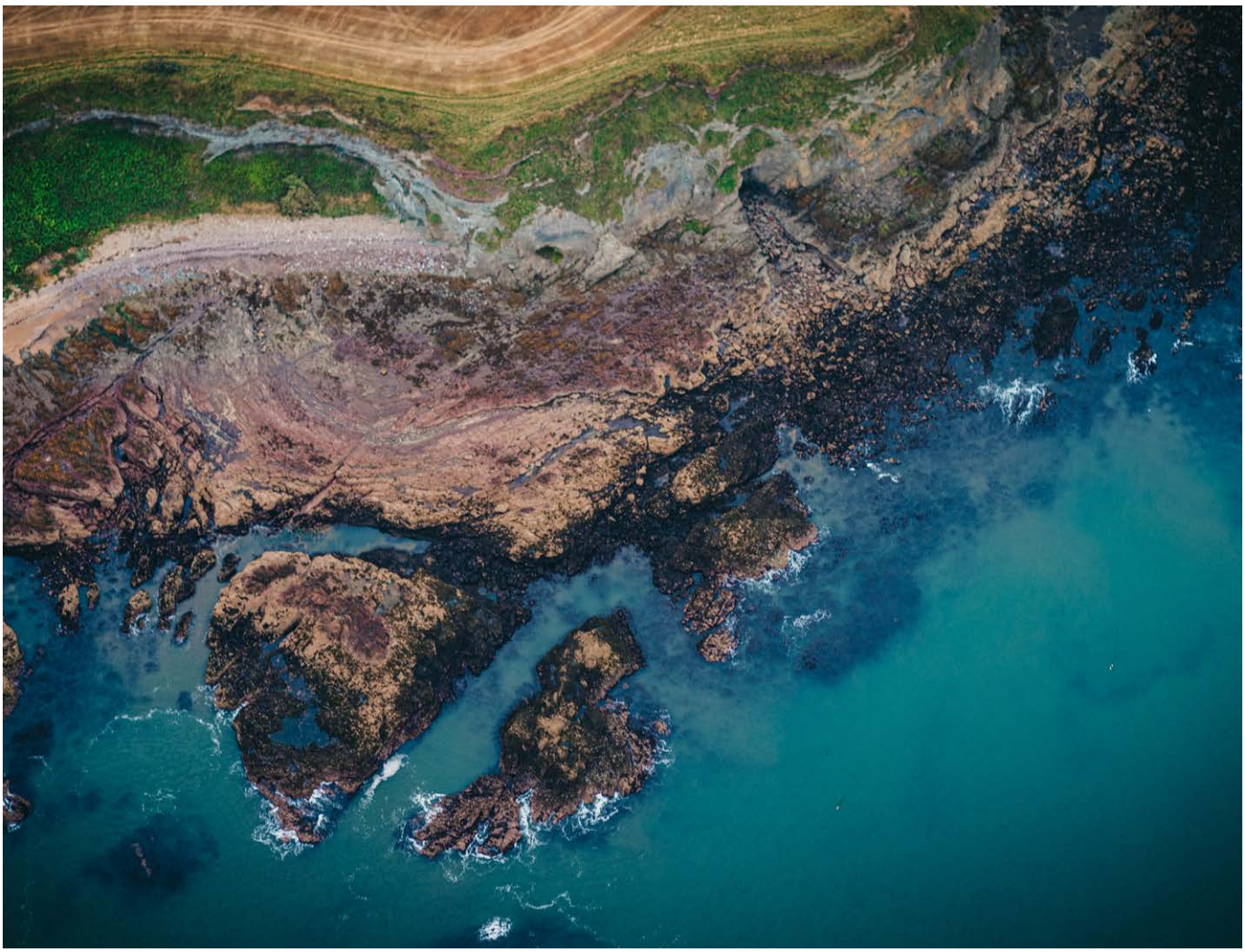
4. **Begin to build the resources you will need to have deeper visibility on your portfolio's engagement with nature.** In our experience, most capital providers do not presently have the information they need to understand their portfolio's engagement with nature in depth. Although investors don't need a precise model of risk to get started, a deeper working understanding will be important and useful as nature strategies develop.

   Location is one example of this. It is desirable for investors to determine the location of their investments and the condition of the natural assets around them. However, most investors will have to build the capability to collect and hold this information before they can start engaging with location in depth (likely with the support of data providers). This visibility is likely to take some time to develop. As such, we suggest that companies and investors begin building a rough view of their data needs very early on (including for location and supply chain data), and embed these in initial engagement asks and conversations across the firm.

NATURE IS A JOURNEY, NOT A ONE-TIME SPRINT

Investors should think of their work on nature as a medium-term exercise in building competence, rather than a sprint. Nature as a full domain of activity can seem impossibly complex and expansive, especially as investors begin to grapple with the challenges presented by both value chains and geography. However, in our view the exercise can be broken down into very manageable parts. Investors are essentially building awareness and management capability across a number of new groups of natural assets. This should be a medium-term exercise, that starts immediately but also takes a number of years to execute.

Investors can use new core capabilities to manage risks and opportunities across different natural assets. We think it is productive for investors to approach the integration of nature as the process of building a central set of management capabilities across different groups of natural assets. Although the capabilities needed to deal with different groups of assets do differ somewhat, many of them are common. Furthermore, many of these common capabilities (engaging systematically on specific issues, establishing and comparing targets, and so on) have already been somewhat developed in work regarding climate change. Many investors will extend these capabilities into the different groups of natural assets which encompass nature, rather than replacing them.



A pathway to nature positive for investors

In response to the outlined pressures and risks, many investors are now starting work to extend their transition plans into nature. Indeed, the TNFD asks that investors develop not only a sense of their risks and opportunities, but also a clear plan (including targets) to address and manage these. In some cases investors are developing nature specific strategies, and in others they are extensions of existing climate-focused transition strategies. Targets are a central and useful a part of these recommended pathways. Nonetheless, these targets are likely to be more varied and less singular than has been the case with climate change.

Transition plans for nature will deepen over time and will most likely include sets of targets for different groups of natural assets. We guide investors to work across natural asset groups (such as fresh water, land or biodiversity) piece by piece and where relevant, rather than having to build strategies on all fronts at once. The approach investors have developed on climate change of building work across asset classes over time (starting where exposure is most material and control is highest), should also be utilised for nature transition planning. The intention behind this approach is to develop deeper understanding, more effective targets and greater disclosure over time, without becoming overwhelmed by the scope of the task at the outset.

As with climate targets, nature targets can also cover various aspects of an investor's activity relating to nature. As outlined in the TNFD, targets can relate to the drivers of damage to natural assets, to the state of nature the portfolio has coverage of, or to the use of ecosystem services. Some of these groups will be more or less relevant for different investors, and some investors will start with some of them first and move to others later. The SBTN's structure is a good example of this approach – beginning with specific groups of assets which are more relevant (and the targets that help manage these groups) and then building out to others. For many investors nature targets can also include investments in enablers and solutions which fit within the investment mandate and which support or facilitate nature improvement.

For investors nature positive should be positioned as a system level goal to contribute to, rather than a firm-level goal. Nature positive is increasingly highlighted as a necessary and desirable future state to guide economy-wide efforts to manage and improve natural assets. As a consequence, we get many questions from companies and financial

institutions regarding whether nature positive should be adopted as an organisation-level goal. A growing community of investors and companies do have strong ambitions to achieve nature positive outcomes. Nonetheless, it is our view that this ambition is at least presently unnecessarily complex for many investors, and that instead investors should focus on strategies and actions which can improve the nature footprint of their portfolios. By doing so, these investors are also providing a direct contribution to a system-level nature positive outcome.

Investor transition plans should support investors to slowly pivot their portfolios from high risk exposures towards improved models and solutions. As noted above, the work investors take on nature should reduce obvious and material risks (and the harms that create these risks) in existing portfolios, while also increasing exposure to improved models, enablers and solutions. This pivot won't be game-changing in all sectors or all asset classes. Indeed, for some businesses it will require modest adjustments to existing models and procurement choices. However, in other sectors or classes it will require significant and sustained innovation in business models and procurement methods. Investors should be looking to identify, prompt and support these transitions.

Although investors should act on highly material risks and opportunities first, they are likely to find that these actions have wider benefits. This is because corporate and investor actions which address one nature-related risk will often end up ameliorating others as well. We noted previously that the categorisation of natural assets used in this note is highly simplified, and especially underplays the connectivity between different groups. Because of this connectivity, many solutions employed by companies are relevant to more than one group of natural assets. Corporate actions which increase circularity are a good example of this, as these often reduce resource use, resource production (which drives pollutant release and land and water change), and energy use (which drives climate change). This isn't the case with all nature-related risks, however it does mean that initial actions to reduce risk will often have wider effects.

POLLINATION

For further information please visit
pollinationgroup.com
