



# Natural capital & biodiversity – where are UK asset owners on their journey?

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PENSIONS  
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PURPOSE



Gresham House  
*Specialist asset management*

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# Executive summary



# Executive summary

This *Pensions for Purpose* **‘Natural capital and biodiversity – where are UK asset owners on their journey?’** paper highlights the results of a research project seeking to assess where UK asset owners, in particular pension funds, are on their journey of incorporating biodiversity and natural capital into their investment decision-making. It also shows why they are considering natural capital in investments – for example, to reduce biodiversity loss and restore nature.

The report was commissioned by *Gresham House*, a specialist alternative asset manager focused on sustainable investments, with expertise in managing natural capital assets and impact investments.

To collect the data, *Pensions for Purpose* surveyed a range of asset managers and interviews were carried out across stakeholders – for example, asset owners and investment consultants. A summary of the main questions addressed in this report and their responses are shown below.

## 1 HOW DO ASSET OWNERS AND THEIR CONSULTANTS VIEW NATURAL CAPITAL?

### 1. Conceptualisation

To encourage systemic change, we believe monetary value must be assigned to nature. Natural capital is finite, yet our economy depends upon it with almost no financial attribution save for cost of exploitation. Unless we place a value on nature, we will not incentivise behaviour that supports its protection and restoration. While oil and gas are technically elements of natural capital and stewardship is crucial to mitigate the risks of biodiversity erosion, this paper’s conceptualisation of natural capital investment should focus on natural capital assets. Our research has found investing intentionally in natural capital solutions is a step few leading asset owners have taken along the journey of incorporating nature-related issues into investment decision-making.

### 2. How to measure biodiversity and other nature-related themes

Pension schemes need to accept metrics will change across different natural capital investments. To some extent, this is already an issue funds face when

investing in social impact – for example, affordable housing, where the deliverables may vary by sub-sector. We also expect qualitative information to play a role in explaining the impact of natural capital investments alongside quantitative data – nature is often too complex to be succinctly explained in a single metric.

### 3. Biodiversity and climate change

Most pension funds are not considering biodiversity as a separate concern to climate change. To date, the level of interest in biodiversity and natural capital solutions has mainly been driven by pension funds implementing climate mitigation strategies. For most funds, natural capital investment is seen as part of their journey towards net zero.

### 4. Natural capital – creation versus protection

The asset owners who participated in this research largely focused and engaged on topics such as deforestation and water pollution, with investors seeking

to reduce or avoid exposure to nature-related risks and harm to nature. Many are only just starting to think about solutions-based investing in natural capital, primarily due to barriers to investing in private markets and lack of knowledge. Careful consideration of the ecosystem externalities is crucial when investing in created natural capital. (An externality is a positive or negative outcome of an economic activity that affects a third party that is not directly related to that activity.)

## 2 WHAT IS THE MARKET FOR NATURAL CAPITAL INVESTMENT?

### 1. The situation today

Natural capital investment is still a nascent market.

While some of the barriers mentioned by asset owners are typical of a new investment – for example, risk, track record, illiquidity and fees – others are more unique to natural capital investment – for example, challenges associated with nature-related data, lack of specialist knowledge, lack of understanding of financial drivers and evolving carbon markets.

### 5. The role of investment consultants

Some consultants are better informed on biodiversity than they were when pension funds first started to consider the climate. A number have invested significant resources to develop expertise on environmental, social and governance (ESG), sustainability and impact investment. They are well placed to help pension funds understand the concepts of natural capital and biodiversity, as well as how to embed them into an investment strategy.

### 2. How asset owners want to incorporate natural capital

Although many have not incorporated natural capital into their investment decisions and few have directly invested in natural capital assets, 54% of our asset owner interviewees are starting to use nature as a theme for engagement. As with many assets, the financial gains from natural capital investment are likely to be most substantial to those investors who make their first commitment ahead of the crowd.

## 3 WHY ARE ASSET OWNERS INVESTING IN NATURAL CAPITAL?

### 1. What are the drivers?

The drivers for asset owners to invest in natural capital are varied, some are more financially focused while others see biodiversity as a route to net zero.

### 2. What sustainability outcomes are asset owners looking for?

Most asset owners investing in natural capital solutions focus on their positive contributions to climate mitigation. However, they should treat biodiversity loss as a similar systemic risk to climate change and consider sustainability outcomes beyond carbon emissions reduction.

### 3. Is it important that natural capital investments yield carbon credits?

The topic of carbon credits elicited strong views from asset owners, some saw them as a mechanism to achieve net-zero targets and others saw carbon credits as a ruse through which actors can continue to pollute with no change in behaviour. Although they comprise a volatile market, investors perceived the financial premium available from carbon credits made these investments potentially attractive opportunities.

### 4. Are frameworks or commitments capturing investors' interest?

Currently frameworks are not driving asset owner interest in natural capital investment but they are inspiring discussion among trustees. We hope the *Taskforce on Nature-related Financial Disclosures (TNFD)* regulation and international agreements such as the *Kunming-Montreal global biodiversity framework* put these issues onto the policy table and will catalyse natural capital investment.

### 5. Do pension funds have a responsibility to invest in natural capital?

Pension funds are divided on this question. Schemes that felt they do not have a responsibility to invest in natural capital tended to focus more on the obligation and role of their own investment portfolio. Those who do have a responsibility, tend to think more progressively about the future of investing and often consider wider implications such as how to secure a better world for their members to retire into.

## 4 FINANCIALS

### 1. What returns are asset owners looking for and what risk are they willing to accept?

Our interviewees were expecting returns from 5-8%, although some were flexible on the return if the assets can offset their own carbon emissions. Geographical diversification was considered a key way to manage risk.

### 2. What are their time horizons in assessing the success of their natural capital investments?

To ensure the permanence of carbon sequestration,

some funds are looking beyond medium-term performance assessment. This is important to maintain the sustainability benefits of natural capital investments.

### 3. How are asset owners thinking about natural capital investments within their portfolios?

With few investing in natural capital, the required level of generated return may change over time as more investors commit capital, and as the carbon credit and other natural capital markets develop. The role of natural capital in a pension portfolio is multi-faceted and may differ from fund to fund.

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# Introduction



# Introduction

Like climate change, biodiversity loss is an existential threat to human beings. *The World Wide Fund for Nature (WWF)*'s '*Living Planet Report 2022*' reports an average drop of 69% in wildlife populations since 1970. Depleted biodiversity may cause our ecosystems and food security to collapse, along with other devastating consequences to humanity and our environment. But, in recent months, crucial international agreements which aim to prevent biodiversity and nature loss have been negotiated. COP15 bore the *Kunming-Montreal Global Biodiversity Framework* (billed as the 'Paris moment for nature') – four goals for 2050 and 23 targets were implemented, among them "to ensure and enable that by 2030 at least 30% of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed...". The *UN High Seas Treaty* will serve to support the protection of international waters and help towards the *Kunming-Montreal Global Diversity Framework*'s targets.

Biodiversity exists within nature. According to the *World Economic Forum (WEF)*, over half of global GDP depends on nature and the ecosystem services it provides. It is no wonder biodiversity and nature are sparking material change in the financial sector which is adopting a conceptualisation of nature that attributes its proper monetary value: natural capital. Both the stewardship and engagement of nature-related issues with underlying companies and the intentional investment in solutions to nature-related issues sees asset managers and owners seeking to benefit from, and contribute to, the transition to a net-zero and nature-positive world.

This *Pensions for Purpose* paper highlights the results of a research project seeking to assess where UK asset owners, in particular pension funds, are on their journey of incorporating biodiversity and natural capital (for example, to reduce biodiversity loss and restore nature) into their investment decision-making. It also shows why they consider natural capital in investments. To collect the data, asset managers were sent a written survey and various stakeholders were interviewed including asset owners, investment consultants and asset managers.

The report was commissioned by *Gresham House*, a specialist alternative asset manager, focused on sustainable investments with expertise in managing natural capital assets and impact investments.



**Coral reefs are believed to have the highest biodiversity of any ecosystem – even more than a tropical rainforest. Occupying under 1% of the ocean floor, coral reefs are home to over 25% of all marine life<sup>1</sup>.**

“Global wildlife populations have plummeted by 69% on average since 1970.”

WWF

## DEFINITIONS

### Biodiversity

The variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems<sup>2</sup>.

### Natural capital

Natural capital is another term for the stock of renewable and non-renewable natural resources on earth (for example, plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits or 'services' to people<sup>3</sup>.





**1** How do asset owners and their consultants view natural capital?

# How do asset owners and their consultants view natural capital?

## 1. Conceptualisation

When asset owners envisage natural capital and how to invest in it, there are conflicting views. We asked our interviewees to outline their concerns on how natural capital and nature-related investment are being conceptualised. Their quotes reflect the nascency of the space and the difference of opinion within it.

“It’s easy to get people on board with nature loss because some of the imagery from it is so visceral, for example, forests getting destroyed and orangutans losing their habitat. The ‘financification’ of the terminology takes away from that. When I go out into my back garden, I don’t think ‘look at all that natural capital’. Or about all the ecosystem services the grass provides to me in my own world.”

TIM MANUEL, AON

“There’s a danger natural capital investment boxes itself in a corner, we’re not going to save nature by planting some forests somewhere while the damage being done elsewhere continues.”

INVESTMENT CONSULTANT

“I would like it to be less human-centric.”

ASSET OWNER



“You’ve got to be careful because oil and gas are natural capital.”

INVESTMENT CONSULTANT

### PENSIONS FOR PURPOSE’S PERSPECTIVE

Knowledge and understanding are required before investing in natural capital solutions. We endorse pension funds who spend time training trustees before investing in this type of impact investment, so they understand the risks and opportunities available but also have a good understanding of interrelated and complex concepts of natural capital, biodiversity and ecosystems.





**Wolves, bears and lynxes are species that once roamed the UK's countryside in significant numbers, before being forced out through culls and over hunting by a growing human population. These are species campaigners wish to see reintroduced<sup>4</sup>.**

**Insight:** To encourage systemic change we believe monetary value must be attached to nature. Natural capital is finite, yet our economy depends upon it with almost no value attribution save for cost of exploitation. Unless we place a value on nature, we will not incentivise behaviour which supports its protection and restoration. It is an important point that oil and gas are elements of natural

capital but, while stewardship is crucial to mitigate the risks of biodiversity erosion, this paper's conceptualisation of natural capital investment should focus on natural capital assets. This research has found intentionally investing in natural capital solutions is a step few leading asset owners have taken along the journey of incorporating nature-related issues into investment decision-making.



## 2. How to measure biodiversity and other nature-related themes

It is more difficult to measure biodiversity and other nature-related themes than climate, where a carbon dioxide equivalent metric gives consistency across a portfolio. The government's *Department for Environment Food & Rural Affairs (DEFRA)* created the *DEFRA Biodiversity Metric (4.0)*, the first objectively determined metric that applies to the implementation of biodiversity net-gain in England pursuant to the Environment Act. This metric makes the measurement of biodiversity formulaic which helps to develop the market.

One asset manager we spoke to used natural capital audits to measure the land they manage while *effec* – a consultancy working to apply environmental economics to public policy and business challenges – is developing natural capital balance sheets.

Distinguishing the suitability of the different metrics – for example, between industry sector and location – is difficult, a contrast to climate action which offers more standardised measurement. Metrics used to measure the quality or abundance of a water course would be very different from that of a forest. In addition, not all aspects of natural capital are easily valued. Consequently, once the appropriate metrics have been selected, applying a consistent and appropriate monetary value to the natural capital may not be simple.

“From one side of a hill to the other side, you get completely different microclimates. So, it's very difficult to have some figure that you can compare, even in the same country, let alone portfolio-wide.”

ASSET OWNER

Biodiversity can be used as a proxy for the health of a natural area. Some measurements outlined by interviewees include eDNA sampling to assess species presence, mean species abundance, organic matter of soil, watercourse assessment and the habitat as a low-cost measure of species presence.



“I don't think, for nature, there's ever going to be one answer like emissions (for climate). It's going to be a mosaic of different things you're going to need to assess.”

ASSET OWNER

The *TNFD* recently published its recommendations for separated, core, global metrics, core sector metrics and additional metrics such as those relevant to specific business models. The lack of comparability associated with an absence of standardised metrics may make it difficult to fit an asset owner's portfolio into a disclosure framework like the *TNFD*. However, a useful tool for listed assets is *Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE)*, which looks at company-specific natural capital dependencies and impacts.

“If you invest in a forest in Scotland, you can explain the narrative behind that, but can you shoehorn that into a metric that will be fit for comparing with equities and gilts? Probably not and in doing so you lose the point.”

INVESTMENT CONSULTANT

**Insight:** Pension funds will need to accept metrics will change across different natural capital investments. This is already an issue they face when investing in social impact, such as affordable housing, where the deliverables may vary by sub-sector (for example, one addresses housing for the disabled, another for key workers and another for the homeless, and all have different impact goals).

#### PENSIONS FOR PURPOSE'S PERSPECTIVE

When assessing metrics reported on for natural capital investments, asset owners should ensure, through their due diligence process, that their investment managers are reporting on their nature-related risks and dependencies, following *TNFD* guidance. They should clarify the impact the fund can offer – if this is a driver for their decision to invest in natural capital, how will it be measured and how does the asset manager plan to improve the impact over time. Impact goals and financial criteria should be embedded into the terms of reference when assessing and monitoring natural capital investment managers.





### 3. Biodiversity and climate change

**B**iodiversity is crucial to the health of ecosystems, such as forests and wetlands, which play an important part in mitigating climate change through the sequestration of carbon dioxide and their role in climatic regulation. Only through the protection of nature can these ecosystems contribute to and provide such services.

It is essential we control the climate crisis to prevent biodiversity loss. Climate change is understood to be responsible for between 11% and 16% of biodiversity loss because of its impact on temperature rise and extreme weather events, which materially impact an enormous range of species globally.

Most of the asset owners we interviewed agreed mitigating biodiversity risk is at least as important as climate risk. Some felt it is a bigger risk but the interlinkages between the two issues are well understood.

Acknowledging biodiversity loss in its own right is essential, given that between 35% and 54% of assets held by financial institutions are highly or very highly dependent on ecosystem services supported by biodiversity<sup>5</sup>. Presently, though, there is insufficient data or understanding to address biodiversity loss directly.

For an asset owner, climate change is easier to tackle than biodiversity loss due to the development of standardised climate metrics and the regulatory focus. Of the asset owners consulted, 80% do not separate biodiversity risks from climate risk because of the challenges previously discussed. Also, most asset owners do not have the internal capacity to look at biodiversity loss in the same way as climate change. *Task Force on Climate-related Financial Disclosures (TCFD)* reporting regulations are taking up enough time.

“It’s a matter of prioritising our resource.”

ASSET OWNER

#### PENSIONS FOR PURPOSE’S PERSPECTIVE

More needs to be done to raise awareness of the impact of biodiversity loss and its relevance to the financial performance of a pension fund portfolio. We hope *TNFD* reporting and the global 30 by 30 targets of the *Kunming-Montreal* framework will begin to bring biodiversity into focus as a standalone concern, but there will remain an obvious link with climate.



**Approximately one million animal & plant species are threatened with extinction, many within decades, more than ever before in human history<sup>6</sup>. The *WWF* consider the African savannah elephant to be endangered.**

It is vital to note the biodiversity crisis does not give us the luxury of time. To enact real change and meet the targets of the *Kunming-Montreal* framework, asset owners must move more quickly than they have on climate. This is complicated by the feeling of being geographically distanced from climate and biodiversity issues; feeling it is ‘happening somewhere else’ rather than in our own backyard. For example, flooding in the UK is less severe than Bangladesh.

“There are places in this world where the (climate change and biodiversity loss) situation is much worse, that’s part of the reason why UK asset owners don’t spend enough time thinking about this.”

ASSET OWNER

**Insight:** Pension funds are not considering biodiversity as a separate concern to climate change. To date, the level of interest in biodiversity and natural capital solutions has been driven by pension funds implementing climate change mitigation strategies. For most funds, natural capital investment is part of their journey towards net zero.



## 4. Natural capital - creation versus protection

“Pick an ecosystem, pick a country – the rate we are destroying natural capital is staggering.”

INVESTMENT CONSULTANT

It was clear our interviewees distinguish between the physical creation of natural capital and how to avoid its degradation. Most of our respondents had not invested directly in natural capital assets but were engaging with companies on their approach to biodiversity loss. Themes they engaged with included biodiversity, deforestation and water pollution. For many asset owners, the urgent need for the protection of natural capital was a driver of engagement but investing in natural capital solutions was perceived to be more problematic.

“You don’t build an ecosystem out of the blue. If you plant a forest, you are not going to recreate all the positive ecosystem services and biodiversity that an existing one would have.”

ASSET OWNER

### Gresham House's comment

In 2023, almost every ecosystem in the world has had human interference. Existing ecosystems, therefore, may not represent a natural capital or biodiversity optimum. As such, change and restructuring can be positive.

**Insight:** The primary focus of the asset owners who participated in this research was engagement on topics like deforestation and water pollution, where investors seek to reduce or avoid their exposure to nature-related risks and harm to nature. Many asset owners were only just beginning to think about solutions-based investments in natural capital. This is the result of barriers to investing in private markets and a lack of knowledge, among other things. Careful consideration of the ecosystem externalities is essential when investing in created natural capital.



**10,000 years ago, 45% of the world's land was covered by forests. Today, the figure is more like 33%, with most of that loss attributable to deforestation<sup>7</sup>.**

Asset managers must be extremely location specific. If you are planting a forest, you can damage nature by growing the wrong species of trees in the wrong place. You must choose the least productive land (otherwise it should be used for agriculture) and think where the best place is to have those trees within that ecosystem. This should be reflected in asset owners’ due diligence.

### PENSIONS FOR PURPOSE'S PERSPECTIVE

When considering climate action, pension funds tend to focus first on embedding climate risk in their investments as responsible investors, they then consider other environmental risks such as biodiversity loss or deforestation. Next, they tend to move along the 'spectrum of capital' towards impact investment solutions to solve environmental and social challenges. Many are still at the point of considering how to improve their investment approach in relation to nature. We anticipate a growth in interest in voting and engagement on natural capital themes. At this stage, appetite for direct investment in natural capital assets and targeted nature-based solutions is more limited but we expect this to change rapidly, with investors travelling along the spectrum of capital as net-zero goals edge closer and biodiversity impact gains traction. Asset owners should recognise the value opportunity associated with limited supply of natural capital investments. Notwithstanding this, when investing in created natural capital, they should do proper due diligence on the ecosystem benefits it is creating and potential negative externalities.

## 5. The role of investment consultants

Some of the investment consultants we interviewed were well-informed on natural capital and biodiversity, having been educated by experts on particular areas. A number are not just providing advice reactively but taking these issues to their clients for discussion. There is still some scepticism among trustees, however, so the initial work lies in making the financial materiality of these issues clear.

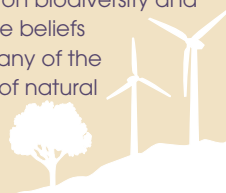
“You’ve got to win hearts and minds with this.”

INVESTMENT CONSULTANT

**Insight:** Some investment consultants are better informed on biodiversity than they were at a similar stage when pension funds first started considering climate action. Some have invested significant resources to develop expertise on ESG, sustainable and impact investment, and are well placed to help pension funds embed biodiversity into an investment strategy.

### PENSIONS FOR PURPOSE’S PERSPECTIVE

Investment consultants should be a valuable resource for any pension fund thinking about biodiversity and natural capital. Some have developed the expertise to provide training, to help funds clarify their investment beliefs on biodiversity and to work with asset owners to transfer these beliefs into the investment strategy. Although many of the consultants acknowledged the universe of natural capital investment managers is limited, some can still provide expertise when asset owners decide to invest.





**② What is the market for natural capital investment?**



# What is the market for natural capital investment?

## 1. The situation today

The natural capital investment market is notably small, with a limited number of asset managers investing directly in natural capital assets, but it is growing. There were almost \$1bn of biodiversity fund assets in 2022, triple the number in 2021<sup>8</sup>, although most of the investible products were listed equity and stewardship-oriented. The demand for nature-positive financing investments is expanding. As of April 2023, 126 financial institutions with over €18.8tn in assets had signed the *Finance for Biodiversity Pledge* and committed to protecting and restoring biodiversity through their finance activities and investments, including engaging with companies, assessing impact, setting targets and reporting, before 2025.

Despite these trends, within natural capital investments more specifically, asset owners' knowledge of product availability is minimal, with most pointing to sustainably managed forestry and some mentioning sustainable agriculture. Also, although we sought out asset owners that have natural capital investments, there were only a small number who were already allocating to solutions and willing to discuss these investments with us.

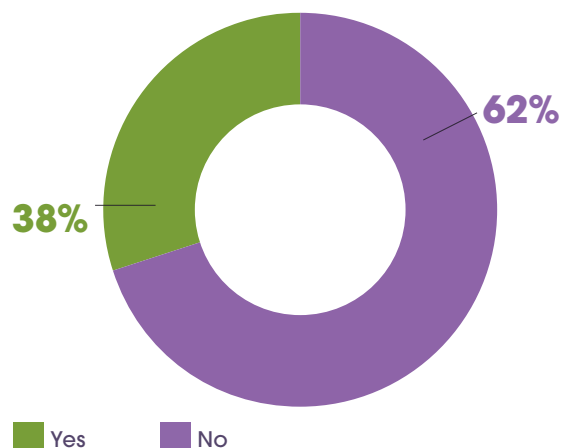
### Supply side

Asset owners are aware of the sustainable agriculture and forestry funds on the market. However, our survey has highlighted some of the innovative products available, which include peatland restoration, habitat banks and ocean regeneration. The challenge for asset managers is to consider how to create high-impact, high-return and low-risk products. There are solutions with both high-impact and high-return but the risk side is difficult to minimise and some of these issues are explored overleaf.

The asset managers surveyed said they see interest mainly from corporate investors, LGPS funds and insurers.



Figure 2 | Percentage of interviewed asset owners with natural capital investments



Obstacles asset managers identified in selling their natural capital investment products to asset owners include:

- The nascency of natural capital solutions and lack of track records.
- Disproportionate perception of natural capital assets' exposure to natural disasters.
- Evolving carbon and biodiversity credit markets, particularly standards and price transparency.
- Limited experience and knowledge in natural capital among asset owners.
- Illiquidity – these investment products largely exist in the private markets.

## Demand side

Barriers to asset owners investing in natural capital investment products, as highlighted by interviews with asset owners, include:

- Limited opportunities.
- Risk around financial outcomes – unproven track record.
- Illiquidity.
- Small allocations and high governance requirements.
- Time horizon is a challenge for private markets.
- Fee levels.
- Concerns that investments sit at the point on the

spectrum of capital where returns start to drop off.

- Nature-related data is insufficient.
- Poor specialist knowledge in this area.
- Evolving carbon markets – uncertainty over returns.

A couple of well-informed asset owners expressed interest in natural capital investments outside the mainstream of sustainable forestry and agriculture, for example, in ocean regeneration and habitat banks.

While we understand there is work to be done to encourage asset owners to invest in these areas, we gauged the interest in various natural capital investments by taking a sample from the eight pension funds who responded to us. **Table 1** shows the mean interest.

Despite the existing demand and supply side challenges to investing in natural capital, there are examples of leaders in the market who have developed investible solutions in natural capital. For example, sustainably managed forestry funds have existed for several decades and have developed a strong record of returns. More emerging solutions are available to asset owners such as investment in biodiversity net-gain markets through the creation of habitat banks.

**Table 1 | Mean interest of different natural capital investments**

Natural capital investment type	Definition	Score 1-5*
Afforestation	Creation and sustainable management of forestry.	4.5
Productive forestry	Sustainable management of forestry for wood products.	4.4
Regenerative agriculture	Promotion of regenerative farming practices.	3.9
Waste-to-energy	Use of waste for alternatives to fossil fuels and avoiding landfill.	3.9
Habitat banks	Creation of biodiverse habitat banks to restore nature/ biodiversity.	3.6
Nature tech	Technology supporting the conservation, restoration or enhancement of natural resources and/or biodiversity.	3.6
Vertical farming	Efficient production of food from a land, water and chemicals perspective.	3.6
Geothermal heating	Use of natural heat sources to generate energy.	3.5
Peatland	Management and restoration of peatland.	3.1
Biobased plastics	Production of materials using plant-based products.	2.8
Seaweed	Creation and management of seaweed farms.	2.5
Aquaculture	Production of sustainably managed seafood both in the sea and on land.	2.5
Alternative proteins	Production of protein food sources from plant or cellular processes, avoiding animal-based meats.	2.4

\*1 = low interest. 5 = high interest (to 1 decimal point)

*Gresham House* is an asset manager with experience in both areas and we highlight the credentials of example investible products below.

**Table 2** and **Table 3** show case studies of investible solutions: *Gresham House*'s forestry funds provide investors with access to sustainable productive forestry, a natural capital investment contributing to climate change mitigation, while habitat banks offer a financial return and regenerate biodiversity.

Investment managers are developing diversified investment solutions to target a range of assets, which aim to provide attractive returns while addressing global environmental challenges. *Gresham House*, for example, is designing net zero and natural capital investment solutions which aim to support clients who wish to invest in the climate transition or generate positive nature-related outcomes. **Tables 4** and **5** illustrate indicative investible mandates for clients, and the targeted returns.

**Table 2 | Case study of an investible solution – *Gresham House*'s sustainable productive forestry, a natural capital investment contributing to climate change mitigation**

### Sustainable productive forestry

What is the challenge?	Anthropogenic climate change threatens the stability of global weather patterns and ecosystems, posing risks to health, food security and economic activity. Mitigating these risks requires maintaining global warming to below 2°C through the rapid and widespread decarbonisation of the global economy and removal of carbon dioxide from the atmosphere at scale. The construction sector was responsible for almost 40% of energy and process-related greenhouse gas emissions (GHG) in 2018, of which 11% of the total emissions of the building and construction sector can be attributed to materials <sup>9</sup> .
What is the investment solution?	<p>Sustainable forest management and woodland creation can produce significant amounts of timber. Timber can support the decarbonisation of residential and commercial construction, through the substitution of carbon intensive materials such as concrete, steel and aluminium for a net carbon absorbing product<sup>10</sup>.</p> <p>Sustainable forest management can provide wider ecological co-benefits, such as carbon sequestration and storage, biodiversity gains through improved habitat connectivity<sup>11</sup> and improvements to water quality<sup>12</sup>.</p> <p>In addition, illegal logging and plantation forestry is still a driver of natural forest loss in many parts of the world<sup>9</sup>. Sustainable forest management and woodland creation can, by increasing yields of certified timber from existing productive forests or by creating new certified forests on agriculturally poor land with low biodiversity or ecosystem value, support growing timber demand while lessening pressures elsewhere in the world to deforest biodiversity rich forests which store and sequester a huge amount of global carbon stocks.</p>
Evidence of impact	<p>The climate and nature-positive impact of these investments are measured using these indicators:</p> <ul style="list-style-type: none"> <li>● Timber harvest volume (tonnes) annually.</li> <li>● Timber sales certified as sustainable (%).</li> <li>● Tonnes of carbon sequestered per hectare annually (tCO<sub>2</sub>e).</li> <li>● Tonnes of carbon stored per hectare (tCO<sub>2</sub>e).</li> </ul>
Investment return profile	The investment targets a nominal internal rate of return (IRR) of 6-7% per annum. This is driven by growth in values of trees based on timber prices, and value accretion and potential additional returns associated with carbon credits.
Scale of the opportunity	<p><i>Gresham House</i> forecasts global timber consumption to rise by 270% over the next 30 years driven by urbanisation, decarbonisation and housing demand. At the same time, there is supply deficit forecast for 2050 of 1,130mn m<sup>3</sup> annually based on 'realistic' assumptions. The growth opportunity for sustainable forestry is significant<sup>13</sup>.</p> <p><i>Gresham House</i> has recently expanded its geographic footprint with the management of over £500mn in global forest assets. <i>Boston Consulting Group (BCG)</i> estimates the global forest market stands at \$150tn, double the value of global equities<sup>14</sup>. <i>Gresham House</i> is well positioned to capitalise in this space as the seventh-largest forest manager in the world by value.</p>

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**Table 3 | Additional case study of an investible solution – Gresham House habitat banks offer both a financial return and regenerate biodiversity**

Habitat banks	
What is the challenge?	Biodiversity richness is fundamental to the health of our natural ecosystems. Modern civilisations cause widespread destruction of nature with the loss of over 60% of all wildlife since 1970 <sup>15</sup> . One-fifth of these ecosystem services are on the verge of collapse <sup>16</sup> yet 55% of global GDP relies on what nature provides <sup>17</sup> .
What is the investment solution?	'Habitat banks', landscape scale areas of land which deliver biodiversity regeneration, have been structured by <i>Gresham House</i> to become a new infrastructure asset class generating proven biodiversity net gain (BNG) to developers who need to meet Environment Act obligations or for corporates seeking to be 'nature positive'.
Evidence of impact	The nature-positive impact of these BNG investments will be objectively measured and monitored using these indicators: <ul style="list-style-type: none"> <li>● Hectares of land converted into habitat banks.</li> <li>● Number of DEFRA determined biodiversity units created<sup>18</sup>.</li> <li>● Species abundance.</li> <li>● Soil quality.</li> </ul>
Investment return profile	The investment targets a gross internal rate of return (IRR) of 8-12%. The target return is based on receipt of BNG unit sale revenues upfront, from which fixed income returns are paid over asset life to investors and further equity upside potential (from higher BNG sale prices and for potential future natural capital service revenues).
Scale of the opportunity	The <i>WWF</i> estimates nature contributes up to \$125tn of value globally on an annual basis. <i>Gresham House</i> estimates the total potential funding requirement for <i>Environment Bank Ltd</i> – the company backed by <i>Gresham House</i> which is creating and managing the habitat banks – will be greater than £1bn over the next five years. The likely market for off-site habitat bank solutions is still nascent but <i>eftec</i> , which has been advising <i>DEFRA</i> on the market, estimates the annual value may be in the region of £270mn per annum in England. Other market commentators have suggested it may be even higher at £400mn+ per annum.

**Table 4 | Net-zero solution – an indicative net-zero investment product aiming to invest in solutions to support the transition to a net zero economy, targeting total net returns of 8-10% per annum**

Theme	Target investments	Indicative allocation
Avoiding emissions	Renewable energy generation, battery energy storage and co-located assets. Sustainable productive forestry.	10-30%
Reducing emissions	Sustainable food infrastructure including vertical farming and alternative proteins production. 'Closed-loop' and on-site waste processing to replace fossil fuels.	40-60%
Mitigating residual emissions	Biodiversity net gain habitat banks. New productive forestry creation (carbon removals).	10-20%

Target investments and sector themes selected for illustrative purposes and not investment recommendations. Projections and IRRs outlined are targets only and not guaranteed.

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**Table 5 | Nature-positive solution** – an indicative nature-positive investment product aiming to address global environmental and social challenges by investing in natural capital assets and nature-positive technologies, targeting total net returns of 6-8% per annum

Theme	Target investments	Indicative allocation
Climate change mitigation	New productive forestry creation (carbon removals).	30%
	Permanent carbon forestry (compliance credits).	
Sustainable resource production	Sustainable productive forestry.	40%
	Sustainable food infrastructure including vertical farming and alternative proteins production.	
Biodiversity regeneration	Biodiversity net gain habitat banks.	20%
Other potential solutions	Water saving systems, peatland restoration, flood defence, nutrient neutrality, wastewater treatment, and open ground managed for species reintroduction and restoration..	10%

*Target investments and sector themes selected for illustrative purposes and not investment recommendations. Projections and IRRs outlined are targets only and not guaranteed.*

**Insight:** natural capital investment is still an emerging market. While the barriers mentioned by asset owners are typical of a new investment (for example, risk, track record, illiquidity and fees), other barriers are unique to natural capital investment (for example, nature-related data, lack of speciality knowledge and evolving carbon markets).

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### PENSIONS FOR PURPOSE'S PERSPECTIVE

Asset owners should expect to commission detailed due diligence before investing in natural-capital solutions. The focus of this due diligence should be the extent of impact as well as how the strategy delivers financially. With this being such a nascent space, experience and track record will count. They will need to understand the specific characteristics of natural capital investment and investment consultants are well placed to help with this, alongside training sessions offered to members of *Pensions for Purpose* through our [Paris Alignment Forum](#).



## 2. How asset owners want to incorporate natural capital

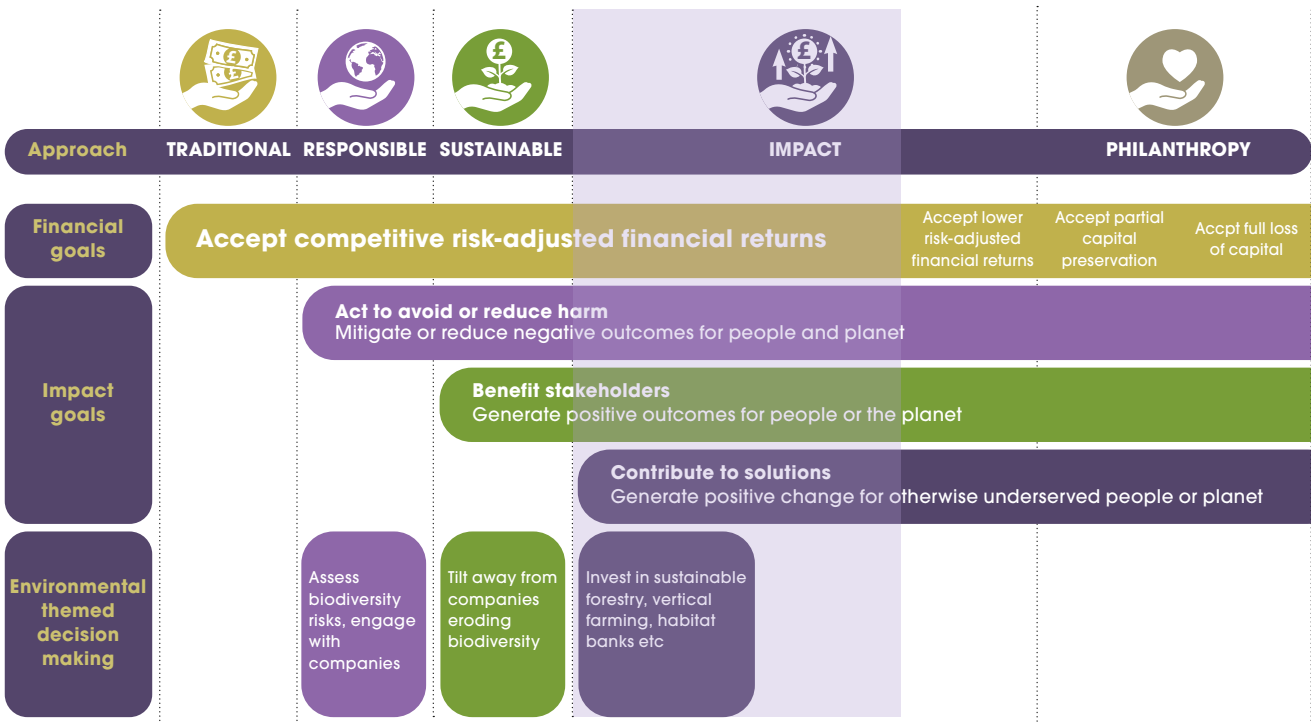
Sixty two percent of the asset owners we interviewed had not yet invested in natural capital. Some are looking to, others simply view natural capital as an engagement theme, and many have not begun to incorporate natural capital into their investment decision-making. In fact, of those who responded to our request for an interview, 38% declined due to insignificant insights. Educating trustees on biodiversity and natural capital is crucial, to help them understand how to mitigate the potential risks to their portfolio through engaging with existing underlying companies and making natural capital investments.

While natural capital investments may not be right for every asset owner, we have mapped out the path we have noticed they tend to follow when incorporating environmental themes into their investment decisions, i.e. climate risk mitigation, to alleviation of other environmental themes, then intentional investing in natural capital solutions. See Figure 1 below.



HOLLY RUSHTON PHOTOGRAPHY

Figure 1 | Spectrum of capital and environmental themed decision-making



Source: Bridges Fund Management, Impact Management Project and Pensions for Purpose





An interesting point made by an investment consultant was that they estimate 5-10% of their company's clients have natural capital investments, but this is likely to increase to 50-60% because everyone is making net-zero commitments. If this happens, one asset owner perceived a bubble could be created.

While concern over the potential for there to be a bubble in natural capital investment is understandable, this is a worry seen more broadly with any new and emerging asset class. On the other hand, first movers in the space will be advantaged because of the huge growth opportunity.

**Insight:** Many asset owners have not yet incorporated natural capital into their investment decision-making but 54% of the interviewees have started to use it as a theme for engagement. Very few have directly invested in natural capital but, as with many assets, the financial gains from natural capital investment are likely to be most substantial to those investors who make their first commitment ahead of the herd.

“The crowding of deals at the moment is tough so there may not be the same anticipated returns as there have been historically.”

ASSET OWNER

“There are a lot of benefits to be had by riding on this part of the journey, because this is quite clearly the future”

ASSET OWNER

#### PENSIONS FOR PURPOSE'S PERSPECTIVE

The best investments follow careful preparation. In this case, pension funds with clear biodiversity investment beliefs, an aligned investment strategy and an insight into the universe of available opportunities, who are prepared to be a leader when committing assets, are likely to be the long-term winners.





**③ Why are asset owners investing in natural capital?**



# Why are asset owners investing in natural capital?

## 1. What are the drivers?

Of the asset owners we interviewed that have invested in natural capital, one was sustainability agnostic and is now beginning to understand how their forestry holdings play into their net-zero target. Another pointed out that, as population growth continues, demand for food and timber will increase, which could raise the returns from sustainable agriculture and forestry investments. A third invested from a financial perspective with the carbon credits generated from the forest being the 'icing on the cake'; while another viewed the investment firstly from a financial point of view, but with the consideration of the co-benefits pertaining to the environmental and social impacts.

Given few asset owners have invested, this section of the report may seem light but, as net-zero commitments continue to be pledged and progression towards those targets continues, we expect the impact characteristics of natural capital investments to draw much greater attention from asset owners.

**Insight:** The drivers for asset owner investment in natural capital are varied at this stage, with some being more financially focused and others seeing it as a route to net zero.

### PENSIONS FOR PURPOSE'S PERSPECTIVE

The importance of biodiversity in the survival of species – including the human race – and in the long-term health and growth of the global economy, should not be underestimated. Its present role in a pension fund portfolio is unclear, however. We would like to see the investment consultants proactively convey this message to their pension fund clients.



**Permanent wildflower margins on arable land can form part of a sustainable farming programme as well as providing habitat for insects and supporting crop pollination.**



## 2. What sustainability outcomes are asset owners looking for?

From our conversations with asset owners, carbon sequestration is the principal sustainability driver behind investment in these solutions to date. It is a current topic of client, media and regulatory focus, and often aligns with their net-zero ambitions. While asset owners may not be measuring sustainability outcomes yet, there are many other outcomes funds are seeking - for example, biodiversity enhancement, water-quality improvements and flood protection. While some asset owners may be prepared to sacrifice an element of returns if it means they can meet their net-zero targets, the vast majority must still meet market-rate risk adjusted return criteria.

“We’re open to meeting our investment requirements with a bit of blue-sky thinking. A lot of asset owners get hung up on stranded assets but we’re not worried because we’re working away at the other end.”

ASSET OWNER

“Where there’s clear potential for carbon sequestration, that’s the starting point.”

ASSET OWNER

**Insight:** When investing in natural capital solutions, asset owners are focusing on their positive contributions to climate mitigation. However, they should treat biodiversity loss as a similar systemic risk to climate change and start to consider other sustainability outcomes beyond carbon emissions reduction.



**Between 35% and 54% of assets held by financial institutions are highly or very highly dependent on ecosystem services supported by biodiversity<sup>5</sup>.**

### 3. Is it important that natural capital investments yield carbon credits?

Several asset owners outlined how carbon credits are important because some natural capital investment products do not offer the hurdle of return they are looking for from their private market portfolios. Including these credits could help achieve a better return if carbon markets and prices evolve in the future as expected. Despite this, there is concern around the question of carbon capture and allowing someone else to pollute as a result.

“Some trustees have an element of distaste at capitalising on the demise of nature.”

INVESTMENT CONSULTANT

There is also anxiety about the potential volatility of carbon credits, as it is not an established market. Though, to ensure sufficient capital flows towards these solutions, we need punchy return projections. It is important to undertake proper due diligence on the credit being sold when investing in natural capital, for example, question whether there is correct certification and to what extent the carbon is permanently sequestered.

“Very often I talk to people and their idea of permanence is different to scientific permanence. You cannot say 100 years is permanent. Of course, it’s difficult to lock down longer than that as a landowner, but scientifically speaking, that is not permanent. If the land is ploughed up in 100 years, you lose the benefits you’re accounting for.”

ASSET OWNER



**Insight:** Carbon credits elicited some strong views from asset owners, with some seeing them as a mechanism to achieve net-zero targets and others saw carbon credits as a ruse through which actors can continue to pollute without changing their behaviour. It was also identified as a volatile market, yet the financial premium available did make some of the potential opportunities more attractive to investors.

#### PENSIONS FOR PURPOSE'S PERSPECTIVE

When considering carbon credits, pension funds should think about the financial implications of:

- Using them as carbon offsets against their own portfolio emissions.
- Or, selling them in the carbon credit market.

There should also be a recognition of the transience of carbon investment and that it should not be viewed as a long-term asset class. The choice of whether to use or sell the credits may change over time, especially when the portfolio reaches net zero. Having a clear framework for why the fund is seeking to benefit from carbon credits and what circumstances may change that in the future, will reduce confusion over the role they are playing in the portfolio, as well as providing an explanation of the investment thinking at the time, for future committee members.





## Gresham House's comment – the role of carbon credits in achieving net zero

Many pension funds and asset owners have ambitions and set net-zero targets but few have tangible, actionable plans to achieve them. Reducing certain sources of greenhouse gas emissions has become easier recently with the advent of energy-efficiency measures, behavioural changes such as reduced work-related travel, and the steady decarbonisation of the grid and therefore lower electricity-related emissions. However, to cut harder-to-abate emissions, some asset owners plan to use carbon capture solutions. The reality is many carbon-capture technologies are years away from viability at scale while others that do exist today, such as carbon sequestration through tree growth, offer only short-term solutions (20-100+ years, as opposed to centuries or millennia).

At *Gresham House*, we believe carbon credits have an important role in achieving net zero but we are vocal that, first and foremost, any entity on a journey to net zero must start by reducing its own emissions. Credits cannot be used in a way that simply supports continued pollution.

Once emissions reduction plans have been applied as the core principle in an entity's net-zero journey, carbon offsets (credits) may be integrated into net-zero plans to help eliminate or 'net off' residual emissions. *The Oxford Principles for Net Zero Aligned Carbon Offsetting*<sup>19</sup> supports this approach and categorises carbon offsets into two buckets:

- Carbon avoidance, i.e. the purchase of credits or investment in solutions which avoid emissions through the creation of alternative technology or solutions.
- Carbon removals, i.e. solutions which remove carbon dioxide directly from the atmosphere.

Both carbon offset types can then be defined as short term (the carbon avoided or removed can only be guaranteed for

decades), or long term (the carbon avoided or removed can be guaranteed for century or millennia). Over time, an entity should aim to move to both carbon avoidance and carbon removal credits with long-term storage.

*Gresham House* offers investible solutions today which provide carbon avoidance and carbon removals.

To achieve avoided emissions, asset owners must consider greenfield assets that create a product or service that is able to replace the use of fossil fuels or other form of direct emissions. The more obvious examples of this include renewable energy or battery energy storage solutions that directly avoid fossil fuelled power generation, both asset-types *Gresham House* invests in although their investment products do not offer verifiable credits.

*Gresham House* believes investors need to look beyond traditional areas of credits to consider the harder-to-abate but highly polluting sectors such as agriculture, steel or cement. Actionable examples of this include vertical farming which, when done efficiently, can use up to 1,900x<sup>20</sup> less carbon than long-haul, imported field-grown crops, and waste-derived replacements for coal used in the production of steel and/or cement that are able to avoid circa 800,000<sup>21</sup> tonnes annually of CO<sub>2</sub> compared with business as usual. *Gresham House's* British Sustainable Infrastructure Fund (BSIF) strategy offers access to both these types of carbon avoidance (but again, not as verifiable credits at this stage).

*Gresham House's* afforestation activities offer investors the opportunity to achieve emissions removals through the growth of trees. Certain *Gresham House* forestry funds, such as the Sustainability & Growth Fund, provide investors with an allocation to carbon credits that can then be used to contribute to net-zero targets if retired.

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## 4. Are frameworks or commitments capturing investors' interest?

The consensus is frameworks may drive investor interest in natural capital, as they allow environmental issues to gain popularity with asset owners and managers. Regulation such as *TCFD* reporting has inspired discussion among trustees. This momentum may be fuelling some investor interest in natural capital investments; however, most asset owners are not at the stage of thinking about investing in natural capital solutions.

“There’s a high degree of interest in it but not much activity.”

INVESTMENT CONSULTANT

“If you hedge your interest rate and inflation risk, then why not your sustainability risk?”

INVESTMENT CONSULTANT

The *TNFD* may spark interest in natural capital investments among asset owners due to its focus on risks and opportunities but also impact. However, at present, without regulation, asset owners’ focus remains heavily on climate risk.

**Insight:** Frameworks and commitments are not capturing asset owner interest in natural capital investment, but they are inspiring discussion among trustees. We hope the *TNFD* and international agreements such as the *Kunming-Montreal* framework bring these issues to the policy table and will catalyse natural-capital investment.



“Hopefully, with COP 16 upcoming in Berlin, a mechanism for the implementation of the *Kunming-Montreal* framework will be agreed. If that happens then that may feed into *TNFD*, which would, hopefully, force the hand of pension funds.”

ASSET MANAGER

## 5. Do pension funds have a responsibility to invest in natural capital?

Of the 13 interviewees, five responded no, three answered maybe and five replied yes to the question of responsibility. Some of the rationale behind the interviewees answers are highlighted in these quotations below:



“It only becomes important to us when financially material.”

PENSION FUND

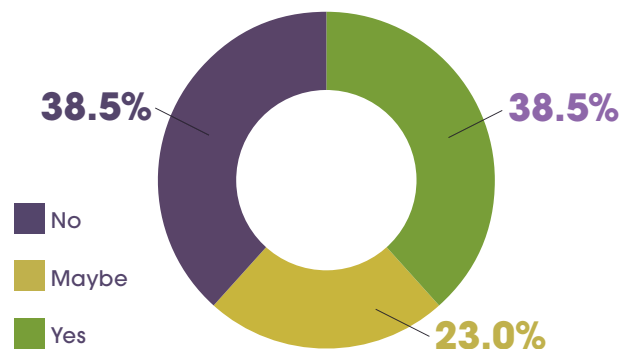
“There’s a responsibility to think about impact but you can’t segment that into dealing with every problem the world has.”

INVESTMENT CONSULTANT

“No, but they should make sure the investment programme stands the test of time.”

PENSION FUND

Figure 3 | Percentage interviewed who believe pension funds have a responsibility



“It wouldn’t fit the bill for every fund, but yes, because pension funds are long term investors and climate and biodiversity risks are systemic. Preserving natural capital is critical if you want to safeguard returns across the board.”

PENSION FUND

“They do but they also have a fiduciary duty. It depends on their funding level.”

INVESTMENT CONSULTANT

YES

“It makes sense for a diversified portfolio. We need these resources – particularly timber – and rather than chopping down natural woodlands, we should think about it as a crop and harvest it sustainably.”

ASSET OWNER

“There’s a likelihood they will need to offset to reach net-zero. They should think of the longer-term impact on finances by buying at today’s prices.”

ASSET OWNER

“Their aim is to provide a retirement pot to members but they can’t enjoy that if the world is destroyed, so part of that is addressing climate and natural capital loss.”

ASSET OWNER

“With the size of the pensions industry, they can make a positive impact. They’re the largest asset owner in the world.”

ASSET OWNER

“There’s a role to play in allocating more capital to biodiversity. Think of the COP15 funding gap.”

INVESTMENT CONSULTANT



**Insight:** There was a division in response from pension funds on this question. Schemes who felt they do not have a responsibility to invest in natural capital tended to be more focused on the responsibility and role of their own investment portfolio. Those who felt they do have a responsibility were thinking more progressively, to the future of investment, or beyond the investments to wider implications and securing a better world for their members’ retirement.

#### PENSIONS FOR PURPOSE’S PERSPECTIVE

We have always viewed pension fund committees’ clarity around investment beliefs as the starting point. This can be a tricky and sometimes emotive discussion but, for those funds we have worked with, the resultant clarity in terms of what the pension fund is trying to do, and why, leads to a greater understanding of how to shape the investment strategy to reflect these beliefs.







## **4** Financials

# Financials

## 1. What returns are asset owners looking for and what risk are they willing to accept?

The asset owners that answered this question with figures gave answers ranging from 5-8% target rate of return. While the return element is significant, some pension funds would be willing to sacrifice an element of return to invest in an asset which could contribute to offsetting their emissions and help them meet their net-zero targets. It is also important to note some asset managers who have marketed their natural capital investment products to asset owners have been nervous in quoting return figures due to the uncertainty around potential income generated from carbon credits.

The risk asset owners are willing to accept comes down to the right level of risk for the returns they're looking to generate. They have also pointed out that geographic diversification is important to reduce the risk of their natural capital investment portfolio from natural disasters.

**Insight:** The asset owners interviewed are looking at returns ranging from 5-8% with some mentioning flexibility on returns if the assets can offset their own emissions. Geographical diversification is also a consideration in managing risk.



**Aerial view of fires in the Amazon, South America.**

## 2. What are their time horizons in assessing the success of their natural capital investments?

Time horizons for assessing the success of natural capital investments are long term. One pension fund mentioned that, with the idea of permanence, success could not be measured until after 100 years. Other funds suggested that five-year intervals would be appropriate.

There is a point to be made that asset owners – if they invest in sustainable productive forestry, for example, and seek secure, regular income – should ensure a spread of vintages of trees. This also helps to manage risk.

“You’ve got to ensure a spread of vintages to ensure income stream is ready from the beginning, bringing a consistent supply of timber to paper mills.”

ASSET OWNER

**Insight:** To ensure the permanence of carbon sequestration, some funds look beyond medium-term performance assessment. This is important to maintain the sustainability benefits of natural capital investments.





### 3. How are asset owners thinking about natural capital investments within their portfolios?

Each asset owner questioned views natural capital investment in one of three different buckets. Some view it within their infrastructure bucket due to the strong link to inflation of forestry and agriculture. These assets can also offer similar sustainability objectives to that generated by renewable infrastructure. Others view natural capital investment in their real assets or property allocations. Finally, some view it as a fixed income-type instrument. Although the perception from some asset owners was that these assets generally provide lower returns than public markets, they felt there were additional benefits from lower volatility and a low correlation to public markets.

**Insight:** With so few asset owners investing in natural capital currently, the required level of generated return may well change over time as more investors commit capital and carbon credit and other new natural capital-related markets develop. The place of natural capital in a pension fund portfolio is also multi-faceted and may differ from fund to fund.

#### PENSIONS FOR PURPOSE'S PERSPECTIVE

Pension funds are encouraged to look beyond the headline risk-adjusted return to consider the security of the income stream, inflation-protection and low correlation with other asset classes. These benefits may mean the pension fund is better off over the long term, even if the headline return is below an initial hurdle rate.



**A habitat bank is a parcel of land where we can create a significant uplift in biodiversity. They are typically upwards of 20 hectares in size and a habitat bank can incorporate multiple smaller parcels of land across one site<sup>22</sup>.**



**Conclusion**

# Conclusion

There is a lot of noise in the industry about natural capital and biodiversity, but not much evidence of actual integration of nature in investment decisions or stewardship activities or investing in natural capital assets that help address nature-related issues. After all, 38% of funds we approached declined to participate based on having not 'done enough' in the space. Having said that, the majority of asset owners we interviewed are at the stage of thinking about biodiversity and nature loss as an ESG risk within their existing portfolios and, as a result, a theme to engage with underlying companies on.

In reality direct investing in natural capital is a relatively new market, and both asset managers and owners are finding their feet. However, as a systemic risk like climate change, biodiversity loss is financially material.

Asset owners have two methods to reduce that risk portfolio-wide while helping contribute to a more nature-positive economy:

- Ask their asset managers to engage with companies on biodiversity and nature loss to reduce the negative impact of their activities.
- Intentionally invest in natural capital solutions with the aim of addressing the biodiversity and climate crises.



We must educate asset owners on the importance of viewing biodiversity as a systemic risk like that of climate change. This is key in raising the knowledge level of asset owners and increasing their confidence in allocating capital to natural capital investments.

## Gresham House's comment

We welcome *Pension for Purpose's* research as a useful representation and summary of where the market currently stands with regard to natural capital-related knowledge and investment.

It is evident that most asset owners and managers are still in the early stages of their journey to understanding natural capital and to allocating capital towards natural capital assets. The main driver of investment in natural capital remains related to climate change mitigation and carbon sequestration targets, but the research suggests that those more forward-thinking asset allocators are starting to understand the inextricable link between nature preservation and climate change, and view biodiversity risk as just as important as climate risk.

For those that are interested in allocating to natural capital or nature-positive investments, a key obstacle is lack of supply of investible solutions that meet their risk, return and impact profile.

*Gresham House* can provide clients with investible natural capital assets, today, offering financial returns and positive environmental outcomes. Indeed, if we are to build sustainable long-term solutions to global challenges such as climate change, nature loss and resource depletion, we

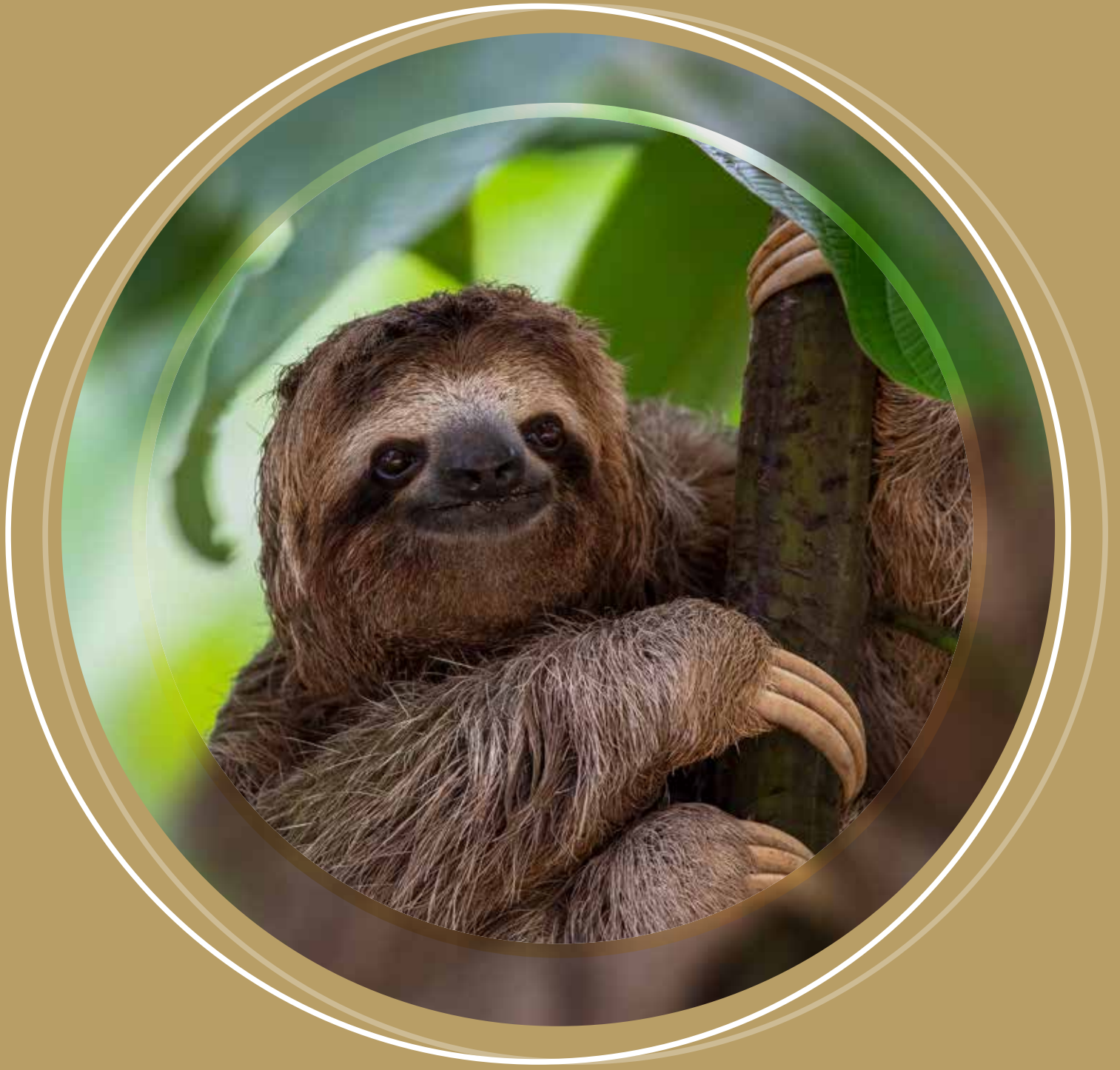
need much more capital to fund them. The World Economic Forum estimates \$2.7tn per year through to 2030 will be needed to scale the transition of socio-economic systems to address the nature crises. This means there needs to be a more holistic focus beyond the obvious natural capital areas and consideration of how the planet's finite resources such as land and water are preserved, especially in light of their impact on nature.

Natural capital investments are still in their nascency for the investment industry and for us at *Gresham House*. While we have expertise in traditional markets, such as sustainable forestry, and are driving forward new markets, such as the market for biodiversity net gain or vertical farming as the future of food production, we too want to expand the investible market and drive the future of nature-positive investment. As such, we encourage clients to contact us to improve their understanding of natural capital, to discuss existing investible opportunities, and to partner with us to develop new nature-positive solutions that meet their investment beliefs and requirements.

For more information, please [email Heather Fleming](#), Managing Director of Institutional Business at *Gresham House*.

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# Appendix

### Appendix 1 | Interviewees who gave permission for their name to be listed in our report

Asset owners	Investment consultants	Other stakeholders
Brunel Pension Partnership	Aon	Middlesex University
Church Commissioners	Barnett Waddingham	TNFD
Coal Pension Fund	Hymans Robertson	
Environment Agency Pension Fund	ISIO	
Esmée Fairbairn Foundation	Mercer	
London CIV		
Nest Pensions		
Pension Protection Fund		
Railpen		
Smart Pension Master Trust		
Tesco Pension Fund		
TfL Pension Fund		
Worcestershire Pension Fund		



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