

The Office for Environmental Protection

## Green Finance Review

Rapid Evidence Assessment

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# 1 Executive Summary

## 1.1 Overview

Green finance is a complex, evolving and multi-faceted area. The UK Government published its Green Finance Strategy (GFS) in 2019 and issued an update to this strategy in March 2023. The GFS established the route map for establishing the UK at the centre of the green finance market and to enable the flows of private capital required to deliver climate mitigation (through net zero ambitions), climate adaptation, and to reverse the decline in nature. The GFS establishes two broad activity areas for UK action on green finance:

- i) Align: greening the financial markets to align with UK climate and environmental goals
- ii) Invest: mobilising green finance to invest in delivering green outcomes.

Much of the green finance raised to date and many of the enabling policy initiatives and support mechanisms implemented are focused on climate mitigation and accelerating the energy transition to renewable energy; there has been far less focus on climate adaptation and on nature recovery. This observation applies globally, not just to the UK. This means that the enabling frameworks for investment in nature recovery are less mature than for investment in climate mitigation.

To address the need for accelerated investment in nature recovery, action is required in terms of stimulating both demand for nature outcomes which will unlock flows of receipts to fund required interventions and service the cost of finance, and supply of suitable nature-based projects that will be able to meet the enhanced levels of demand and deliver the environmental improvements. This will require action from both private and public stakeholders, including a range of governmental and policy interventions, to stimulate both mandatory and voluntary actions.

The OEP has an important role to play in this context. It has a statutory duty to review and report on the progress of the Government in improving the natural environment, in accordance with the Government's latest Environmental Improvement Plan (EIP). The EIP23 includes 10 broad environmental goal areas. Each goal contains long-term and interim targets, and a list of delivery actions describing how government plans to achieve these.

Meeting the goals of the EIP23 will require a significant uplift in the level of investment, which the Government expects to come from a combination of public and private sources; and the EIP23 itself contains a commitment to mobilise 'at least £500 million of private finance per year into nature's recovery in England by 2027, rising to more than £1 billion per year by 2030'.

As such, the OEP needs to (be able to) scrutinise the Government's progress in terms of mobilising the necessary investment, and in its 2023 annual report (reviewing 2021-22) the OEP attempted for the first time to understand the government's policy landscape for mobilising green finance, the scale of the finance gap for meeting nature goals, and the aggregate levels of finance committed towards environmental improvement in the EIP23. The OEP notes in its report that this was not a straightforward exercise, was limited by data inadequacies, overlap, and inconsistent presentation of commitments, and required the use of assumptions.

In this context, the OEP commissioned this report, based on a Rapid Evidence Assessment (REA). This REA was conducted against a set of key questions that were essentially designed to serve 1) as a foundation for the OEP's understanding of the green finance space, and 2) as the basis for recommendations to inform and evolve the OEP's role in monitoring and scrutinising green finance such that it can hold Government and other public authorities to account in this regard.

This report accordingly provides a comprehensive overview of the green finance landscape, including the key actors within it. A set of practical recommendations also emerged from this REA, designed to help the OEP cut through the complexity and provide a way forward in terms of what to focus on (and what not to).



Our overarching recommendation is for the OEP, first and foremost, to adopt a structured framework for assessing investment flows into nature, and main enablers for these, that is based on a targeted Theory of Change. This framework should be provided by Government, but in the absence of this the OEP will be able to design its own. We provide a high-level draft outline for a framework which we consider could be suitable to work with and build on.

Within this, we recommend the OEP in the first instance focuses in on the EIP23 apex goal and a subset of the associated targets. This makes it both ambitious and practical, and the approach can be widened to incorporate further goals and targets over time. It will be an iterative exercise to develop and refine the approach, and expand it.

This also means we recommend the OEP do not continue with the approach it adopted for its 2023 annual report, which was a relatively simple categorisation and aggregation of the funding commitments announced in the EIP, by goal area. This was a logical effort and produced some informative results that demonstrated ‘public spending on the environment can be poorly targeted, with investment not always aligned with the scale of the environmental harm’. However, to track progress in mobilising green finance in a more systematic and comprehensive way, we recommend adopting a framework which provides a golden thread from funding to outcomes.

We also suggest the OEP does not get constrained by specifics of the green finance commitment within the EIP. The mobilisation of any investment is to be welcomed in the face of the nature crisis we face. Having said this, it is important to note that the Green Finance Institute quantifies the ‘finance gap’ for nature related goals to be in the region of £44-£97bn over the next 10 years (2022-2032), with a central estimate of £56Bn. This includes £19Bn (central estimate) to protect and/or restore biodiversity.

As such the commitment of ‘£500 million of private finance per year into nature’s recovery in England by 2027, rising to more than £1 billion per year by 2030’ seems both arbitrary and low. The EIP also doesn’t provide any guidance on how to assess this in the context of the multiple EIP goals and targets.

We commend the OEP for looking to build a foundational understanding of the green finance landscape to underpin and inform how it shapes its role going forward. We consider the OEP does not need to be or become an expert institution in all the complexities of the world of finance, and it can engage with other organisations such as the FCA to consider the relevant links and respective roles. At the same time, we think the OEP can over time develop a robust approach for scrutinising the Government’s progress on mobilising investment flowing towards nature recovery, and with this report we aim to provide the necessary initial building blocks to do so.

## **1.2 Draft high-level assessment framework (based on a Theory of Change approach)**

Figure 1 sets out a suggested draft high-level framework we have designed specifically for the OEP to work with and build on, to assess the Government’s progress in terms of mobilising investment into nature recovery. It is essentially structured around a Theory of Change and follows a logical flow towards the outcome of achieving the EIP23 apex goal and targets. The suggestion of adopting a Theory of Change approach featured both in the literature and interviews considered in this REA.

The framework is anchored in multiple key premises:

- There can be a basic distinction between funding (the receipt of payments for services or outcomes) and financing (providing finance to enable upfront investment in interventions, the cost of which is serviced from the funding sources), which is helpful to maintain when thinking through how best to assess progress in terms of mobilising investment into nature recovery.
- The most fundamental challenge sits with funding, i.e. creating sources of income and receipts for delivery of services or outcomes related to nature recovery. This is because nature is essentially a public good which cannot easily be monetised in terms of it generating sufficient revenue streams (including to fully service the cost of financing the activities required to generate the benefit). Nature does provide many ecosystem services and wider benefits, which market participants may be willing

to pay for. Where this is the case, these opportunities need to be developed and leveraged, whilst maintaining integrity and focus on appropriate outcomes. Nature markets are one mechanism for enabling this.

- Stimulating demand for projects which serve nature recovery is therefore critical, and there are 4 sources of funding that can be meaningfully distinguished:
  - Funding from direct nature compliance requirements, with BNG as the current mechanism for this;
  - Funding from delivery of wider compliance outcomes such as nutrient neutrality. In this context water companies are one of a primary and major source of potential investment;
  - Funding stimulated by voluntary motivations, including for risk mitigation and/or as surfaced through reporting requirements; and
  - Funding by government, such as through grants, subsidies, guarantees and tax incentives.
- These different funding source categories can be linked, via the (potential) investment sums, to the delivery of outcomes against the EIP23 apex goal and associated (sub-)set of targets (these would need to be decided on in terms of the assessment framework, with hectares of habitat a very logical candidate for inclusion). This ‘golden thread’ from stimulating demand all the way through to the outcome currently exists for BNG only, as included in the draft framework diagram. This approach needs to be developed further for the rest of the framework, including for example in terms of the potential that could be unlocked by expanding compliance requirements.
- The inherently local/regional characteristic of nature means that there is a need to aggregate projects such that they can add up to scale both in terms of outcome and funding. Multiple vehicles are emerging, such as local Community Interest Companies, but the primary mechanism for this will sit with nature markets, and Defra’s Nature Markets Framework is critical to their development.
- Alongside this, it is also important to ensure that if demand gets stimulated, projects can be supplied to meet the demand. There is a view that supply can be forthcoming, subject to suppliers being able to make sufficient revenue; this interacts with Defra’s Nature Markets Framework, including in terms of stacking policy and the ability to blend public and private income, as well as with Polluter Pays policy.

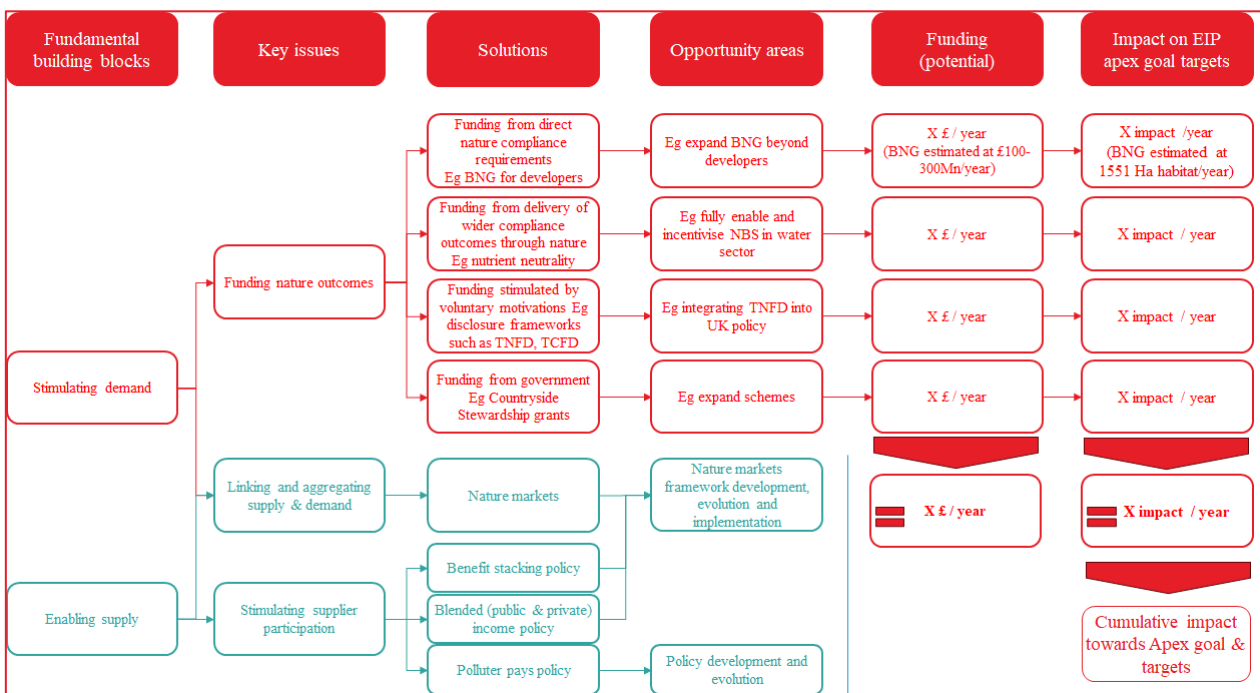


Figure 1 - Draft high-level framework based on a Theory of Change approach (BNG figures drawn from UK Parliament POST note, 2022)

As noted above, we recommend the OEP in the first instance focuses in on the EIP23 apex goal and a subset of the associated targets.

Further reflecting the Rapid Evidence Assessment findings against this framework, from literature and interviews, the following can be observed:

- Demand is being stimulated through policy interventions such as BNG, but further demand stimulation will be required to achieve the apex goal and associated targets.
- There appears to be significant opportunity in expanding the direct compliance requirements beyond current BNG requirements.
- There are not considered to be any supply-side constraints at present to serve BNG, but as demand gets stimulated and grows supply-side incentives may need to be unlocked further. As supply-side aggregation grows, this can in turn unlock further demand for nature recovery projects especially from large-scale investors who are currently focused on other countries that can offer single, large-scale projects.
- There appears to be significant opportunity in optimising water company investment such that it is enables more catchment and nature-based solutions which come with a range of environmental co-benefits. Work is ongoing to try and make this happen and the OEP should bring scrutinising progress on this into its review.
- Developments in the context of green finance, such as around TNFD and the Green Taxonomy, are also essential to stimulating what is essentially voluntary funding into nature recovery. The extent to which this can then be linked to quantified funding amounts is inherently complex and will need to be done conservatively within this framework. The OEP can explore working with the FCA in this regard.
- Defra's Nature Markets Framework is critical on multiple fronts, and the OEP should continue to monitor Defra's progress and developments on it including in the context of critical, and complex, issues such as stacking.

These 'opportunity areas', as they are termed within the draft assessment framework, are areas that the OEP can monitor and scrutinise progress on, as enablers to unlock (further) funding towards the relevant goals and targets.

We also note that the government should be able to learn from its own success and experience stimulating very substantial investment in other sectors such as energy. We recognise that nature doesn't seem to have the same focus and attention as climate, and mitigation specifically, and that a strong focus on it in the UK only emerged following the Dasgupta review. We also note that nature is inherently more complex than carbon. Nonetheless, we consider that the type of ambitious thinking and approach that we have seen in the energy and decarbonisation space should have transferable lessons and insights into the nature space.

### **1.3 Recommendations and considerations for OEP**

In this section we summarise our recommended actions or areas for further consideration as set out in the main body of the report. The context behind each can be found in the relevant sections.

- The OEP should adopt a high-level framework such as the one proposed in this report to assess the government's progress in terms of mobilising investment into nature recovery. This should be structured around a Theory of Change, enable the OEP to assess and scrutinise the main funding/driver categories for investment and associated enabling activities, and follow a clear thread towards the EIP23 apex goal and targets.
- The OEP should evaluate the Government's progress towards integrating TNFD aligned approaches into UK policy and legislation and consider the extent to which this form of voluntary disclosure measurably contributes to the apex goal (for the purposes of incorporation into the assessment framework), and effectively operationalises Target 15 of the GBF.

- The OEP should evaluate the UK Government’s efforts to mobilise nature finance through the introduction of mandatory disclosure requirements and labelling schemes, including the forthcoming SDR and Green Taxonomy and carry out further analysis into the extent to which this form of voluntary disclosure measurably contributes to the apex goal. The inclusion of environmental objectives and their relevant criteria as part of the development of Green Taxonomy should be a particular area of focus.
- The OEP should encourage the development and monitor the implementation of a ‘nature investment roadmap’, as committed to in the GFS (for 2023). The OEP should evaluate alignment of this investment roadmap with the EIP goals.
- The OEP should evaluate any future published ‘roadmap for financing green’ (with comparison made to the greening finance roadmap). The OEP should evaluate alignment of this roadmap with the EIP goals.
- The OEP could evaluate the conclusions and recommendations drawn by the Mission Climate Ready report, which focusses on climate adaptation, for their applicability in mobilising finance for achieving nature recovery, noting the integrated vision, policies, and plans required between Government and corporate organisations to achieve the three linked challenges of climate mitigation, climate adaptation and nature recovery.
- The OEP could, in addition to tracking the Government’s publication of nature investment roadmap, evaluate other issued sectoral roadmaps to assess if they contain actionable plans on investment to promote activities delivering nature recovery. This could include scrutiny into how climate mitigation and climate adaptation focussed roadmaps effectively integrate biodiversity enhancements into their outcomes.
- The OEP should explore how it can work with the FCA to mutually support their respective remits as they relate to green finance. The OEP could offer support in ensuring the FCA’s processes are as informed as possible by the Government’s policy outcomes for nature.
- The OEP should seek to articulate a consistent and clear message to the market to explain its role and approach.
- The OEP could evaluate the financial impacts and environmental outcomes associated with implemented tax incentives and subsidies. To support the Government’s determination of how tax breaks and subsidies fit into the wider UK and international tax landscape, the OEP could focus on the theory of change pathways connecting tax incentives, subsidies, and nature outcomes.
- The OEP could evaluate impacts to nature of specific cases where Government funding has been used successfully to mobilise private finance, to amplify sharing of lessons learned.
- The OEP should track the ongoing evolution of the Nature Markets Framework and ensure it continues to support the timely development of nature markets, including on the implementation of effective market governance.
- The OEP could explore whether it has any oversight role to play in the governance of nature markets.
- The OEP should consider how it can review and scrutinise the extent to which potentially very significant water company investments towards catchment and nature-based solutions are enabled, and how this funding can be incorporated within its assessment framework.
- The OEP could similarly consider the extent to which funding for Natural Flood Management can be incorporated within its assessment framework.

## 2 Introduction

### 2.1 Background

Arup have been commissioned by The Office for Environmental Protection (OEP) to complete a Rapid Evidence Assessment (REA) to develop a broad understanding of the issues and themes relating to green finance and mobilising investment into nature recovery.

The OEP's mission is to protect and improve the environment by holding government and other public authorities to account. It is right that the OEP explores and considers how it will apply its remit in the context of green finance, recognising that greater mobilisation of public and private finance is essential to support the apex goal of the Environmental Improvement Plan 2023 (EIP23) (Defra, 2023a): **to halt the species decline in England by 2030 to achieve thriving plants and wildlife**. In the EIP23, green finance is introduced as both a cross-cutting theme and as a tool to deliver the Government's environmental targets and commitments. The explicit target for green finance is,

**“to raise at least £500 million per year of private finance into nature's recovery by 2027, and more than £1 billion by 2030”.**

The OEP has already started applying its remit through an initial assessment in their 2022/23 Progress Report, published in January 2024 (OEP, 2024). This includes illustration of the role of green finance in contributing to the apex goal [Figure 2], and summarises that the overall prospects of meeting ambitions, targets and commitments are considered 'largely off track', noting their high dependency on the mobilisation of green finance at the scale needed.

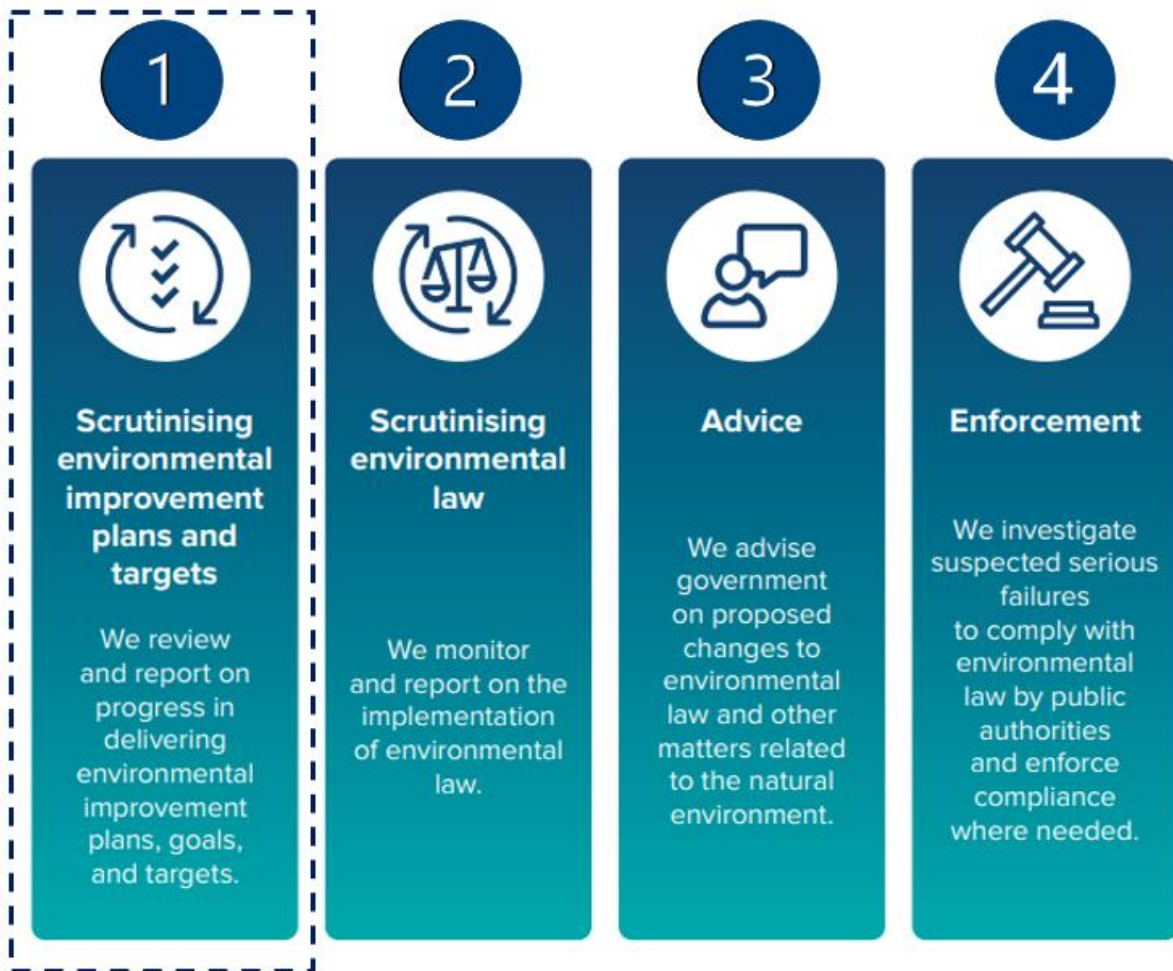


Figure 2 - The OEP's representation of the EIP23 goals and selected cross-cutting themes, taken from the Progress Report 2022/23 (OEP, 2024).

### 2.2 Research question

It is understood that the OEP has four main functions, as shown in Figure 3. In looking to inform how the OEP could monitor and scrutinise the government's green finance commitments in pursuit of the apex goal of nature recovery, this REA is contributing to the first of the OEP's function, that of '*scrutinising environmental improvement plans and targets*'.





The focus of this REA

**Figure 3 - The four main functions of the OEP (diagram adapted from the 2022 OEP strategy (OEP, 2022)).**

The overarching research question is to conduct a Rapid Evidence Assessment (REA) to allow the OEP to have a broad understanding of the issues and themes relating to green finance and mobilising investment into nature recovery. We have taken the following definitions of ‘green finance’ and ‘mobilising’ to provide a sufficiently wide scope for this review.

***“Green Finance” – money that contributes to biodiversity and nature recovery (i.e., the EIP23 apex goal Figure ) in England.***

***“Mobilising” – any activity or mechanism that makes a direct contribution to biodiversity and nature recovery. This can range from providing capital, to enabling reporting, to regulating, etc.***

As such, our definition of green finance identifies nature and biodiversity finance to be separate from climate finance (acknowledging inevitable and important crossovers, which are alluded to in this report).

The key objectives underpinning this research question are:

- Understanding the strategies and systems for mobilising green finance.
- Provide a critical appraisal of key strengths, weaknesses, gaps, and risks within these strategies and systems.

Defining nature recovery is, in itself, a complex question. To achieve thriving plants and wildlife, the OEP Progress report recommends that government should ‘provide timely transparent and accessible evidence to enable assessment and evaluation of nature recovery’ and comments on the ability to measure progress effectively using government’s species abundance index (OEP, 2024). The report further notes that greater transparency is required on the technical approaches being adopted to monitor progress. Regulation on Local

Nature Recovery Strategies came into force in April 2023, (HM Government, 2023b) yet the core definition is still unclear from the literature reviewed. The IUCN coins the term ‘Nature-Positive’, attributed both to the overall outcome of nature recovery, and to activities contributing to this apex goal (IUCN, Nature-Positive, 2023). It offers that this ‘Nature-Positive’ goal should be delivered ‘*through increasing the health, abundance, diversity and resilience of species, populations and ecosystems, so that [by 2030] nature is visibly and measurably on the path of recovery*’. The measurability of nature recovery was a challenge consistently referred to by stakeholders and one that underpins the OEPs ability to monitor and scrutinise government commitments associated with it.

## 2.3 Interpreting the research question

The OEP clearly has an important role to play in the context of scrutinising progress in mobilising green finance. It has a statutory duty to monitor the progress of the government in improving the natural environment, in accordance with the government’s latest Environmental Improvement Plan (EIP). Meeting the goals of the EIP23 will require a significant uplift in the level of investment, which the government expects to come from a combination of public and private sources. The green finance target to mobilise at least £500 million per year of private finance into nature’s recovery by 2027, and more than £1 billion by 2030 sits in the context of an estimated ‘finance gap’ for nature related goals, quantified to be in the region of £44-£97 billion over the next 10 years. (Green Finance Institute, 2021).

The OEP is therefore looking to explore its potential role in monitoring and scrutinising the mobilisation green finance contributing to nature recovery in England, and thus hold government and other public authorities to account in this regard.

This is a complex question which needs to be informed in the first instance by a solid foundation and understanding of the green finance landscape. This landscape consists of a wide range of UK and global actors and organisations drawing on an array of investment sources and of strategies and mechanisms, being used (and developed) for mobilising finance for nature recovery. Understanding the relationships between different actors and organisations requires an insight into the drivers and incentives that currently exist for investing in nature recovery, including the role of disclosure. Against that foundational context, the OEP then needs to understand the strengths, weaknesses and potential gaps in the UK Government’s most recent green finance strategy, considering its overall adequacy based on the current pipeline for projects, the readiness to scale up, and the requisite scale of investment for measurably realising nature goals, given the significance of the finance gap for nature.

One of the critical sub-questions is how to identify which investment streams or sources could justifiably be mobilised to bridge the green finance gap or commitments.

To address these considerations, we have structured our research approach around the following focus areas:

### **Green finance landscape:**

- Who are key actors and stakeholders for mobilizing green finance, and what are their responsibilities?
- What strategies and mechanisms do current actors/stakeholders use?
- What sources of investment currently exist?
- How do current sources of investment align with and relate to the government’ green finance strategy?
- What are the roles and responsibilities of key actors and stakeholders?
- What role does disclosure play in mobilizing private finance for nature recovery (notably the TNFD)?
- What is the role of the UK’s planned green taxonomy?

### **Government green finance strategy:**

- How do current sources of investment align with a relate to the government’s strategy for mobilizing green finance?
- What are the strengths and weaknesses of the government green finance strategy?

- To what extent is the government green finance strategy adequate considering the current pipeline for projects?
- To what extent is the government green finance strategy ready to scale up to realise the requisite scale of investment required?

**Market based mechanisms for both financial market and nature market responses:**

- What are the critical dependencies and key risks to scaling up green finance through market-based mechanisms?
- What are the key challenges and risks in designing market-based mechanisms, ensuring additionality, preventing double counting, and preventing offsetting/compensation for damage to nature?

**Relevant tools and methodologies for OEP to consider:**

- What current monitoring gaps can the OEP fill, and what tools and methodologies are required?
- What definitions for measuring and monitoring green finance should the OEP adopt, considering national and international standards and private investment practices?
- What methodologies for measuring and monitoring green finance should the OEP adopt, considering national and international standards and private investment practices?

## 3 Green finance landscape

In this section we set out key actors and stakeholders. This is intended for foundational knowledge of the landscape.

### 3.1 UK Government Departments, Agencies and Bodies

Given the defined role of the OEP as Government focused scrutineer, we have summarised below the roles of some of key UK governmental and regulatory bodies in mobilising green finance for nature:

#### 3.1.1 Government Policymakers

In setting the policy framework, governments are positioned to implement policies that promote nature outcomes, support green finance linked to these and promote a stable and predictable regulatory environment. Governments also allocate public funding in accordance with stated policy aims and can incentivise green investments through tax breaks and subsidies as they support policy (CISL, 2022).

##### HM Treasury

**Primary Role:** HM Treasury is the Government's economic and finance ministry, maintaining control over public spending, setting the direction of the UK's economic policy and working to achieve strong and sustainable economic growth.

**Secondary Objectives:** It advises ministers and departments on national fiscal matters.

**Actions on Nature Recovery:** HM Treasury is, and should continue to be, the critical financial policymaker with regards to financial markets, and in this regard should underpin financial aspects of the Government's approach to developing the green finance market for nature recovery.

##### The Department for Environment, Food and Rural Affairs (Defra)

**Primary Role:** Defra are responsible for improving and protecting the environment. It aims to grow a green economy and sustain thriving rural communities. The Department also supports the UK's food, farming and fishing industries through policymaking and advice.

**Secondary Objectives:** It advises ministers and departments on national environmental, food and rural community matters.

**Actions on Nature Recovery:** Defra as the primary policymaker for the Environment and Rural Affairs is critical in the guidance and coordination of nature markets that are being established to achieve nature outcomes. Its overarching perspective and powers with regard to dictating governmental focus on nature outcomes is critical and should underpin policymaking for the green finance for nature recovery markets in relation to environment, food and rural affairs.

#### 3.1.2 Financial Regulators

Financial regulators support green finance through assessing risks, setting standards, promoting green investments, monitoring compliance, and collaborating with stakeholders. Interviewees noted the important role that regulators play in mobilising action through creating accountability and scrutiny. In the UK, financial regulators include the Financial Conduct Authority (FCA), Prudential Regulation Authority (PRA) and Financial Policy Committee (FPC).

##### Financial Conduct Authority (FCA)

**Primary role:** Consumer protection from financial markets, market integrity and enforcement

**Secondary objectives:** facilitating international competitiveness and growth.

**Actions on nature recovery:** The FCA's commitment to promoting sustainable finance and considering environmental factors in investment decisions. The FCA actively participates in various initiatives related to biodiversity and finance, including the TNFD and the Finance for Biodiversity



Initiative. These efforts aim to integrate biodiversity considerations into financial decision-making. The FCA has established new TCFD aligned disclosure requirements for UK premium listed companies extended to a broader range of eligible companies and is working with the International Sustainability Standards Board (ISSB) in development of sustainability related reporting disclosures and adoption into Sustainability Disclosure Requirements (SDR).

### 3.1.3 Central Banks

As public rather than private institutions, central banks oversee a country's financial system and monetary regime. By incentivising or directing capital away from traditional carbon-intensive sectors (and those that contribute to nature's decline) and promoting green and sustainable investment routes, central banks can significantly impact the greening of the financial system.

#### Bank of England

**Primary role:** Maintaining monetary and financial stability, setting monetary policy, this involves managing money supply, interest rates, and currency stability.

**Secondary objectives:** Effective competition, competitiveness, and growth of UK economy.

**Actions on nature recovery:** The BoE's focus on climate change resilience and integrating environmental risks into financial stability assessments. The Bank of England committed to launching 10 Landscape Recovery Projects between 2022 and 2024. These long-term projects focus on land use change and aim to restore wilder landscapes where appropriate. They contribute to the UK's pledge to protect 30% of land by 2030 and establish nature recovery areas.

### 3.1.4 Relevant Sector Regulators

Certain sectors will have a key role to play in terms of nature recovery. Associated/relevant regulators provide guidance and regulate behaviours that are considered acceptable for an industry or sector and provide enforcement capacity when behaviours are in contravention of regulations. For example:

#### The Water Services Regulatory Authority (Ofwat)

**Primary Role:** The Water Services Regulation Authority (Ofwat) is a non-ministerial government department that is the economic regulator for the water and sewerage sectors in England and Wales. Ofwat are responsible for making sure that the companies they regulate provide consumers with a good quality service, efficiently delivered, and affordable to customers; and that the water companies are able to finance themselves.

**Secondary objectives:** Ofwat must also regulate in way it considers will best contribute to the achievement of sustainable development and must act in accordance with the statutory strategic policy statements published by Defra and the Welsh Government, the most recent of which has a strong focus on environmental outcomes. Ofwat also has general environmental and recreational duties in section 3 of WIA9.

**Actions on nature recovery:** Ofwat scrutinises the cost efficiency of environmental programmes that companies need to put in place to meet statutory requirements (set by Defra/EA/NRW) and has an evolving and growing role in the development of these programmes. It can play a wider role in aligning investment and action from water companies towards the achievement of the UK Governments nature recovery policies, as it has through its Public Value Principles (Ofwat, 2024). Its Innovation Fund also directs funding towards relevant initiatives such as the Mainstreaming Nature-Based Solutions project (Ofwat Innovation Fund, 2024).

### 3.1.5 Environmental Agencies

Environmental agencies execute and regulate on environmental policy and can have an active operational role such as the EA has on flood risk management. They will interact closely with sector regulators such as Ofwat.

## The Environment Agency (EA)

**Primary Role:** The EA is an executive, non-departmental public body that works to create better places for people and wildlife and support sustainable development.

**Secondary objectives:** The EA assists Defra and other governmental bodies in the monitoring of the environment and nature systems across England, undertaking field surveys and on-the-ground actions associated with the environment.

**Actions on Nature Recovery:** The EA will be a critical body in the MRV responsibilities of Government, and with other bodies should be given a clear and effective jurisdictional capability in this regard. Between the EA and other Government bodies it is not clear where MRV responsibility will land, but the EA has a clear purview and capability to undertake such actions through its internal human resource skills. The affording of support for these resources, including but not limited to funding, will be critical.

Devolved nations have their own equivalents of the Environment Agency

## Natural England

**Primary Role:** Natural England is an executive non-departmental public body and the Government's adviser for the natural environment in England helping to protect and restore the UK's natural world.

**Secondary objectives:** Natural England supports projects and interventions in many jurisdictions to provide positive impact on nature, and achieve the outcomes sought within the UK's nature recovery policies.

**Actions on Nature Recovery:** Natural England, as with other bodies, has a critical role in converting the 'means' of finance markets to ends and outcomes for nature in England. It has the skills and knowledge to support MRV and should be seen as a key partner in attributing outcomes to investments and enabling nature recovery outcomes. Similarly to the EA, Natural England's role should be clearly communicated and stated to ensure efficiency and effective use of its skills and knowledge, and where defined responsibilities are noted, support must be provided.

## Forestry Commission

**Primary Role:** The Forestry Commission is a non-ministerial Department focused on increasing the value of woodlands to society and the environment.

**Secondary objectives:** To protect forestry assets in the UK for future generations.

**Actions on nature recovery:** With regard specifically to forest asset management and investment, the forestry commission should act as an arbiter for quality standards in its role to uphold and maximise value from the UK's Forest assets. Therein promoting outcomes in accordance with Government's nature policies for forests.

### 3.1.6 Market Integrity Agencies

Market integrity agencies impact markets through upholding quality, providing transparency, attributing accountability, increasing standardisation for comparison, and providing a link from means to outcomes that is verifiable and accountable. Integrity market actors also provide clarity and confidence in markets, a critical component of constructing attractive markets for investment. Both carbon and nature markets internationally have been accused of greenwashing, lack of transparency and lack of beneficial additionality with other economic markets, and all actors agree in principle that demonstrating integrity of outcomes is essential.

## Financial Reporting Council (FRC)

**Primary Role:** ensures that auditors, accountants, and actuaries adhere to high standards of practice and ethics, shaping corporate governance practices and promoting transparency and integrity in business.

**Secondary objectives:** It supports the UK's economic growth and international competitiveness

**Actions on nature recovery:** The FRC collaborates with the TCFD and TNFD to develop metrics for companies and financial institutions. These metrics help embed nature-related considerations into investment decision-making.

### The UK Statistics Authority

**Primary Role:** The UK Statistics Authority is a non-ministerial Department that promotes and safeguards the production and publication of official statistics that serve the public good.

**Secondary objectives:** It also promotes and safeguards the quality and comprehensiveness of official statistics and ensures good practice in relation to official statistics using the Code of Practice for Statistics.

**Actions on Nature Recovery:** The UK Statistic Authority should act as a key expert in discussions around MRV, data analysis and the aggregation of information for Government reporting.

### The British Standards Institute (BSI) [Non-governmental]

**Primary Role:** The BSI is the UK national standards body by Royal Charter and seeks to aid innovation, support economic growth, and improve quality, safety and well-being through standardization and interoperability of standards with international partners, informed by its 12,200 committee members.

**Secondary objectives:** The BSI also acts as a knowledge conduit and catalyst for best practice across the UK and globally where interoperability and standardisation is required.

**Action for nature recovery:** The BSI, in partnership with Defra, is currently developing a suite of high-integrity nature investment standards through the BSI Nature Investment Standards Programme (BSI, 2023). These codes are essential to provide legitimacy and confidence in deliverability and reliability of outcomes and will be essential to attract private investment.

## 3.1.7 Other Government Actors

### UK Infrastructure Bank (UKIB)

**Primary role:** contribute to climate change mitigation by supporting projects that align with the government's net zero emissions target by 2050. By investing in infrastructure, it aims to drive economic development across different areas of the UK.

**Secondary objectives:** Facilitating private finance alongside public investment, supporting investment in Nature-Based Solutions

**Actions on nature recovery:** The UKIB, established in 2021, has £22bn of financial capacity to support mobilisation of public and private capital for green investments. The remit of UKIB does include nature and it set out its proposed 'Role in Natural Capital Markets' in November 2022. This draft set out the potential to deploy capital into high integrity natural capital markets such as voluntary woodland and peatland markets and to monitor progress of biodiversity net gain. The UKIB 'Strategy Update: Private sector investments' issued in September 2023 does not include nature in its list of seven short-term areas of priority investment which are listed as: short duration energy storage, hydrogen, carbon capture, usage and storage (CCUS), Electric Vehicle charging, zero emission buses, heat networks and the port infrastructure for floating offshore wind.

UKIB has recently announced two natural capital related investments: a commitment of up to £50 million on a match-funding basis to Greensphere Capital for its Gaia Sciences Innovation fund and secondly to commit £12million to support an innovative nature restoration project in the Scottish Highlands and Islands with the aim of stimulating natural capital markets providing a short-term bridging loan facility to support Highlands Rewilding Limited's acquisition of the Tayvallich Estate - a 1,300-hectare rural estate in Argyll. UKIB has also supported a new water resource project and may support investment in the programme of strategic water resource options being developed under the integrated RAPID regulatory process.

### British Business Bank (BBB)

BBB supports access to finance for smaller businesses to drive sustainable growth and prosperity across the UK, and also to enable the transition to a net zero economy. Between 2014 and end of August 2022, BBB supported £505 million of equity investment in clean technology companies. BBB can offer, debt, debt guarantees and equity.

### UK Export Finance (UKEF)

UKEF is the UK's export credit agency. Its mission is to advance prosperity by ensuring no viable UK export fails for lack of finance or insurance, doing that sustainably and at no net cost to the taxpayer. UKEF is significantly involved in the UK Government's international development funding for nature recovery.

The role of export credit agencies has been noted as needing to go beyond the more apparent objective of mobilising the export of UK financing as foreign direct investment and/or aid support. It was highlighted on numerous occasions through the expert interview process that export-credit agencies' outward facing remit enables them to be well placed to both identify best-practices and engender a level of quality-standard expectations for both domestic and foreign-partner investment.

### UK Research and Innovation (UKRI) & Innovate UK

UKRI is a non-departmental public body of the UK government that directs research, innovation, and skills funding. Between 2015 and 2020 Innovate UK supported 5,940 companies with £1.9 billion of net zero related grants. As a result, these businesses created 67,000 new jobs, and went on to raise £4.8 billion of private investment. These innovation bodies can provide grants, innovation loans, promote knowledge sharing, commercialisation of research and investment readiness.

UKRI's Integrating Finance & Biodiversity for a Nature Positive Program is a research and innovation program, funded by the Natural Environment Research Council (NERC) and Innovate UK, aims to embed biodiversity considerations in financial decision-making. The program has three flagship initiatives:

- Financing Green Sector Transitions: Supporting the agricultural sector (which covers over 70% of land) in restoring nature.
- Greening Finance for Nature: Addressing decision-making processes in financial institutions (such as banks and asset management companies) to positively impact nature.
- Financing Biodiversity: Delivering investments in biodiversity conservation.

## 3.2 Non-governmental organisations and actors

### 3.2.1 Supply side actors - natural capital owners

Natural capital owners, including but not limited to farming communities, local authorities, and landowners, are the critical link between the demand for nature recovery and biodiversity to the delivery of real nature outcomes. These organisations often need to aggregate or work collaboratively to be able to access finance or demand for the outcomes they can deliver and this route to market can be delivered by a wide range of brokers, arrangers and other market makers. Without these supply side actors, many of whom have been positively managing and stewarding England's natural assets for multiple generations, there will be no impact to be achieved from Policy, Regulation, Markets or Finance.

A significant part of Government focus to date has been on developing demand through legislation such as biodiversity net gain and supply is emerging to meet this demand. As further demand develops and further compliance requirements are put in place there may be a need for greater sources of supply and a clearer resolution to the challenges around incentivising an increased transition towards nature recovery approaches for landowners.



Natural capital owners, managers and stewards are particularly sensitive to the ongoing food production versus environmental protection (and biodiversity impact) paradigm. Agricultural communities and farmers have been economically, culturally, and financially driven towards maximising yield to generate positive return in order to satisfy an ongoing commitment to the lands they farm. In this regard, ongoing support from the EU Common Agricultural Policy (CAP) BPS and more recently the updated ELM scheme administered by the Rural Payments Scheme (RPS) has been of critical importance to farming communities – and therefore has acted as a critical behavioural, economic, and cultural driver to action.

As economic challenges in agricultural markets have led to consolidation over time, so have they led to a change in how agricultural services are procured and contracted, namely through an increase in tenant versus owner-led farming. These practices differ in their process, drivers and timelines and must be considered in the balance of supply-side support mechanisms and incentives provided to natural capital owners, to support the nature-positive outcomes sought in the EIP.

The World Bank Publication: *The Economic Case for Nature* (The World Bank Group, 2021) makes the risk of nature collapse to the world economy both stark and undeniable, indicating that a conservative estimate in collapse of select services could wipe \$2.7 Trillion from global GDP by 2030 (The World Bank Group, 2021).

Natural capital owners further play a role in directly implementing sustainable practices, and investing in projects that enhance natural resources and actively manage risks related to habitat loss. This focus on the provision of supply not only for now, but for ongoing generations is of critical importance in upholding economic security and is increasingly being seen as a means by which Credit Risk Agencies (CRAs) are assessing economic, financial, and societal risk for sovereigns and corporate entities.

The disaggregated basis of landholding and use makes collection of underlying data challenging. To adequately ascertain the condition and natural capital balance for England, robust and comprehensive baselining at a catchment, landscape and habitat level is critical. Land-use modelling interacting directly with such baseline models is key and transparent ongoing Monitoring, Reporting and Verification (MRV) on the state of natural assets will be fundamental but not yet in place. All of these activities and responsibilities are reliant on the support, buy-in and participation of natural capital owners.

### 3.2.2 Demand side actors – beneficiaries of natural capital

Beneficiaries of natural capital assets and the ecosystems services they generate are myriad. The World Economic Forum indicated the level of moderate or high reliance on nature from global businesses was in the order of \$44 trillion in economic value added – or over half the world's current GDP (World Economic Forum, 2020). The balance of economic contribution and the valuation of externalities to nature requires a significant pricing correction. This pricing correction will require clear action from all parties involved with nature markets, most notably government policymakers and regulators, and private buyers of benefits. The beneficiaries of nature services can be split across:

- Buyers or recipients of public goods – communities, local authorities, government.
- Buyers of private benefits – such actors include financial institutions, businesses and private investors (Broadway Initiative, 2023). Businesses are also recognised for their role in incorporating natural capital within investment portfolios and contributing to nature-positive investments. (Defra, 2023a). Key private actors include:

**Financial institutions.** Banks, investment funds, and insurance companies can direct capital towards green projects and integrate sustainability criteria into their lending and investment decisions. These actors are responsible for assessing and managing environmental risks in their portfolios and offering green financial products.

**Businesses / corporations.** Through their business practices and investment choices, businesses can drive demand for green finance, both as beneficiaries of natural capital and as demand-side actors. Businesses are responsible for reducing their environmental footprint and disclosing their environmental impact to investors and the public.

**Private investors.** Private investors directly invest in green projects, assess environmental risks, and demand transparency from companies. By aligning their financial choices with environmental goals, they drive positive change in the financial landscape.

Stimulating demand for projects which serve nature recovery is critical, and there are 4 sources of funding that can be meaningfully distinguished:

- Funding from direct nature compliance requirements, with BNG as the current mechanism for this;
- Funding from delivery of wider compliance outcomes such as nutrient neutrality. In this context water companies are one of a primary and major source of potential investment;
- Funding stimulated by voluntary motivations, including for risk mitigation and/or as surfaced through reporting requirements; and
- Funding by government, such as through grants, subsidies, guarantees and tax incentives.

These different funding source categories can be linked, via the (potential) investment sums, to the delivery of outcomes against the EIP23 apex goal and associated (sub-)set of targets (these would need to be decided on in terms of the assessment framework, with hectares of habitat a very logical candidate for inclusion). This ‘golden thread’ from stimulating demand all the way through to the outcome currently exists for BNG only, as included in the draft framework diagram. This approach needs to be developed further for the rest of the framework, including for example in terms of the potential that could be unlocked by expanding compliance requirements.

### 3.2.3 Market operating and supporting organisations

There will or need to be multiple bodies that operate or support a market, including the emerging nature market space within the UK. These include bodies for market operation, accreditation and certification, and monitoring, reporting and verification; as well as further intermediaries such as brokers.

Market operation for financial markets is very well-established, while it is relatively nascent in the context of nature markets. EnTrade is a market operator that creates and operates environmental markets for nature with operation markets in the Somerset, Bristol Avon and Solent catchments.

Providers of accreditation and certification services need to be independent of those that set the standards and codes.

There is a much wider group of actors that ultimately facilitate aspects of overall market mechanics, either directly through their operational role or via relevant support services such as environmental specialists, legal representatives, nature tech companies and information platform providers.

It is generally agreed that the design of the nature market institutional architecture, including the governance of it, needs to be a key area of focus to enable investment into nature recovery (see Nature Markets Mechanisms section).

### 3.2.4 Non-Governmental Organisations (NGOs), Thinktanks & Other

NGOs impact behaviour change in green finance and nature markets through advocacy, direct intervention, and lobbying. Influencing policymakers, providing expertise, and driving public awareness of environmental issues, NGOs play a role in advocating for environmental issues, and holding governments and corporations accountable for their actions (CISL, 2022). NGOs can also play a role in capacity building, project identification and evaluation, stakeholder engagement, and innovation and research. They often hold a multi-lateral or supranational status that can be levered to bring best practice to governments and private actors.

Think-tank and other policy supporting organisations also play an important role. For example:

#### Green Finance Institute (GFI)

The Green Finance Institute was launched by the City of London Corporation and the UK Government to foster greater cooperation between the public and private sectors, create new opportunities for investors, and strengthen the UK’s reputation as a global hub for green finance. The

GFI is an ‘Action Tank’ independent but supported by the UK government whose purpose is to accelerate the transition towards an environmentally sustainable and resilient economy by catalysing investment in net zero and nature positive outcomes. GFI is dedicated to accelerating the transition towards an environmentally sustainable and resilient economy. It aims to catalyse investment in net zero and nature positive outcomes. Their mission is to channel capital at pace and scale towards real-economy outcomes. The Institute focuses on the systemic transitions that need to be financed within the real economy, such as the energy efficient retrofitting of buildings, and the decarbonisation of road transport. GFI has created the GFI Hive as a collaboration space that contains insights, case studies, resources and toolkits to support and enable investment in nature recovery.

In addition to the GFI Hive, the GFI hosts the Secretariat for the Taskforce on Nature-related Financial Disclosures and runs the TNFD’s UK National Consultation Group. GFI also oversees the Land, Nature, and Adapted Systems Advisory Group (LNAS Advisory Group) advising the Defra on definitions of economic activities that can be defined as environmentally sustainable as part of the broader UK Green Taxonomy, and supports and advises on over £14 million of the UK’s natural environment investment readiness funds that help develop the crucial pipeline.

### 3.2.5 International Organisations

International and multi-lateral development organizations, in particular Multi-Lateral Development Banks (MDBs) have provided a large proportion of financing for both green finance and finance for biodiversity and nature and can provide funding, facilitate international cooperation, and set global standards. These entities have significant cross-jurisdictional expertise and skills, that can bring best practice from global counterpart markets to the UK. They are responsible for promoting international standards and best practices, as well as providing financial support for green projects in developing countries (CISL, 2022). Multi-lateral and international organisations hold significant supranational influence and can use their benefits to dictate behaviours in cross-jurisdictional markets.

## 4 Drivers and incentives

The drivers and incentives for investing in green finance for nature recovery are multifaceted and some of the principal drivers are explored in this section.

Driving and incentivising behaviour change in the market is a pivotal factor in mobilising green finance. By leveraging insights from the theory of change, effective strategies to mobilise green finance can be developed. The theory of change's logical sequence, encompassing inputs, activities, outputs, and outcomes, provides clear guidance for driving positive behavioural change. Further, the monetisation of benefits derived from nature conservation can serve as a powerful incentive for driving positive behavioural change. Attaching a monetary worth to ecological services creates a clear case for investments in nature.

### 4.1 Compliance drivers

Compliance drivers are centred around meeting legislative compliance and include meeting environmental objectives as well as making mandatory disclosures. Central to this at the moment is the introduction of mandatory BNG under Schedule 7A of the Town and Country Planning Act 1990.

#### **Biodiversity Net Gain (from UK Parliament PostNote)**

'Biodiversity Net Gain (BNG) [requires] all Town and Country Planning Act 1990 developments to deliver a minimum 10% increase in biodiversity from that present beforehand (PN 369, PB 34).<sup>15,86</sup> Some local planning authorities (LPAs) may choose to raise it to 20% to deliver more nature recovery.<sup>87</sup> When habitats themselves cannot be restored on-site then units can be purchased directly from a landowner who will deliver the units offsite or from a 'habitat bank' [...]. The number of 'biodiversity units' required to compensate for the loss of the area of habitat types in their current condition is calculated using Natural England and Defra's BNG metric. This could generate £100-300 million per year, <sup>89,90</sup> with Defra estimating that BNG could contribute 1,551 ha of habitat towards the habitats target annually (29,469 ha by 2042).'

Mandatory disclosures require companies to publicly report their environmental impacts and risks. This transparency holds companies accountable for their actions and encourages them to invest in nature-positive outcomes (TNFD, 2024). Further below in this section expands on the role of disclosure as a driver.

Compliance drivers can involve wider outcomes, such as nutrient management or natural flood management, the achievement of which can involve solutions that also benefit nature more broadly. Section 9, Nature Market Mechanisms, expands on this including in the context of water company investment.

### 4.2 Voluntary drivers

Voluntary drivers include economic rewards, risk management, and meeting changing consumer demand. The transformation towards a green economy can offer both environmental and economic rewards. Companies and investors need to manage risks from environmental degradation, and green finance can help avoid stranded assets and minimise the fiscal risks of the transition. Changing consumer expectations and preferences are shifting demand towards green products and services. Personal connections to nature and the influence of high-profile individuals also motivate green finance initiatives.

The following are some specific examples of mechanisms and drivers that can underpin voluntary action:

**Risk mitigation:** The impact of climate and nature on risk management is increasingly understood, and investor fiduciary duty drives nature-focused investments. An important development in the field of risk identification, assessment, and mitigation is the consideration of nature-related risk both from a financial (potential risk for financial prospects) and impact (potential impacts on society and the environment) perspective (CISL, 2023b).



Global sector guidance for climate and nature transition, such as that considered in the WWF report ‘Nature in Transition Plans: Why and How?’ (WWF, 2023) provides valuable information to investors, driving competition and action in a positive way.

Sector collaboration and confidence: Industry competition encourages companies to improve through benchmarking, while investments in R&D for nature technologies are on the rise, contributing to market development and building investor confidence.

Demonstration of integrity of outcomes: BSI’s report “A high integrity standards framework for UK Nature Markets” notes that two of the key drivers for directing finance towards solutions for nature recovery include ensuring high integrity investments which deliver genuine environmental benefits and providing clarity and assurance for market participants to avoid greenwash and enable investment in various habitats and ecosystem services (BSI, 2023).

Profit and return: natural capital is increasingly recognised as a valid asset class and there are opportunities emerging for financial return in investment in different aspects of nature recovery. However, as discussed elsewhere in this report many aspects of nature investment do not as yet generate sufficient returns to enable private investment (or eg without some form of support or subsidy mechanism).

## 4.3 Disclosure as a driver

### 4.3.1 Impact of voluntary disclosures

Mandatory and voluntary disclosures serve as critical tools in mobilising green finance, providing transparency and accountability to investors, policymakers, and the public. Disclosures can influence investment decisions, foster sustainable practices, and drive capital towards initiatives for nature.

The interviews revealed a view that there is limited evidence to suggest that voluntary disclosure leads to significant real-world impact. The current approach to voluntary disclosure was likened to a ‘tick box exercise’, suggesting a lack of depth and effectiveness.

There was a call for greater empirical evidence to substantiate the impact of disclosures and whether voluntary disclosure will drive action at the pace required to meet global challenges. This highlights the need for rigorous research and data to inform disclosure practices and policies.

The need for transparency and comparability was raised during the interviews, particularly in relation to the introduction of the TNFD for nature-metrics. This suggests a need for standardised and comparable metrics to enhance the effectiveness of disclosures.

### 4.3.2 New financial reporting standards

The UK GFS supports the development of and adoption of UK Sustainability Disclosure Standards (UK SDS), which will be based on the IFRS Sustainability Disclosure Standard issued by the newly created ISSB as a means of standardising disclosure. The UK SDS aim is for sustainability-related disclosure to be globally comparable and provide a useful basis for investor decision-making to support the efficient allocation of capital, and efficient functioning of the UK’s capital markets (UK DBT, 2023).

When the UK Government introduced mandatory climate disclosures, this was done to ensure that large companies which have a significant economic and environmental impact consider risks and opportunities in a uniform way by applying a common set of requirements, whilst also encouraging those companies to set out emission reduction plans (DBEIS, HMT, 2021).

The upcoming introduction of the Sustainability Disclosure Requirements (SDR) is noted by the FCA as an instrument to improve the trust and transparency of sustainable investment products. They can help minimise greenwashing, and help investors make more informed decisions when investing. By providing clear and

consistent information, these rules can enhance the credibility of the sustainable investment market (FCA, 2023).

In a working paper published by the European Corporate Governance Institute (Dai, Ormazabal, Penalva, & Raney, 2023), researchers examined the impact of the EU's SFDR on investment funds. The study found that funds classified as Article 8 and 9—which represent sustainable investment strategies—experienced an increased decarbonisation effect after SFDR implementation. Specifically, these funds reduced their Scope 1 and 2 emissions more significantly than other control groups. Interestingly, the decarbonisation effect was particularly pronounced for Article 8 and 9 funds with higher portfolio emissions prior to SFDR adoption. The driving force behind this decarbonisation was a combination of exiting high-emitting companies and real-world efforts to reduce emissions. Overall, the results support the theory that mandatory disclosures can incentivise asset managers to prioritise decarbonisation.

The observed decarbonisation effect indicates that the introduction of SFDR has encouraged asset managers to prioritise sustainable investments and promoted a shift in investment patterns. The success of SFDR in incentivising decarbonisation highlights the potential of mandatory disclosures, policymakers may consider similar regulations in other areas including nature protection and restoration to drive positive change.

### 4.3.3 The potential impact of TNFD

The introduction of the TNFD was generally viewed by interviewees as a positive and important step towards improved nature-related disclosures but there is less clarity on whether this will yet drive positive action quickly enough. Stakeholders interviewed mentioned that the increased focus on action planning, compared to the Task Force on Climate-related Financial Disclosures (TCFD), is a positive development.

The TNFD is seen as a potential tool to aid in redirecting capital once established. However, there were concerns about potentially limited large-scale impact, indicating a need to aggregate projects to achieve broader impact. The importance of detailed guidance was emphasised, suggesting that clear and comprehensive guidelines are key to the successful implementation and uptake of the TNFD.

The TNFD provides standardised monitoring and reporting frameworks and technologies which can increase investor interest and understanding of nature-based solutions investment opportunities (Finance Earth, National Lottery Heritage Fund, 2022). The EIP23 notes policy uncertainty, lack of standardisation, and information asymmetry as three of the key challenges for scaling up green finance (Defra, 2023a). In the GFS, the Government pledged to explore in Q4 2023 'how best the final TNFD framework should be incorporated into UK policy and legislative architecture, in line with Target 15 of the Global Biodiversity Framework' (HM Government, 2023d) having notably been the first government to fully support the Taskforce's creation and progress towards the publication of its recommendations. Exploring how the TNFD recommendations should be incorporated into UK policy is considered a critical next step in mobilising voluntary funding for nature recovery using the primary driver of corporate risk mitigation.

### 4.3.4 The role of the UK's Green Taxonomy

Part of the UK's approach to creating a clear and robust framework for sustainable investing is the introduction of the UK Green Taxonomy, aiming to provide clarity and consistency for investors and improve understanding of companies' environmental impact. The Green Taxonomy together with the implementation of SDRs could be an important tool for aligning with national and international standards and private investment practices. The introduction of the SDR and Green Taxonomy is seen as a key driver for mobilising green finance for nature recovery. The Greening Finance Report (HMT, DWP, DBEIS, 2021) further emphasises the importance of robust, evidence-based, and accessible standards that align with international frameworks.

The evolution of the EU Taxonomy over time has been notable, accelerating a shift from do no harm towards positive contribution. The guiding frameworks and sector applications are standardising and driving common best practice. As with other sustainability-related frameworks much of the focus to date is on climate mitigation and net zero transition, with less focus on nature and social outcomes, although this is likely to evolve. There were positive views expressed in the stakeholder interviews on the introduction of a

framework for common definitions of ‘sustainable’. However, some concerns were raised about the length of time it is taking to implement, especially given the increasingly acknowledged urgency of the situation.

The importance of interoperability between the UK and EU was highlighted during the interviews as a key factor in the success of these sustainability initiatives. This suggests a need for alignment and cooperation between different regions to effectively address sustainability challenges, and financing nature recovery should not be excluded from this.

A comparative summary of some of the key disclosure and standards frameworks covered so far is detailed in Table 1 below.

**Table 1 – A comparison of disclosure and standards frameworks**

<b>Disclosure / Standards Framework</b>	<b>What?</b>	<b>Contribution to Transparency / High Integrity</b>	<b>Key relationships</b>
<b>Global</b>			
<b>TNFD</b>	The Taskforce developed a set of disclosure recommendations and guidance encouraging and enabling business and finance to assess, report, and act on nature-related dependencies, impacts, risks and opportunities.	Through the identification of dependencies and impacts, the application of TNFD recommendations aims to enhance transparency by promoting clear, comparable and consistent information, and utilising existing data	The TNFD aims to support a shift in global financial flow away from nature-negative outcomes and towards positive outcomes, aligned with the Global Biodiversity Framework.  As the UK has adopted the GBF, the Government is committed to incorporating TNFD recommendations into UK policy and legislative architecture. This would include the SDR, BSI NIS Programme, and Green Taxonomy.
<b>EU</b>			
<b>EU SFDR</b>	Sustainable Finance Disclosure Regulation (SFDR) introduced as part of the EU’s Sustainable Finance Action Plan (2018). Sets out mandatory ESG disclosures for institutional investors and financial advisors to support sustainability objectives.	Promotes transparency primarily through application of the EU Taxonomy.	Both the EU SFDR and UK SDR are regulations aimed at increasing transparency in the financial sector in relation to ESG factors.
<b>EU Taxonomy</b>	The EU Taxonomy is a classification system that defines criteria for economic activities aligned with a net zero trajectory and other environmental goals. It aims to direct investments to the	Market transparency tool, and mechanism for addressing greenwashing.	The UK Green Taxonomy was proposed as a response to the EU Taxonomy (the UK was previously involved in EU Taxonomy design as a member state).

	economic activities most needed for transition. The Taxonomy Regulation entered into force in July 2020.		
<b>UK</b>			
<b>UK SDR</b>	PS23/16: Sustainability Disclosure Requirements (SDR) and investment labels released by the FCA in November 2023.	Transparency-focussed in terms of aims to prevent greenwashing.	Builds on the UK implementation of the TCFD, but has not directly incorporated the TNFD. The implementation of the SDR, and delivery of a UK Green Taxonomy were set out as next steps in the Government’s Greening Finance roadmap (HMT, DWP, DBEIS, 2021).
<b>BSI Nature Investment Standards (NIS) Programme</b>	BSI in partnership with Defra – <b>framework of standards</b> to drive high integrity markets for the UK and encourage the scale up of private investment into nature. (BSI, 2023)	Transparency is one of the principles taken forward by the Programme, to reach the over-arching objective of high integrity markets operating in the UK; <i>“the use of a recognised, credible, publicly accessible registry to register, track and permanently retire verified credits, that provides sufficient, transparent, data for appropriate due diligence in a standardised way.”</i> (BSI, 2023)	The BSI NIS Programme notes that any demand side standard or initiative for the UK will need to align with and draw from a range of ongoing international work, notably the TNFD.
<b>Green Taxonomy</b>	A common framework for defining sustainable impacts and investment.	Consistent definition of sustainable investment	As above, the implementation of the SDR, and delivery of a UK Green Taxonomy were set out as next steps in the Government’s Greening Finance roadmap (HMT, DWP, DBEIS, 2021).  To maximise interoperability, the UK GTAG (Green Taxonomy Advisory Group) asserts preference for using the EU Taxonomy as a basis for the UK Green Taxonomy.



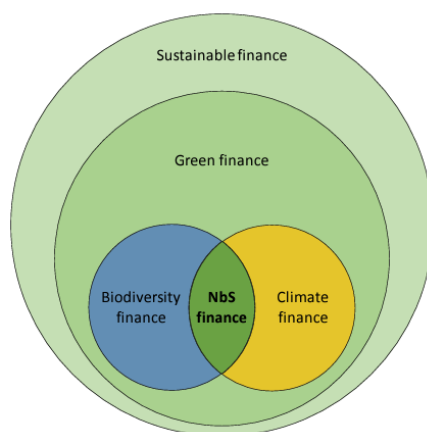
## 4.4 Recommendations and considerations for OEP

- The OEP should adopt a high-level framework such as the one proposed in this report to assess the government's progress in terms of mobilising investment into nature recovery. This should be structured around a Theory of Change, enable the OEP to assess and scrutinise the main funding/driver categories for investment and associated enabling activities, and follow a clear thread towards the EIP23 apex goal and targets.
- The OEP should evaluate the Government's progress towards integrating TNFD aligned approaches into UK policy and legislation and consider the extent to which this form of voluntary disclosure measurably contributes to the apex goal (for the purposes of incorporation into the assessment framework), and effectively operationalises Target 15 of the GBF.
- The OEP should evaluate the UK Government's efforts to mobilise nature finance through the introduction of mandatory disclosure requirements and labelling schemes, including the forthcoming SDR and Green Taxonomy and carry out further analysis into the extent to which this form of voluntary disclosure measurably contributes to the apex goal. The inclusion of environmental objectives and their relevant criteria as part of the development of Green Taxonomy should be a particular area of focus.

# 5 Impact of the Green Finance Strategy in mobilising private capital for nature

## 5.1 The Green Finance Strategy and Nature Markets Framework

The UK Government published its Green Finance Strategy (GFS) in 2019 and issued an update to this strategy in March 2023. The GFS established the route map for establishing the UK at the centre of the green finance market and to enable the flows of private capital required to deliver climate mitigation (through net zero ambitions), climate adaptation, and to reverse the decline in nature. The interlinkages of different types of sustainable and green finance are illustrated in Figure 4.



**Figure 4 - Relationships between Sustainable Finance, Green finance, biodiversity or 'nature' finance and climate finance (GIZ, 2020).**

The GFS defines green finance as any structured financial activity - a product or a service - that has been created to ensure a better environmental outcome, it includes an array of loans, debt mechanisms and investments that are used to encourage the development of green projects or manage the impact of climate change on investments.

The GFS establishes two broad activity areas for UK action:

- i) Align: greening the financial markets to align with UK climate and environmental goals;
- ii) Invest: mobilising green finance to invest in delivering green outcomes.

The GFS was published alongside the Nature Markets Framework as one of the prime elements of the strategy for securing finance for nature. A comprehensive update to the Nature Markets Framework was issued in March 2024, to highlight progress one year on, and Government plans to consult on the steps needed to support the growth of high integrity voluntary nature markets (Defra, 2024c).

In this section, we explore the various elements of Government policy in this area and the impact to date of mobilising private capital for nature assessing the suitability of policies, assessing some of the enabling standards and regulations, considering progress in developing readiness of the market and finally commenting on progress in developing and implementing the required pathways.

In the subsequent Sections 8 and 9, we explore progress in respect of the two main mechanisms for mobilising nature finance which are i) the use of Financial Markets to secure investment in delivery of nature related projects and ii) the creation of an active Nature Market approach to stimulate both demand and supply match buyers and sellers of nature outcomes.

**Much of the green finance raised to date and many of the enabling policy initiatives and support mechanisms implemented are focused on climate mitigation and accelerating the energy transition to renewable energy; there has been far less focus on climate adaptation and on nature recovery. This**

observation applies globally, not just to the UK. This means that the enabling frameworks for investment in nature recovery are less mature than in climate mitigation.

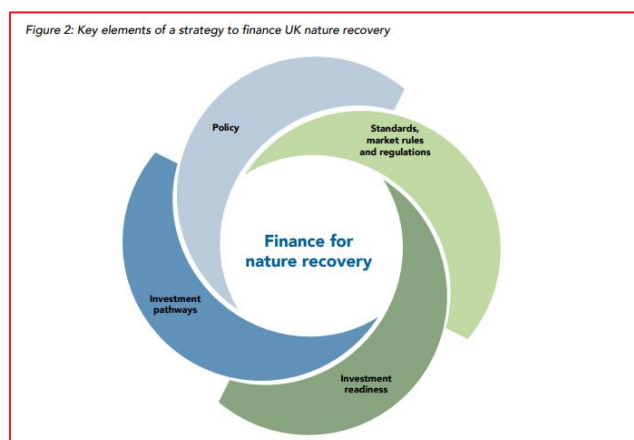
In terms of action on nature recovery, the GFS established the initial framework of action to deliver the statutory objectives established in the Environment Act 2021 and for meeting UK international commitments on the environment, notably in respect of nature and biodiversity the commitment to ensure that UK bilateral development assistance becomes nature positive aligning with the Kunming-Montreal GBF to halt and reverse global biodiversity loss by 2030.

**The GFS sets out the objective to mobilise private investment in nature recovery in England, specifically to £500m per annum up to 2027, rising to more than £1bn per annum by 2030.** This investment is principally to be made up of ‘investment in nature-based solutions for carbon sequestration, flood risk management and water quality, as well as compensating for biodiversity and nutrient impacts (e.g. through Biodiversity Net Gain and Marine Net Gain)’. (HM Government, 2023d)

**The detail behind the build-up of these investment targets is not yet available and Government aims to publish an investment roadmap by 2024.** We understand from the interviews that there is not yet in place a clear methodology for determining the definitions of nature investment and how to track primary data to monitor the level of investment, although research has been commissioned and the approach is in development. UK Government has produced a roadmap for greening finance (HMT, DWP, DBEIS, 2021) but to date has not issued a similar roadmap for financing green. The creation of clear definitions, establishment of a baseline, and development of a clear investment roadmap are essential steps that the government needs to implement as soon as practical.

## 5.2 Strategy framework for considering the impact of the Green Finance Strategy

The Financing UK Nature Recovery report (Broadway Initiative, 2020) proposes that the Government strategy to accelerate private investment in UK nature recovery could consider four elements (see Figure 5):



**Figure 5 – The role of Government and the required components of a strategy to accelerate private investment in UK nature recovery (Initiative, 2020)**

- (1) **Policy (Section 6.3)** – clear policies are needed to create confidence and define the role of planning and environmental regulation in creating demand for projects that enhance nature;
- (2) **Standards, market rules and regulations (Section 6.4)** – a green finance strategy for nature recovery requires robust technical standards, backed by clear market rules and regulations that maintain environmental standards;
- (3) **Investment readiness (Section 6.5)** - funding and financing for capacity building, particularly on the supply side, to prepare nature restoration projects for commercial investment.
- (4) **Investment pathways (Section 6.6)** – including sectoral roadmaps and market support mechanisms.

This section of the report uses this strategy framework as a means of considering progress on mobilising green finance for nature recovery, and to group the strengths, weaknesses, and potential gaps in the GFS, as identified through the stakeholder interviews and literature review.

### 5.3 Policy for mobilising finance for nature recovery

#### 5.3.1 Policymaking

Government policy is a fundamental mechanism for signalling intent, communicating with clarity and confidence, providing a basis for decision making and promoting behaviours towards a defined outcome. The role of policy making in Government cannot be understated in respect to nascent markets such as green finance and is particularly important when there is a need to focus a wide range of actors towards an outcome that is as complex as the multi-faceted nature system.

Policymaking has a key role to play in guiding the market. Policy frameworks can provide incentives for channelling investment towards green finance and legislation can mandate disclosure of risks, encouraging transparency and responsible investment. Additionally, policy and legislation play a role in defining what is determined ‘green’, fostering innovation in green financial products, and incentivising outcome focused initiatives. In terms of international alignment, harmonized green finance standards have emerged through collaborative policymaking.

The EIP notes policy uncertainty as one of the key challenges for scaling up green finance (Defra, 2023a). Interviewees highlight that although clear commitments have been made with reference to legally binding targets in the UK, the roadmap for achieving these remains unclear. Policy clarity is therefore a crucial element for mobilising green finance.

There is an additional need for outcomes focused policy. Nature outcomes for all focus areas identified in the EIP remain individually and collectively undefined and given the complexity of nature systems, the baseline and future targets relative to this baseline are effectively unquantified. To enable scrutiny of the government’s progress on individual green finance commitments, it is important to evaluate the overall efficiency of policymaking through implemented government processes. This includes the government’s ability to promote transparency, adherence to norms, and streamlined operations.

#### 5.3.2 Theory of change approach

The need for a Theory of Change approach for nature-related spending is suggested to identify the specific activities that lead to outputs and outcomes for nature (Green Finance Institute, 2021). A Theory of Change approach for nature-related spending is alluded to in both the literature and in stakeholders’ suggestions in order to identify the specific activities that lead to outputs and outcomes for nature (Green Finance Institute, 2021). Nature positive transition pathways need quantitative limits and budgets, in order for mechanisms to subsequently be derived to meet them i.e. trading, pricing, regulation, or in combination.

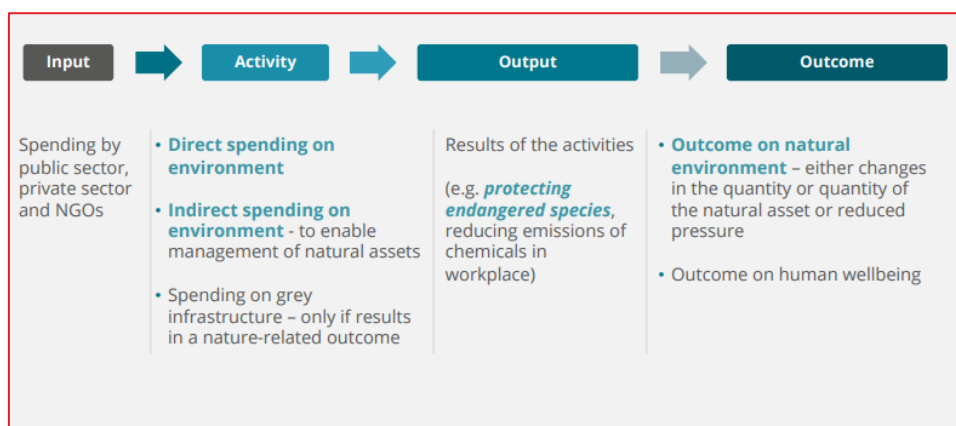


Figure 6 - Theory of Change approach (GFI, 2021)

### 5.3.3 Legislation and Regulation

Legislation can be used as a tool to mobilise green finance, typically through performance or disclosure requirements. Legislation creates the overarching legal framework and purpose, whilst regulation and directives provide the specific detail and instructions on how laws should be implemented.

Interviewees frequently emphasised that existing regulations fall short in stimulating market growth within the nature sector. These regulations lack the necessary rigor to effectively manage the desired expansion of nature markets. Like carbon markets, regulatory measures will be essential to drive action and prevent greenwashing. However, the complexities surrounding nature markets demand a coherent framework of market design rules, standards, and regulations.

Additionally, the proposed UK SDS, aligned with the IFRS Sustainability Disclosure Standard issued by the ISSB will serve as the foundational basis for any future UK legislation or regulation mandating companies to report on sustainability matters.

The OEP has highlighted in this year's progress report that publication and application of the Environmental Principles Policy Statement (EPPS) would be 'indispensable' to cross-government action (OEP, 2024). Some stakeholders proffered that the impact of the EPPS on cross-government activity should not be underestimated, viewing the policy statement as having real potential to influence policy makers in protecting and enhancing the environment. The link between the Environment Act 2021 and Financial Services and Markets Act 2000 is just one example of where EIP23 implementation, and progress towards associated green finance goals for nature, requires monitoring both across departments (not just Defra) and by multiple regulators.

### 5.3.4 Key observations on progress on policy

**Clear commitments are made, with reference to legally binding targets, however the roadmap for achieving these is not clear.** Stakeholder interviewees were positive that commitments have been made, and that the target for England is clear and legally binding. The target (to halt the decline in domestic species abundance in England by 2030, and then to increase abundance by at least 10% to exceed 2022 levels by 2042) is set out in the GFS as an investment priority, alongside objectives for net zero and energy security, and climate adaptation and resilience. This target for raising private finance to support nature's recovery was highlighted in the Autumn Budget and Spending Review 2021, supporting two public investment targets.<sup>1</sup>

**Nature outcomes are undefined, so targets as well as the baseline from which measurement are being made are unspecific and unquantified.** There is no significant evidence to define what the parameters of nature finance are; until this is defined, quantification of achieving the target is not possible. The targets need to be aligned to real metrics for what nature 'is' and need to be supported by a clear roadmap with realistic milestones, as referred to above. Establishing a clear set of definitions for which types of private investment are to be realised and developing a clear baseline for historic and current activity will be essential for effective tracking and verification of future progress in mobilising finance.

#### **Finance for nature targets alignment with the estimated finance gap for nature recovery in the UK.**

The GFI Finance Gap for Nature report gives an estimate of the finance gap to meet the UK's nature-related outcomes to be at least between £44-97 billion only for the period from 2022 to 2032, with a central estimate of £56 billion. The finance gap associated with achieving nature-related outcomes in England is between £21 billion and £53 billion. Although clear overlap exists between other nature-related outcomes, protecting and restoring biodiversity is estimated to have a £9 billion gap (illustrated below). The strategy does acknowledge the need for significant investment in domestic nature-related goals to support nature's recovery and transition to a nature-positive economy. Although there is reference to the bridging the global finance gap through the Government's 10 Point Plan for Financing Biodiversity (Defra, The 10 Point Plan for financing biodiversity, 2023), the GFS does not provide a quantified pathway for meeting this deficit, by

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<sup>1</sup> More than £250 million to protect and restore nature in England in support of the UK's world-leading target to halt biodiversity decline by 2030, and a further £625 million for the Nature for Climate Fund, ensuring total spend of more than £750 million by 2025 on peat restoration and woodland creation and management. This will support the government's commitment to plant at least 7,500 hectares of trees a year in England by 2025 and restore 35,000 hectares of peat during this Parliament.



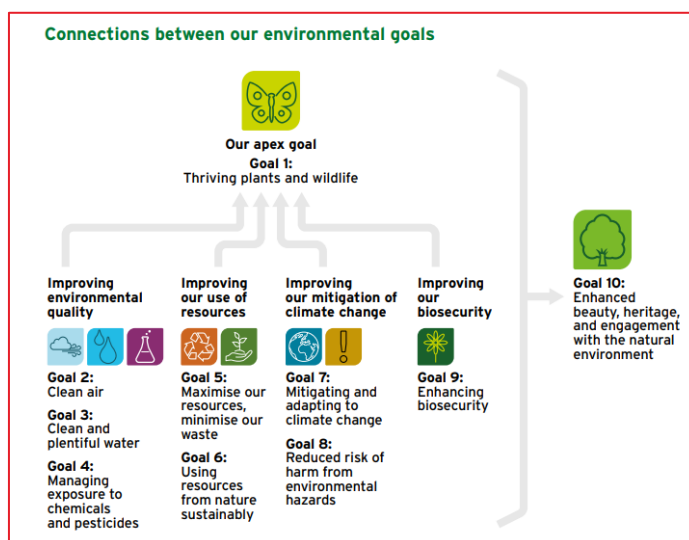
combining both public and private commitments. It is unclear how far the commitments to mobilise private investment under the GFS will go towards closing this finance gap and over what timeframe. The level of ambition of achieving £1bn per annum by 2030 appears low in the context of this finance gap.

**Figure 7 – Financing gap by outcome and location (2022-2032) *The Finance Gap for UK Nature (2021)* (Green Finance Institute, 2021)**

	UK <sup>1</sup>	England	Wales	Scotland	Northern Ireland
Clean water	£8 billion	£3 billion	£1 billion	£3 billion	£710 million
Protect and/or restore biodiversity	£19 billion	£9 billion	£1 billion	£8 billion	£1 billion
Reduce flood risk through natural flood management <sup>2</sup>	£354 million	£347 million	£7 million	-	-
Improve bio-resource efficiency	£4 billion	£3 billion	£35 million	£476 million	£437 million
Climate mitigation through bio-carbon	£20 billion	£8 billion	£2 billion	£9 billion	£669 million
Enhance biosecurity	£109 million	-	-	-	-
Improve access and engagement with natural environment	£7 billion	£4 billion	£1 billion	£1 billion	£1 billion
Overlap	£4 billion	£1 billion	£220 million	£2 billion	£272 million
<b>Total</b>	<b>£56 billion</b>	<b>£27 billion</b>	<b>£5 billion</b>	<b>£20 billion</b>	<b>£4 billion</b>

<sup>1</sup> The sum of the gaps for each location does not add up to the total for the UK as spending data for some outcomes only available for the UK / Great Britain or includes spending in Overseas Territories. <sup>2</sup> UK finance gap for this outcome measured as sum of gaps across DAs.  
NB: Central estimate used. If figure less than 1 million rounded to nearest million. The sum of the gaps for each location does not add up to the total for the location due to rounding.

**Achieving the environmental goals set out in the EIP23 (Defra, 2023a) and therefore reaching the overarching apex goal of thriving plants and wildlife requires both climate finance and nature finance.** A strength of the green finance strategy is an intent towards nature and climate integration. Figure 8 illustrates that climate-related goals contribute significantly to achieving thriving plants and wildlife, presented as the apex goal. The strategy sets out the intent to incorporate both nature and climate adaptation into the UK’s green finance policy framework, recognizing the inseparable link between protecting nature and addressing climate change. The tracking of climate financial flows therefore also needs to quantify the additional benefits to nature.



**Figure 8 – Relationships between EIP environmental goals and the apex goal (Defra, 2023a)**

**The commitment to publishing a Land Use Framework for England in 2023 has not yet been realised.** This is due to inform how trade-offs between different land uses is managed as delivery of ambitious climate and environmental goals are progressed, providing greater clarity to the market.

**Adopting Global Biodiversity Framework and providing development support for others to do the same:** The strategy reflects commitments made in the Kunming-Montreal Global Biodiversity Framework, emphasizing the importance of finance in halting nature’s decline and supporting biodiversity. As part of adopting this approach the UK Government has committed to ensuring that large and transnational companies regularly monitor and disclose their risk, dependencies and impacts on nature with the aim that this will drive positive action by these companies.

### 5.3.5 The level of ambition and scale of private finance mobilised to date for climate mitigation actions is much larger than that for nature recovery.

**The GFS states that policies and initiatives on green investment will help leverage around £100bn of private investments in low carbon technologies, the ambitions on nature recovery are more modest.**

Examples of large Government investment into climate mitigation include the £20bn for early development of CCUS, the net zero hydrogen fund, support mechanisms for nuclear new-build, various initiatives to drive energy efficiency and low carbon heating across homes, businesses and the public sector, for example, the million Boiler Upgrade Scheme (BUS) is providing £450 million between 2022-2025. The £1.425 billion Phase 3 of the Public Sector Decarbonisation Scheme will provide grant funding over the financial years 2022/23 – 2024/25, and the up to £20 million Green Home Finance Accelerator to support the development of innovative green finance products that help homeowners with upfront costs of energy improvements.

### 5.3.6 Insights from existing climate mitigation policies can be used to strengthen and develop both climate adaptation and nature recovery policy.

**We observe that there are very strong parallels between the shortcomings in UK policy for driving climate adaptation that apply to promoting investment in nature recovery.** Further, the lessons learned from the progress in enabling investment in climate mitigation can be applied to both adaptation and nature recovery, to leverage the underlying strength of the UK green finance market, and hence to unlock private investment in both areas.

The Climate Change Committee published its ‘Investment for a well-adapted UK’ report in February 2023 highlighting the need to mobilise a range of funding sources to support adaptation investment. A significant proportion of flood protection could potentially come from applying nature-based solutions. The report highlights a range of market barriers holding back new investment, including limitations on climate risk information; lack of bankability of climate adaptation projects; and policy, regulatory and behavioural barriers.

The collaborative report ‘Mission Climate Ready’ (GFI, Smith School of Enterprise and ECI, 2023) also explored the proposition that investment in climate adaptation is lagging behind progress on climate mitigation. The report argues that keeping the UK at the forefront of action on climate change requires not only building a net zero economy, but a net zero, resilient and nature-positive economy. The report makes a number of observations on structural and policy shortcomings and makes recommendations for accelerating investment in climate adaptation. These shortcomings, alongside the recommendations for accelerating investment in climate adaptation, can be considered as ‘lessons learnt’ to assist in the development of nature recovery policy.

We consider below the key findings and recommendations of the ‘Mission Climate Ready’ report, and how these could be equally applied to nature recovery:

- **There is a clear need for a more targeted policy on both adaptation and nature recovery to stimulate or compel private investment.** Finance is often framed as a barrier to adaptation, but the core issue is not finance per se but a lack of targeted policy. The report argues that adaptation action and investment is not happening at scale today because an adequate policy, fiscal and regulatory environment is not in place to enable it to do so, and the same can be said for nature recovery and that there is a significant demand side gap and hence a need to incentivise or requirement to compel the private sector to invest in adaptation and by implication nature. Nature recovery could easily replace ‘resilience’ in the following extract: “The UK also lacks the mechanisms to allow market failures to be addressed, for example allowing monetisation of the

positive resilience benefits of investments, to overcome the upfront costs of resilience and payback over long periods – an adaptation tax credit may assist in overcoming these barriers – and to fully embed resilience within our regulated utilities to ensure investments align with resilience goals”

- **Adaptation and nature recovery must learn from the mitigation playbook on mobilising investment.** Market-based mechanisms have played a big role in mobilising private investment to decarbonise the UK economy and yet are largely unexplored for adaptation [and nature recovery]. The Nature Markets Framework is a useful step towards this, but more work is required.
- **Resilience and nature recovery risks and opportunities need to be better incorporated and incentivised into financial decision making, both in the public and private sectors.** Resilience and nature risks are not being fully priced into policy decisions or long-term investment decisions. Many organisations are adopting natural capital and total value approaches, but it is not yet clear to what extent these are driving changes in investment decision making. Organisations may attempt to capture and monetise the value of a broader range of benefits but there are perceived challenges in capturing and quantifying nature related and societal benefits that in effect are a public good rather than a fungible cashflow item. These challenges can be overcome, and greater positive weightings can be attributed to nature and societal benefits. As with carbon benefits, nature pricing could potentially be adopted into decision making. The Ofwat Innovation Fund research project on Mainstreaming Nature Based Solutions (Ofwat Innovation Fund, 2024) will explore and develop best practice in this area and make recommendations for adoption across the water sector.
- **Use of a shadow price for carbon has been the way that net zero approaches have been driven into investment decision making, could the same be applied to nature recovery,** although the challenges of assessing standard units of nature benefit will be more challenging than assessing volumes of carbon.

#### 5.4 Standards, market rules and regulations for mobilising finance for nature recovery: key observations on progress

**The GFS shows strong commitment to supporting the development and operation of nature markets, with markets built on robust principles.** This is operationalised in the Nature Markets Framework, published alongside the strategy to develop high-integrity markets that enable investment in natural capital, particularly focussed on the role of natural capital owners such as farmers and land managers (HM Government, 2023e). This commitment has been further bolstered by the comprehensive update to the Nature Markets Framework in March 2024.

**Carbon sequestration incentives are well-supported, but not clearly linked to nature recovery benefits.** For example, the £50 million Woodland Carbon Guarantee incentivises landowners to participate in carbon sequestration (participation in the Woodland Carbon Code, which ensures accurate carbon measurement, is a prerequisite to Guarantee eligibility). The Woodland Carbon Guarantee is designed to help accelerate woodland planting rates and develop the domestic market for woodland carbon, by offering a price guarantee for verified carbon credits sold to the UK Government.

**The commitment to developing nature standards is clear, with evident deliverables being progressed by the British Standards Institution’s Nature Investment Standards Programme.** The GFS points towards the Nature Markets Framework and work with the British Standards Institution to work with business, finance, farming, and environmental experts to develop a comprehensive suite of nature investment standards. (BSI, 2023) [Note: the ‘BSI Flex 701 v1.0 (March 2024) “Nature Markets – Overarching Principles and Framework Specification” was published during the production of this report, and therefore has not been included in this evidence assessment]

**Good examples are highlighted from devolved administrations, providing a means of understanding, and sharing, best practice.** For example, the Scottish Government Interim Principles for Responsible Investment in Natural Capital establishes a high integrity market approach for investment in natural capital supported by the launch of the Facility for Investment Ready Nature in Scotland (FIRNS) a £1.8m investment readiness fund. The Welsh Government has also established a number of sector and regional funds and boards, including the Woodland Financing Group. The Welsh Government is considering statutory biodiversity targets aligned with the Global Biodiversity Framework, driving investment in nature recovery.

**Building the role of supporting data.** UK Government has initiated several initiatives to improve the capture and quality of data to support better biodiversity decision making, such as Natural Capital and Ecosystem Assessment to monitor ecosystem changes over time and UKRI's Integrating Biodiversity and the £7m Finance for a Nature Positive Future programme.

**Rules surrounding stacking of nature credits and ecosystem services are poorly defined.** Multiple nature credit and ecosystem service payment schemes are emerging in the UK, and individually these cover a range of ecosystem services. However, rules and regulations surrounding 'stacking' benefits (e.g. receiving multiple credits for one project) are currently poorly defined. Clear guidance should be created, taking care to address double-counting or additionality concerns. [See Nature Markets section further below].

## 5.5 Enabling investment readiness to mobilise finance for nature recovery: key observations on progress

**Initiatives such as Natural Environment Investment Readiness Fund (NEIRF) send strong signals as to Government's commitment to get projects 'investment ready'.** The NEIRF has had notable success in supporting farmer-led innovation, with the initial establishment of a £10 million fund supporting 86 innovative nature projects across England to explore ways of generating revenue from nature markets and operate on repayable private sector investment. Stakeholders highlight that although there is significant investment made to supporting individual projects, more could be done to addressing the investment readiness more strategically.

**Big Nature Impact Fund (BNIF),** UK Government is investing £30 million in a new blended finance impact fund managed by Federated Hermes and Finance Earth. This will crowd in significant levels of private capital, with the aim of developing a track record for private sector investment in nature recovery at scale, which others can follow. BNIF will accelerate the creation across England of high-integrity nature projects that generate revenue from ecosystem services such as carbon sequestration, biodiversity, and water quality, by creating biodiverse woodlands and other priority habitats, and restoring peatlands. By taking a blended finance approach and aggregating these projects up to an investible level, BNIF will help lower transaction costs and reduce risks, bringing the risk profile of these projects in line with institutional investors' appetite.

**Supporting the bespoke Landscape Recovery** projects to secure private funding alongside public funds in innovative ways carrying out numerous tests and trials looking at different mechanisms to crowd in private finance to improve nature's recovery.

**Local Investment in Natural Capital (LINC) Programme.** To help support the ambition for local authorities to develop a local convening role and attract investment in green projects, Defra is providing four local authority areas with up to £1 million each as part of the Local Investment in Natural Capital (LINC) Programme to build their capacity to attract private investment at scale, direct it towards their local environmental priorities (including those identified and mapped through Local Nature Recovery Strategies), and share learning with other local authorities. The selected authorities are Cornwall Council, Northumberland County Council (on behalf of the Borderlands Inclusive Growth Deal area), West Midlands Combined Authority and York and North Yorkshire.

### Projects for Nature Online Platform

Defra, Natural England and the Environment Agency, in collaboration with other organizations, developed the Projects for Nature online platform. This platform aims to boost corporate donations from the private sector for nature recovery projects in England. Through this platform, businesses and donors can connect with 25 nature recovery projects across England. These projects are screened by Defra, Natural England, and the Environment Agency to ensure alignment with national and local environmental priorities. Lloyds Banking Group became the first organization to provide funding through this platform, contributing £250,000 to three significant projects:

- **Weald to Waves:** Creating a 100-mile nature recovery corridor in Sussex, connecting habitats along rivers to the coast. This project enhances biodiversity, reduces flooding, captures carbon, and supports the rural economy.

- Resilient Glenderamackin: A catchment-based project in Cumbria that aims to reduce flood risk, restore nature, and mitigate climate change. It involves collaboration with farmers and land managers across 11,000 hectares.
- Peak District - Nature Recovery at Dalehead: The National Trust is restoring wetlands on a site nestled between Mam Tor and Kinder Scout, supporting nature, climate, and people.

## 5.6 Investment pathways for mobilising finance for nature recovery

### 5.6.1 Key observations on development of investment pathways for nature recovery

**A need for sectoral roadmaps for financing green has been identified.** Many stakeholders referred to the need for a Financing Green Roadmap, to replicate the Greening Finance roadmap, published in 2021. (HMT, DWP, DBEIS, 2021). Of note, the Greening Finance roadmap precedes the latest EIP, and it is the EIP's updated targets that need to be extrapolated into implementable roadmaps for achieving the finance goals for nature recovery in England. The need for sectoral roadmaps is acknowledged in the GFS, however the first roadmaps published have a leaning towards climate, rather than biodiversity. For example, a roadmap for offshore wind was produced alongside the GFS (DESNZ, 2023) with future roadmaps on heat pumps, CCUS and hydrogen specified as being developed. The EIP23 commits to scoping out the investment pathway for key sectors for the transition to a nature positive future.

### 5.6.2 Market support mechanisms

**A key facet of the GFS approach to stimulate green finance is to design sectoral market support mechanisms.** These include 'business models' tailored to the needs and circumstances of sectors, and support mechanisms designed in consultation with industry to reduce risk and provide long-term clarity. This is particularly helpful for sectors that face significant uncertainty around future prices and costs.

Examples of successful implementation of this approach in the UK include:

- For energy transition and net zero UK Government has successfully implemented interventionist approach to create a market structure and provide support mechanisms to attract bidders and de-risk early-stage technology development. The growth of the offshore wind sector is a great example of the effectiveness of the UK policy framework in attracting private investment. The government's earlier support scheme (Renewables Obligation and Final Investment Decision Enabling for Renewables) brought forward a significant amount of deployment which accelerated investment, technological development and learning.
- The Contracts for Difference (CfD) support scheme (see section 3.2.2), launched in 2014, drove competition and cost reduction. Between the first CfD allocation round in 2015 and the fourth in 2022 the per unit (MWh) price of offshore wind fell by almost 70% and the UK now has the highest deployment of offshore wind capacity in Europe.
- The Regulated Asset Base (RAB) funding model for future nuclear projects introduced in 2022. RAB models have been successfully used for many years to finance large, long-term single-asset infrastructure projects in the UK. In November 2022, the UK government confirmed an investment of £700 million in the Sizewell C project.
- The Hydrogen Production Business Model (HPBM) will provide revenue support to hydrogen producers to overcome the operating cost gap between low carbon hydrogen and high carbon fuels.
- A suite of CCUS business models is being developed, tailored to different parts of the CCUS sector.



In nature the UK Government has implemented a number of actions to stimulate or provide market support, for example:

- **Mandatory Biodiversity Net Gain (BNG) was legislated to be introduced in the Environment Act 2021, and Government has established a market for biodiversity units from early 2024.** Land managers who can create or enhance habitat on their land will be able to sell the resulting biodiversity units to developers needing to meet their obligations. Mandating BNG for developers and Nationally Significant Infrastructure Projects plans to reduce biodiversity depletion or improve outcomes on new projects and provide funding for additional biodiversity interventions that can deliver biodiversity credits using the newly established assessment criteria. While market pricing remains uncertain, early 2021 analysis estimated that mandatory BNG could generate an annual demand for approximately 6,200 off-site biodiversity units with a market value of £135 million from BNG (Market analysis study, Economics for the Environment, February 2021).
- **Partnerships through National Parks.** The National Parks Partnership (NPP) and newly formed National Landscapes Association cover nearly 25% of land in England and are critical to attracting investment into natural capital in a way that protects habitats for nature while enabling access for people. Government is encouraging National Parks to build local capacity through partnerships such as the pilots developed with the Revere Partnership (Revere, 2024) in developing financing platforms which aggregate together single site or small holding nature restoration projects.
- **Taking steps to encourage the use of nature-based solutions within infrastructure** and development in England, including an expectation of a significant increase in the use of nature and catchment-based solutions in the water sector and aiming to make Sustainable Drainage Systems (SuDS) mandatory in new housing developments in 2024, subject to final decisions on scope, thresholds and process following consultation.

In respect of many of the energy transition market support interventions implemented by the UK Government the policy intervention was either helping overcome the initial high costs of emerging technologies until the point that scale drives a lower levelised cost of delivery in the market or helping alleviate uncertainty regarding future market prices for the relevant funding sources. It might be argued that these challenges are even greater in the context of the nature market and commentators have made suggestions as to whether similar market support mechanisms should be applied to the nature market.

## 5.7 Recommendations and considerations for OEP

- The OEP should encourage the development and monitor the implementation of a ‘nature investment roadmap’, as committed to in the GFS (for 2023). The OEP should evaluate alignment of this investment roadmap with the EIP goals.
- The OEP should evaluate any future published ‘roadmap for financing green’ (with comparison made to the greening finance roadmap). The OEP should evaluate alignment of this roadmap with the EIP goals.
- The OEP could evaluate the conclusions and recommendations drawn by the Mission Climate Ready report, which focusses on climate adaptation, for their applicability in mobilising finance for achieving nature recovery, noting the integrated vision, policies, and plans required between Government and corporate organisations to achieve the three linked challenges of climate mitigation, climate adaptation and nature recovery.
- The OEP could, in addition to tracking the Government’s publication of nature investment roadmap, evaluate other issued sectoral roadmaps to assess if they contain actionable plans on investment to promote activities delivering nature recovery. This could include scrutiny into how climate mitigation and climate adaptation focussed roadmaps effectively integrate biodiversity enhancements into their outcomes.

## 6 Financial market mechanisms

In Part A of this Section, we consider some of the principle green finance instruments that are being developed to secure investment in green outcomes and more specifically in nature recovery, commenting on progress to date in investment secured and the extent to which these mechanisms have been applied to nature recovery.

In Part B, we then go on to explore progress in developing some of the enabling frameworks and support mechanisms to accelerate the mobilisation of finance.

### 6.1 Part A: Review of Key Financial Market Instruments

#### 6.1.1 Green Bonds

The Climate Bonds Initiative (CBI) provides specific definitions for green bonds and regular bonds, as per below:

**Green bonds:** According to the CBI, green bonds are essentially standard bonds with an additional “green” feature. They are designed to fund projects that have positive environmental and/or climate benefits. The majority of green bonds issued are green “use of proceeds” or asset-linked bonds. Proceeds from these bonds are earmarked for green projects but are backed by the issuer’s entire balance sheet.

**Sustainability-Linked Bonds (SLBs):** Similar to Green Bonds, SLBs incorporate additional features and linkages to a wider range of purportedly beneficial outcomes related to sustainability – in particular in some cases social value outcomes. The broad classification of SLBs, broader even than Green Bonds, lends itself to a vast array of oft-times tangentially linked beneficial outcomes that frequently require considerable MRV and regulation to generate truly sustainability positive-outcomes.

**Regular bonds:** also known as conventional bonds, are debt securities issued by corporations or governments to raise capital. The issuer promises to pay the bondholder a specified amount of interest for a specified length of time and to repay the loan on the expiration date. It’s important to note that the credit profile of green bonds is the same as other vanilla bonds from the same issuer, which is why prices are typically the same (a concept known as “flat pricing”). This means that the risk and return profile of a green bond is the same as that of a regular bond from the same issuer. The key difference lies in the use of proceeds, which are directed towards environmentally friendly projects in the case of green bonds.

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*The global green bond market experienced significant growth in 2023*

*Use of Proceeds (UoP) for the purposes of contributing specifically to terrestrial and aquatic biodiversity represented 16% of green bonds issuance purposes in 2023*

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#### 6.1.2 Global Green Bond Performance

The global green bond market experienced significant growth in 2023 with record green bond issuances during the first half of 2023 reached £248 billion, marking the highest half-year total since the inception of the green bond market (S&P Global, 2023). Global green bond sales from corporates and governments overall set records in 2023, climbing to £460 billion (BNP Paribas, 2023). Europe typically supplies around 50% of annual green bond issuance, and 2023 was expected to stay on trend, with higher volumes from both the European public sector and corporates (BNP Paribas, 2023). Other European government issuers of green bonds in 2023 included France, Germany, Ireland, the Netherlands, and the United Kingdom. A total of £152 billion of green bonds were issued by governments throughout 2023 (Bloomberg, 2024).

In the year to October 2023, Fitch Solutions stated that there had been an increase in sustainability linked bonds' (including green bonds). Use of Proceeds (UoP) for the purposes of contributing specifically to terrestrial and aquatic biodiversity of 16% in 2023 (Sustainable Fitch: Fitch Solutions, 2023), representing an increase from 5% in 2020. By contrast, 66% of all issued products included carbon emissions related KPIs (Sustainable Fitch: Fitch Solutions, 2023).

Where large-scale bonds to benefit biodiversity conservation are raised for environmental management, it is usually undertaken by supranational specific entities such as International Financial Institutions (IFIs) and MDBs. The New Development Bank (NDB), European Investment Bank (EIB) are prominent, but the World Bank is the major leader in issuances to benefit biodiversity conservation with 85% of issuances to date (Sustainable Fitch: Fitch Solutions, 2023).

In a global context, the UK must develop as an attractive and competitive market for green finance, where outcomes are transparently communicated and attributed and be seen as a market where government signalling, communication and policymaking provides rather than undermines confidence for green finance market actors.

### 6.1.3 UK Sovereign Green Bonds (Green Gilts) and Green Savings Bonds (GSBs)

The lion's share of all investment finance from the UK Government into nature-outcomes is sourced from Green Bonds, in the form of UK sovereign issued Green Gilts and the retail issuance of Green Savings Bonds.

The UK Government defines a Green Gilt as a type of government bond that is issued to raise financing from investors to fund green expenditures. In addition to these large-scale bonds, the UK government has also launched the retail-targeted UK Green Savings bond via National Savings & Investments (NS&I), aimed at achieving green finance through retail investors from £100 to £100,000. Together the expenditures allocated from these debt facilities are aimed at tackling climate change, rebuilding natural ecosystems, and supporting jobs in green sectors (HMT, DWP, DBEIS, 2021).

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*The lion's share of all investment finance from the UK Government into nature-outcomes is sourced from Green Gilts or the Green Savings Bond Scheme.*

*Allocations of finance raised from these sources focused on Agri-Environment Schemes, the Nature for Climate Fund and the Green Recovery Challenge Fund.*

*Green Gilts and the Green Savings Bond programme are likely to continue to be a predominant source of sovereign nature-funding for the foreseeable future.*

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The principles of the Green Financing Programme, which includes the issuance of green gilts, are set out in the Green Financing Framework. This framework explains how proceeds from green gilts will finance green expenditures to help tackle climate change, biodiversity loss, and other environmental challenges, while creating green jobs across the UK (HMT, UK DMO, 2021).

The types of expenditures that can be included in the programme are set out in six categories (HMT, UK DMO, 2021):

1. Clean Transportation
2. Renewable Energy
3. Energy Efficiency
4. Pollution Prevention and Control
5. Living and Natural Resources
6. Climate Change Adaptation

The framework also commits the Government to annual allocation reporting and biennial reporting on environmental impacts and social co-benefits, ensuring transparency for retail and institutional investors as

well as other interested parties (HMT, 2023). The UK announced plans to issue its first Sovereign Green Bonds in 2021 to meet investor demand and fund eco-friendly projects (HMT, UK DMO, 2021). Since this launch, a total of five transactions have been completed by the UK Government, amounting to c.£10bn of finance raised through auction or syndication.

No issuances to date have specifically identified nature-focused, or biodiversity conservation-related predefined focuses outside of the adherence to the GFF's six expenditure types. This is reflected in the Use of Proceeds (UoP) framework for expenditure outlined in both the GFF and the inaugural and second issuances of the UK's Green Gilt in 2021. Further scrutiny of the external review, a role potentially to be fulfilled by the OEP in coming years, identifies the following nature-related impacts through Living and Natural Resources, and Pollution and Prevention Control, the only two marginally nature-focused areas of the GFF at this time:

- Living and Natural Resources:
  - Absolute or % reduction in air/water pollutants,
  - Hectares of protected areas restored/maintained,
  - Increase of area under certified land management,
  - Number of Native species which have benefitted from the project,
- Pollution and Prevention:
  - Reduction of air pollutants,
  - Waste reduction,

The above are primarily focused on GHG reduction or socio-economic benefit impacts, which are indeed positive but are not related definitively and positively to nature impact – and in some cases could potentially be negative in their impacts on nature and biodiversity. In addition, allocations of funding, under the UK Official Development Assistance (ODA) programme, allocates funds not only to outcomes in the UK, but also to the contribution of these objectives in ODA-eligible countries.

Ongoing scrutiny of benefit to outcomes set-out in the EIP and GFS (among myriad other targets) pre-issuance is clearly critical in this regard to ensure that positive and negative impacts are net-balanced, benefits are not double-assigned to targets and that there is a clear, transparent, and traceable flow of issued debt to allocated funding and investment financing for projects that create outcomes.

The HMT Green Financing Allocation Report (HMT, 2023) issued in September 2023 reviews the allocation of proceeds from the debt issuance according to impacts aligned to the GFF. Under this allocation review, 27 separate allocations across the six categories are assessed for benefit, related to the combined volume of debt raised from UK Green Gilts and UK Green Savings Bonds. From Arup's analysis of this allocation, nature related allocations for the 2022 and 2023 period (including backwards allocations to 2020-21 and 2021-22 periods) amounts to c.£1.1bn. It is not possible to align this allocation sub-nationally within the UK with the information in this report and so further transparency of pathway between the funds outlined and the area of contribution will support the outcome-focused approach needed for nature-market confidence and integrity.

Key nature related funds and schemes noted as benefiting from the Green Gilt and Green Savings Bonds raised to date (i.e. partially *backed by* green finance) include:

### **The Nature for Climate Fund**

The Nature for Climate Fund is noted as having access to £650m for allocation to tree planting, woodland creation and management, and peatland restoration (Harrison, 2023). During the 2022-23 period to end of February 2023 allocations amounted to £153.5 million and according to the UK Green Financing Allocation and Impact Report, to September 2023 (Harrison, 2023) allocations for the Nature for Climate Fund had increased to £206.7 million for forestry, peatland restoration, parks, and other nature related projects (HMT, 2023).

## **The Green Recovery Challenge Fund**

The Green Recovery Challenge Fund was an £80 million (HMT, 2023) fund developed in response to the COVID-19 pandemic, designed to help nature recovery and conservation whilst creating and sustaining jobs. The fund was developed in partnership with the UK National Lottery and funded 159 projects across England (Defra, 2024a). The fund's focus was on nature conservation and restoration, nature-based solutions for climate mitigation and adaptation, connecting people with nature and supporting environmental sector job creation. Funds were distributed by the National Lottery Heritage Fund on behalf of Defra, Natural England, The Forestry Commission, and the Environment Agency (EA) (Defra, 2024a).

## **Agri-Environment Schemes**

Collated under Agri-Environment Schemes are the Countryside Stewardship Offer, Future Proofing Plant Health (FPPH) and the Environmental Land Management scheme (ELM). These schemes were allocated a total of £832million during the 2020-2023 period and account for the majority of 'nature related' funding provided. The importance of support for rural communities, natural capital owners and agriculture in delivering the outcomes of the EIP cannot be understated. As the stewards and often custodians of much of the natural resources, biodiversity and land in the UK and indeed England rural and farming communities have been on the forefront of nature-positive stewardship for many generations. The Countryside Stewardship (CS) Offer represents targeted support provisions for the delivery of nature-positive outcomes on England's land specifically those aligned to the increase of species abundance outlined in the EIP. In addition to this the FPPH represents a critical resilience programme to safeguard plant viability for generations to yet come.

The ongoing transition from the EU CAP to the UK Government's ELM scheme represents a huge undertaking, opportunity and challenge that, if coordinated and integrated across nature-backed markets, has the potential to impact systemic change through the UK Government's policy of Agricultural Transition (Defra, 2024b). The scale of the programme, the move away from a tenure and ownership-based BPS and a more environmentally focused land management approach, has the potential to support the direct-delivery of nature-outcomes at scale in rural farming communities. It should be noted however, that all funds allocated to the ELM scheme are not anticipated to be just nature-focused, and the replacement of the EU CAP BPS still requires a focus on sustainable farming practices. The Sustainable Farming Incentive (SFI) will complement the CS to focus on a number of farming-specific sustainability and nature-focused interventions improving animal health and welfare, managing nutrient standards and supporting hedgerow management standards among many others.

A clear roadmap and theory of change for the Agricultural Transition, tracing, monitoring, reporting and verifying the flow of finance and funding to outcomes generated by land stewardship, farmers and rural communities can both help enable support as well as demonstrate the achievement of the EIP apex goal, and the mobilisation of green finance to generate truly positive nature outcomes.

## **National Environment Readiness Fund (NEIRF)**

The National Environment Readiness Fund (Defra, EA, 2022) offers individual grants between £10,000 and £100,000 for farmer and farm groups looking to help attract investment into nature market. The projects funded should align with the Environmental Improvement Plan and assist farmers to trial new ways of earning from ecosystem services attract investment and create scalable investment models for wider adoption (across the farming community).

At the time of writing this REA, Green Gilts and the UK Green Bond Savings scheme represent the most significant proportion of all green finance in the UK, both public and private.

### **6.1.4 Nature Performance Bonds (NPBs)**

NPBs are an emerging set of debt performance-linked instruments that aim to better align the cost of sovereign debt with success in protecting or enhancing a country's valued, productive natural capital (Finance For Biodiversity Initiative, 2022).



NPBs are KPI linked debt instruments that link a set of nature and/or biodiversity performance outcomes to debt terms. A central characteristic of these instruments is that where performance outcomes are achieved, there would be a reduction in either the interest payment and/or principal payment, depending on the structure of the deal.

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*NPBs are KPI linked debt instruments that link a set of nature and/or biodiversity performance outcomes to debt terms.*

*NPBs have not been utilised by the UK Government yet, primarily due to outstanding challenges with regards to ongoing MRV and complexities in KPI setting.*

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In the case of an NPB being structured to reduce interest payments - should performance goals be met - annual debt service would be reduced. In the case of a principal reduction, any savings on debt repayments from meeting the agreed performance would occur at maturity of the bond. Unlike green bonds, which are use-of-proceeds bonds where all funds raised must be spent on delivering climate and/or nature outcomes, nature performance bonds only incentivise issuers to meet nature performance outcomes, without specifying how the funds must be used. Nature Performance Bonds (NPBs) have potential both in England and through export finance with the potential to contribute to the UK's overall commitment to the GBF supporting net-positive global nature impacts.

Examples of NPBs globally include the highly publicised so-called 'Rhino Bond', an Impact Investment Project undertaken by the Zoological Society of London (ZSL). Funding for this project was provided by the Global Environment Facility (GEF) of the World Bank, supported by a number of parties including the UK Government's Illegal Wildlife Challenge Fund. The bond resulting was issued as a five-year syndicated Wildlife Conservation Bond by the World Bank to specifically support the increase in population of the endangered Black Rhino in South Africa. The coupon from funding raised will be allocated to conservation projects specifically targeting this performance outcome as a covenant of the bond. Investors returns are therefore determined directly from the increase in population over the five-year period.

Challenges to MRV for performance on bonds is currently seen as a primary hurdle to direct implementation of NPBs in the UK. However, the UK Government and many private sector technology companies are attempting to bridge the gap to establish transparent, traceable, and interoperable systems that can measure, quantify and even forecast the future state of ecosystems. One such project is the Natural Asset Recovery Investment Analytics (NARIA) project, a CreditNature venture supported by the UK Government (CreditNature, 2023). This project aims to establish verifiable nature credits, that provide clear proof of provenance and asset-level data to support credit information and uphold market integrity. Interfaces of such products with a national land-use and ecosystem database could be essential if large-scale investment and confidence in directly linked performance bonds are to grow to critical mass levels. Scrutiny of such repositories of data, traceability to funds and their veracity on an integrated basis will be critical to enable ongoing confidence in nature markets.

### 6.1.5 Debt for Nature Conversion/Swaps (DFNS)

Debt for Nature Swaps (DFNS) are a form of NPB that allow countries to refinance existing debt from a higher rate to a haircut lower-rate in exchange for debt-covenant linked commitments to nature conservation and action. Such mechanisms allow countries that may be either carrying a large and unsustainable balance of debt to both address the sustainability of their existing principals, convert to a more affordable long-term solution as well as providing a tangible financial incentive to support nature-conservation activities.

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*Debt for Nature Swaps (DFNS) are a form of NPB that allow countries to refinance existing debt from a higher rate to a haircut lower rate in exchange for debt-covenant linked commitments to nature conservation and action.*

*DFNSs have not yet been domestically applied in the UK, focusing to date on export finance. There however could be targeted potential for them in the future.*

*DFNSs are not currently seen as a large-scale solution to sovereign debt structuring in comparison to traditional means and practices of debt management.*

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Such swaps can generate funding and income for conservation through the savings from refinancing and additional credit enhancements afforded by a more sustainably managed debt balance sheet. They offer a potential long-term solution to credit challenges and offer definable, transparent and auditable pathways to financially valuing conservation activities.

Examples of recent DFNS include Gabon's \$500million Blue Bond DFNS in August 2023 focuses on marine conservation in the coastal African state of Gabon. The initiative combined an issuance of \$500million of 15-year amortising notes by the lender that were used to fund a 15-year \$500million loan to the nation of Gabon. The mechanism for interest payment in the loan facility is the basis for unlocking nature action, it is split into 3 parts:

- Financial Interest – the standard interest payment reflected from the reduced coupon rate afforded by the insurance mechanism amongst other factors;
- Conservation Interest – Funding specifically paid to support conservation fund activities; and
- Endowment Interest – A long-term funding source for conservation projects of longer-term impact realisation that require an ongoing endowment account to realise their impacts.

As a result of the Gabon Blue Bond DFNS Issuance, Conservation Loan and political risk insurance, the Nation of Gabon was able to unlock \$125million in conservation activity funding, link commitments to the Kunming-Montreal COP15 GBF and crucially refinance an outstanding suite of close-to maturity amortizing notes in the order of \$2.5bn.

Criticisms of DFNSs to date include assumptions that DFNS can structurally alter the unsustainable levels of indebtedness that nations may be under, and that DFNS has only been demonstrated to be used at a relatively small-scale to overall sovereign indebtedness. DFNS cannot be used as the fundamental lever to restructure national debt and more traditional forms of fiscal and sovereign debt balance sheet management must be utilised for this much larger challenge. There are also concerns that the shift to obligations for nature may detract from focusing typically limited resources away from human communities, particularly in developing countries where poverty levels are high.

Although predominantly export-focused at this time, DFNS presents opportunities for the UK and England through a number of potential avenues. Two are considered to be of particular interest more immediately, as highlighted below:

- a) **Export impacts:** Export finance agencies can contribute to the overall response to the GBF halting of nature and biodiversity loss through nature and biodiversity finance export. This approach could contribute to the overall response to the GBF, and the UK's commitments therein, but cannot

reasonably be considered to be addressing the EIP apex goal of increasing species abundance in England. Export-credit for nature is not directly noted in the GFS as contributing to its mobilisation objectives, however, in the future this could be considered as a viable additional element to finance export DFNS globally to support contributions to the GBF. Such contributions will need extensive and globally interoperable MRV ensuring that outcomes for nature and biodiversity are clearly and transparently tracked, monitored, reported, and verified.

- b) **Applying the approach domestically:** Working at a smaller scale, there is an opportunity for the Government to work with communities, landowners, farmers and landed estates within the UK to assess indebtedness and potentially provide more sustainable financial futures for these groups as stewards and managers of the land. The conceptual premise of refinancing for those that may be struggling with indebtedness is synonymous with the obligations of landowners, managers and farmers to protect nature – with often hard to value and monetise beneficial return for the services provided. A domestic DFNS programme could therefore provide a lifeline to marginal cash-flow landowners and/or farmers to mobilise nature outcomes in the UK towards the EIP apex goal – while serving to create more sustainable long-term rural and farming communities. Such obligations would need to be balanced against the ongoing requirement for sustainable food production, but such a mechanism could be worth exploring.

### 6.1.6 Impact Investment Funds

Impact investment funding, broadly termed by the British Private Equity & Venture Capital Association (BVCA, 2024) (BVCA) as funds that specifically target *social and environmental returns* in addition to financial returns, have had success albeit on a non-systemic and limited basis in recent periods. Such funds are often supported either directly or indirectly by Government catalyst and innovation funding to maximise gearing benefit and generate the necessary returns to exceed hurdle rates for funding projects with socio-economic and environmental value that cannot be currently monetized in traditional financial markets. An excellent example of such a fund is the Finance Earth and Federated Hermes UK Nature Impact Fund, that was directly supported by the UK Government via £30 million of seed funding provided by Defra. This fund supports the financing of high-quality nature-based-solutions projects and enterprises that deliver social and environmental impact, while generating financial return for institutional investors through the provision of ecosystem services. Impact investment funds are closely financially regulated by the FCA, in accordance with their responsibilities and powers under the FSMA. The effective MRV and outcome attribution of the impact of impact funds associated with nature outcomes is not clearly defined at this stage and should be considered.

Financial regulation and oversight for fund management, marketing and activities in the UK is the obligation of the FCA as financial regulator under the FSMA (HM Government, 2023c). The OEP's oversight and scrutiny obligations for impact funds should focus on the efficacy of UK Government actions to support, facilitate and monitor the contribution of impact funds to UK Government policy outcomes.

### 6.1.7 Corporate Fixed-Income Markets

Fixed income markets remain a very buoyant source of green finance for the non-sovereign banking sector also. In the first nine months to September 2023, UK corporates raised a record £6.1 billion (Mondo Visione, 2023), with two of the largest bonds being from Thames Water PLC and DS Smith PLC the large multi-national packaging corporation (LSEG, 2024). Sumitomo Mitsui Financial Group Inc underwrote the highest green bond issuance ahead of COP28 at £774.6 million. (Mondo Visione, 2023)

Current use of proceeds and allocation for corporate finance raised from bond-issuance is currently typically linked to corporate-derived frameworks. Many of these frameworks accord to principles such as the ICMA or CBI Green Bonds Principles but do not have a requirement to identify specifically nature outcomes. Ahead of the establishment of the UK Government's Green Taxonomy, products issued in this area will be subject to the FCA's SDR mandated disclosure requirements to be accurate and not-misleading in sustainability related claims. SDR's focus on marketed and traded products limits its ability to dictate use of proceeds beyond the guidance provided in the consumer-facing information such as naming, marketing and terms use – but it is nonetheless a critical aspect of the transparency and integrity requirements for green and nature finance markets. At this time, the SDR will not provide sufficient fidelity to distinguish nature finance

from green finance for the purposes of allocating nature finance to UK biodiversity and nature outcomes such as the EIP.

Corporate fixed income markets will increase in their importance in the achievement of the GFS and EIP outcomes and goals, and will continue to be regulated through existing powers afforded by the FSMA through the FCA.

### 6.1.8 Exchange-Traded Funds (ETFs)

ETFs in the green finance space are numerous globally and have been subject of much concern among green-investment advocates over the past 12 months. Consistent claims of greenwashing have been seen in some cases as being misleading as well as domiciliary challenges for cross-border funds have led to an inability to transparently discern whether and where green outcomes were manifesting. The question of ‘where’, given the more traditional domestically domiciled mutual funds, has led to many ETFs with green ‘claims’ to be caught between multiple jurisdictional-regulations such as the EU’s Sustainable Finance Disclosure Regulation (SFDR), the UK’s SDR and the EU directive on Markets in Financial Instruments (MiFID II).

With this limited confidence in the integrity of many ETF claims, but more importantly the limited number of UK-domiciled ETFs, the UK’s FCA has taken the step to limit ETFs from being labelled according to the SDR. The UK SDR certification and labelling is only to be available to UK domiciled ETFs, and according to Morningstar of the 1780 ETFs available in the UK in February 2024 with sustainability linked terms – 77% of these are domiciled internationally (Financial Times, 2024).

Given these points until such time as a uniform, federated and transparent approach to the use of ETFs for green financing, specifically nature, can be established ETFs it is hard to see ETFs as a scalable mechanism for mobilising outcome-generating green finance for nature.

### 6.1.9 Green Loans

Typically backed by green bond issuances, ‘green loans’ are offered by banks and in some-cases philanthropic entities to support specific undertakings associated with a wide range of activities either directly or tangentially related to sustainability and in some cases nature. Loan books consisting of such facilities are anticipated to be included within the UK SDR, and activities undertaken from the UoP resulting from the provision of ‘green loans’ are anticipated to be dictated as applicable uses under the forthcoming UK Green Taxonomy.

Adequately defining applicable expenditures to focus on real-outcomes that contribute to nature, and the policy-targets established by the UK Government will be the determining factor in success and MRV requirements for loan-issuers and project developers alike to demonstrate compliance should not be underestimated. Dedicated conservation and nature-focused facilities do exist, and examples of dedicated loans such as the EIB’s long-standing Nature Capital Financing Facility (NCFF) (European Investment Bank, 2017) provide direct and intermediated, debt and hybrid financing solutions specifically for conservation practices, supported by the European Commission’s LIFE Programme (European Investment Bank, 2017).

Financial regulation and oversight for loan-books in the UK is the obligation of the FCA as financial regulator under the FSMA.

## 6.2 Part B: Enabling Frameworks and Support Mechanisms to Accelerate Mobilisation of Finance

### 6.2.1 Tax Incentives and Subsidies

Tax incentives and subsidies can be used to encourage private investment in nature-related projects, and to discourage and penalise investments into activities which are harmful to nature. Tax incentives can encourage investment into nature protection and restoration from individuals and businesses whilst subsidies can reduce the costs associated with green investments, making projects more financially viable. Beyond direct financial benefits, these incentives can level the playing field, ensuring that green technologies can compete effectively with conventional alternatives. Moreover, they can mitigate risks by providing tax relief on research and development expenses, encouraging innovation in clean technologies.

## 6.2.2 Active Risk Management in Green Finance Markets

Active risk management by financial institutions, including banks, financial services, and insurers, is an ongoing commitment and requirement that is a key focus of day-to-day operational activities. The UK Government's approach to policy, legislation, and regulation, including virtue signalling and communication, all impact the active form of risk management that UK corporations and financial institutions undertake daily.

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*Active risk management by financial institutions, including banks, financial services, and insurers, is an ongoing commitment and requirement that is a key focus of day-to-day operational activities.*

*Integration of systemic nature and biodiversity risks should form part of such practices.*

*Monitoring, Reporting and Verification (MRV) requirements to ensure transparency and compliance are not insignificant and should not be underestimated as an afterthought.*

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As with all corporations and financial institutions within nature and green markets, transparency and accountability are critical. All mechanisms noted within this section would require clear pathways for ensuring that the raising and use of proceeds associated with nature finance are employed specifically and effectively to achieving positive nature outcomes. In this regard, the MRV requirements to ensure such transparency and compliance are not insignificant and should not be underestimated as an afterthought.

## 6.2.3 Credit Ratings Agencies (CRAs)

The mechanisms noted above, related to the mobilisation of green finance and specifically nature finance, all rely on a fundamental tenet of modern debt markets – the timely, accurate and verifiable assessment of risk. Credit Rating Agencies (CRAs) such as Standard and Poor, Fitch and Moody's undertake the role of credit rating agencies to provide a rating to sovereign nations, corporations and individuals in order to quantify the ability for a counterparty to repay debt. This in turn impacts the cost of the debt provided and ultimately the access to debt at all in some cases.

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*The timely, accurate and verifiable assessment of risk by Credit Rating Agencies (CRAs) is a fundamental tenet of modern financial systems.*

*The World Bank Publication: The Economic Case for Nature [27] makes the risk of nature collapse to the world economy both stark and undeniable, indicating that a conservative estimate in collapse of select services could wipe \$2.7 Trillion from GDP by 2030.*

*Collaboration across the entire integrated nature markets system will be required for CRAs to accurately, contemporaneously and continually update risk ratings to a similar basis by which current, complex financial risk mechanisms occur in effective real-time.*

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The link between nature and biodiversity ecosystem health, and economic effectiveness has been made very clear. The World Bank Publication: The Economic Case for Nature (The World Bank Group, 2021) makes the risk of nature collapse to the world economy both stark and undeniable, indicating that a conservative estimate in collapse of select services could wipe \$2.7 Trillion from GDP by 2030 (The World Bank Group, 2021). This is even more stark in lower-middle-income countries where drops in 2030 GDP could be as much as 10%. The World Economic Forum similarly indicated the level of moderate or high reliance on nature from global businesses was in the order of \$44 Trillion in economic value added – or over half the world's current GDP (World Economic Forum, 2020). Economic exposure is clearly proportional to the size



of economy, with the greatest impacts being concentrated in absolute terms in China, the European Union and the United States.

This risk potential is beginning to be more keenly considered by CRAs, as biodiversity loss and natural capital degradation poses a risk to market stability through increased potential for default events (Agarwala, Burke, Klusak, Kraemer, & Volz, 2022). Markets and investors reliant on traditional forms of CRA ratings, that do not account for the real-linked biodiversity loss impact to creditworthiness, will be unable to identify, price and manage risk across their portfolios and as such may be open to unquantified Value at Risk (VaR). Economies and sovereign nations who similarly rely on nature and biodiversity to underpin economic growth must consider the impact to sovereign credit ratings, as an impact to the economy will be reflected in sovereign debt ratings, and accordingly will be passed through to inter-bank lending levels. Increased upward pressure on inter-bank lending rates will impact commercial banks and consumers. This in-turn could impact the ability of businesses to lend and invest, creating a typical crisis feedback loop between biodiversity degradation, reduced economic growth, reduced ability to invest and back to further degradation through lack of management and recovery funding.

Ratings agencies' ability to reflect real-risk to biodiversity and nature-loss and in-turn its impact on the real economy will require new risk-assessment tools and a new approach by credit-risk agencies to both determine downside and also reward investments that have clear benefit to biodiversity net-gain and nature. Collaboration across the entire integrated nature markets system will be required for CRAs to update risk ratings accurately, contemporaneously and continually.

Ratings agencies are supervised under the remit of the FSMA and the ongoing scrutiny and regulation of financial services firms and their opinions impact all traditional and green finance markets. They are regulated by the FCA.

#### 6.2.4 Sustainable Banking and Finance Institutions

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*Banking and financial institutions are currently leveraging and employing green finance through myriad means including Fixed-Income Securities, Exchange Traded Funds (ETFs), Biodiversity Credit Exchanges, Green Loans and Impact Investment Funds among many others.*

*The FCA remains the principal financial regulatory authority with regard to financial markets through its considerable powers under the FSMA.*

*The implementation of the UK SDR, UK Green Taxonomy and UK SDS will be critical for the effective use of private banking capacity and capability to achieve societal aims for sustainability outcomes – including but not limited to nature.*

*MRV obligations to establish the impact that financial products have on real-outcomes will be complex and substantial and these requirements should not be underestimated.*

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The private banking industry both levers finance and provides finance onwards to the market it serves. The range of products, securities and facilities offered by banks to their customers are very wide ranging, and with regard to green finance the following are emerging as increasingly important for achieving nature outcomes.

#### 6.2.5 Biodiversity Credit Exchanges

Monetisation of biodiversity impact is a key constraint to the development of sustainable and self-mutualising nature markets. The non-fungible, diverse and complex interconnected uniqueness of ecological systems cannot easily be distilled or simplified into one discrete determinant of positive or negative outcomes.

Further complicating this is the bio-system linkages, for example between soil nutrition, plant growth and health and linked animal and human food chains. Representing positive or negative impact to one or multiple

of the facets in this complex system, and attributing this to a partner for monetary loss or gain is challenging, and so far, has been represented typically by proxy-metrics such as those identified within the mandatory Biodiversity Net Gain (BNG) additions under Schedule 7A of the Town and Country Planning Act 1990, and the use of Biodiversity Credits. These credits have been created in an attempt to monetise biodiversity net-gain activities and provide a proxy for biodiversity impact through habitat creation.

To facilitate this positive action, specialist asset manager Gresham House, in collaboration with Defra, Natural England, the SBTi and the TNFD established The Environment Bank. This bank provides an exchange house for Government-backed Biodiversity Credits as part of the Gresham House British Sustainability Infrastructure Fund II. Credits are provided a minimum market backstop guarantee via Natural England of 2-3x market rates, and revenues generated from the sale are attributed back to the support, stewardship and management of the credit-linked habitats. This management includes the ongoing assessment of veracity, fidelity and integrity that are provided via first-hand stewardship and monitoring via eDNA, Camera Traps, Surveys and Drone-based LiDAR inspections.

This approach is currently being used to support off-site development of BNG compliant landscapes and habitats for sale to offset more intense development, where the achievement of an onsite 10% BNG in accordance with new law may be challenging to achieve. Examples of this include the Wallacea Project by Gresham House, in collaboration with the CreditNature, Operation Wallacea and the TNFD among others - providing an increase in abundance of an estimated 2000 species including habitat for the rare Nightingale.

The long-term success of such exchanges cannot be determined, as the programmes are still in their infancy, but such innovative approaches to contribute to biodiversity net gain should be recognised. Ongoing challenges to the biodiversity credit approach include the previously noted current focus on just one aspect of the complex and interconnected nature-system (habitats for biodiversity), as well as the ongoing commitment for life-cycle MRV that will be required to uphold the integrity of each credit and the market as a whole.

Scrutiny and oversight for developments in biodiversity and other nature-credit schemes will be critical. Oversight of regulation efficacy, simply surmised as the balance of sufficient regulation to achieve stated requirements but not to excessively burden on a nascent market, will be key. In addition to this role, there will be a need to scrutinise the MRV and impact attribution practices and the integrated reporting of outcome impacts for Government purposes signalling progress towards policy goals such as those set out in the EIP23 and GFS.

### 6.2.6 Certification and Standards

Certification and standards provide a mechanism for mobilising green finance by increasing and upholding market integrity. BSI's report "A high integrity standards framework for UK Nature Markets" notes that two of the key drivers for directing finance towards solutions for nature recovery include ensuring high integrity investments which deliver genuine environmental benefits and providing clarity and assurance for market participants to avoid greenwash and enable investment in various habitats and ecosystem services (BSI, 2023).

A lack of standardisation and interoperability is one of the key challenges associated with scaling green finance in the UK according to the EIP (Defra, 2023a). Additionally, the need for greater transparency and comparability was raised during the interviews, particularly in relation to the introduction of the TNFD in relation to nature-metrics, underpinning the need for standardised and comparable metrics to enhance the effectiveness of disclosures. As such, robust, evidence-based, and accessible standards that align with international frameworks such as the TNFD are necessary for mobilising green finance (HMT, DWP, DBEIS, 2021). The UK GFS provides a range of tools and methodologies for measuring and monitoring green finance, including drawing on existing national and international standards (HM Government, 2023d). The upcoming BSI High-Integrity Standards Framework for UK Nature Markets will also provide UK-orientated standards.

It was abundantly clear from interviews with experts, that policymaker, standards setters, and verifiers must be mutually exclusive and independent. Objectivity and independence are critical in maintaining market integrity between the setting of standards for minimum compliance, and the verification of compliance to those standards.

Similarly, jurisdictional boundaries associated with enforcement of non-compliance events must be clearly and transparently stated, so that Government is clear itself on how to regulate, scrutinise and guide the complex market for green finance and nature towards positive outcomes. Over-enforcement beyond jurisdictional scope can significantly impact market confidence and unduly throttle investment, while under-enforcement can lead to markets that serve only their own ends and do not generate progress towards the outcomes and means targeted by their existence.

### 6.2.7 Collaboration with Multi-Lateral Organisations

Supranational and multi-lateral development organizations, in particular Multi-Lateral Development Banks (MDBs) have provided a large proportion of financing for both green finance and finance for biodiversity and nature on global scale. These entities have significant cross-jurisdictional expertise and skills, that can bring best practice from global counterpart markets to the UK. The NDB and EIB are prominent providers of innovative multi-lateral finance and when focusing on the largest financial mechanisms for mobilising finance to date, namely green bonds, the World Bank is the major leader in issuances to benefit biodiversity conservation - with 85% of issuances to date [15].

Leveraging supranational knowledge, lessons learned and best-practice through cooperation with multi-lateral organisations will be important to create a competitive UK green finance market, the primary objective of the UK Green Finance Strategy (HM Government, 2023d). Collaborating with multi-lateral organisations also provides insight into exogenous market conditions, and potential requirements for standardisation and interoperability between markets. Positive, cooperative and collaborative relationships between multi-lateral organisations and UK policymakers, legislators and key market actors will ultimately promote confidence in the integrity and efficiency of the UK green finance market.

## 6.3 Recommendations and considerations for OEP

- The OEP should explore how it can work with the FCA to mutually support their respective remits as they relate to green finance. The OEP could offer support in ensuring the FCA's processes are as informed as possible by the Government's policy outcomes for nature.
- The OEP should seek to articulate a consistent and clear message to the market to explain its role and approach.
- The OEP could evaluate the financial impacts and environmental outcomes associated with implemented tax incentives and subsidies. To support the Government's determination of how tax breaks and subsidies fit into the wider UK and international tax landscape, the OEP could focus on the theory of change pathways connecting tax incentives, subsidies, and nature outcomes.
- The OEP could evaluate impacts to nature of specific cases where Government funding has been used successfully to mobilise private finance, to amplify sharing of lessons learned.

## 7 Nature market mechanisms

In this section we explore progress in the development of nature markets, both voluntary and compliance based, as a delivery mechanism for mobilising investment towards nature outcomes and services.

### 7.1 Nature Markets Framework

In its Green Finance Strategy, the UK Government states its commitment to fostering growth in high integrity nature markets that “unlocks truly additional finance for net zero and takes advantage of the synergies between carbon and other ecosystem services, such as biodiversity, water or flood mitigation, to unlock additional investment in nature”.

The government’s Nature Markets Framework was published alongside the 2023 Green Finance Strategy and constitutes the overarching policy framework that also incorporates prior market development initiatives. The first annual update to the Nature markets Framework was published in March 2024.

The Nature Markets Framework sets out core principles for nature markets; current rules for accessing markets and combining income streams (including commissioning work to consider the question of stacking); an arrangement with the British Standards Institution to develop a set of high-integrity nature investment standards; and next steps to clarify and develop institutional and regulatory roles and market infrastructure. In its annual update in March 2024, progress is reported in a range of areas – including the introduction of mandatory Biodiversity Net Gain and the growth of voluntary nature-based carbon markets.

#### 7.1.1 Compliance nature markets

There are currently two compliance-driven nature markets within England:

- Nutrient markets (Nitrogen and Phosphorous); and
- Biodiversity markets.

##### *Nutrient markets*

In 2018 the ‘Dutch Nitrogen Case’ outlined the requirement for nutrient neutrality (NN) to prevent harm to European designed waterbodies. Within the England there are 74 Local Planning Authorities (LPAs) which have European designated waterbodies (Special Areas of Conservation, Special Protected Areas and Ramsar sites). In response to this NN requirement, several nutrient and phosphate nutrient markets have emerged within England that provide nutrient mitigation via Nature Based Solutions, in turn to enable development in these LPAs (e.g. the Somerset Catchment Market).

##### *Biodiversity markets*

Mandatory Biodiversity Net Gain (BNG), as a condition to get planning permission for new development in England, came into effect 12 February 2024. Development needs to increase biodiversity by at least 10%. There are 3 ways BNG can be achieved: through on-site biodiversity creation; off-site biodiversity creation or purchase of off-site biodiversity units through a market; or – as a last resort – through the purchase of statutory biodiversity credits from the government. As such BNG underpins a compliance-driven market for nature. The accompanying Biodiversity Metric 4.0, alongside the in-development British Standards Institution (BSI) nature investment standard, represents strong progress in establishing monitoring, reporting, and verification standards (Defra, 2024c). As Biodiversity Net Gain has only recently been mandated, the market supporting this is very early in development.

##### *Future compliance markets*

There is potential for additional compliance markets. In 2022, Defra launched a consultation of Marine Net Gain, and are currently exploring the market-based approach to marine net gain policy development. In addition, recently proposed development within the Cambridge area was blocked due to Cambridge Water’s Water Resources Management Plan’s inability to demonstrate that the new properties within the Local Plan could be developed without risk of deterioration to the local water environment (including chalk streams).

The Government is developing a water credit market to help unlock development within the Cambridge area (DLUHC, 2024).

### 7.1.2 Voluntary nature markets

The primary voluntary nature market is the carbon market. There is also activity around establishing water credits focused on water quality, flood alleviation and water cooling.

#### *Carbon markets*

There are two carbon mechanisms which were supported by the UK Government and the Devolved Administrations to enable compensating for emissions: the UK Woodland Carbon Code and the UK Peatland Code. These are the two most mature voluntary markets in the UK, and the annual average growth for UK WCC units between 2018-2022 has been 28%. In its March 2024 update to the Nature Markets Framework, the Government notes that “*The number of projects in the Woodland Carbon Code in the UK has increased at an average annual growth rate of 68% since 2019. 2,037 projects are on the UK Land Carbon Registry as of December 2023, of which 590 (29%) are validated. The number of projects in the Peatland Code in the UK has increased at an average annual growth rate of 190% since 2017. As of February 2024, there are 244 Peatland Code projects in the UK, of which 85 (35%) were validated.*” (Defra, 2024c)

There are multiple other mechanisms emerging to sell voluntary nature-based carbon including:<sup>2</sup>

- **The Salt Marsh Code** (UK Centre for Ecology & Hydrology, 2024);
- **Wilder Carbon** - sells a bundle of carbon and biodiversity outcomes (Wilder Carbon, 2024); and
- **Blue Carbon Code for Seagrass** (Nature-based Solutions Initiative, 2023).

#### *Woodland water credits*

As stated on the Woodland Carbon Code website, and as also referenced in the 2024 Nature Markets Framework update, a “*Woodland Water Code is being developed by a consortium led by Forest Research, funded by the UK Government through Defra’s Nature for Climate Fund programme. The consortium is working on developing woodland water credits, initially for water quality and then for flood alleviation and water cooling. A concept note for integrating the Woodland Water Code with the Woodland Carbon Code was approved by the Woodland Carbon Code executive board in January 2023. An initial desk-based piloting phase of the water quality element of the code will run between May and September 2024.*” (Woodland Carbon Code, 2024).

## 7.2 Views on nature markets

Nature markets are a key strand to the government’s strategy for mobilising investment into nature recovery. There is a significant amount of work ongoing, under the umbrella of the Nature Markets Framework, which in turn is stimulating activity and effort including through the emergence of multiple active nature markets on the ground. These remain small and embryonic, but the general sentiment and outlook is positive; and policy continues to evolve including to address some key challenges around scaling and designing the markets. The government’s actions and initiatives to-date including under the Nature Markets Framework, and the activities this has stimulated, arguably position the UK as a world leader in nature market development. This progress to-date should be recognised.

Nature markets are also a sensitive topic, overall and around specifics such as stacking. The speed with which some of this can develop may therefore be inherently constrained, and policy development needs to be grounded in the best available evidence and data and needs to involve extensive stakeholder engagement.

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<sup>2</sup> All of these were funded by the National Environment Readiness Fund.



## 7.2.1 Challenges to scaling up investment, including via Nature Market mechanisms

### 7.2.1.1 Sufficiency of demand

With the BNG requirement having been mandated for a few months only, since February 2024, the impact this will have is as yet unknown. In terms of directing investment, the government's own analysis in the 2024 Nature Markets Framework update suggest that the market for BNG "is likely to be worth between £135 million to £274 million annually." Nonetheless, a recurring theme in interviews was that there needs to be a greater push to drive further growth in the context of nature markets, and it is considered that BNG will not suffice to attract and provide the private investment needed to achieve the EIP goals. As nature has traditionally been perceived as a public good, without actively stimulating demand there remains little incentive to invest in it further beyond public pressure.

Private finance streams into voluntary nature markets are currently seen to be modest in scale. Recent years have seen the establishment of concessional finance instruments such as the BNIF, which has seed funding from HM Government to absorb the risk of high integrity nature projects, and the Local Investment in Natural Capital (LINC) programme, which has funding to reduce transaction costs, create aggregated nature markets, and improve investment readiness across combined local authority areas. These instruments will act to reduce risk whilst simultaneously expanding local nature markets and their ability to receive private finance at a larger scale. It was suggested that the Government should consider expanding the BNIF to fund more projects, and the LINC programme should be expanded beyond the existing four combined authority areas.

It is also noted that, as and when BNG and Nutrient Neutrality projects increase in volume, transactional costs should reduce and eventually the market should reach a tipping point where it can self-sustain and where all upfront investment and readiness costs are incorporated into the pricing.

### 7.2.1.2 Sufficiency of (aggregated) supply

It was noted that where investors are looking to spend on nature, they can prefer projects that match the size of their investment, rather than an aggregation of smaller projects that might result in higher perceived risk. Many UK based projects are currently seen to be too small or immature, or lack the capacity, to receive the level of investment some investors are looking to put in. As demand for nature services grows, stimulated by policy levers, awareness from nature disclosure and other commercial drivers the level of supply will need to increase alongside the ability and mechanisms to aggregate this.

In this context it has also been noted that other countries in the Southern hemisphere will in the short term have larger projects on offer (due to their geography and scale) which could more easily attract large investors as single landowner and single mechanism opportunities can bring lower transaction costs, more established monitoring and verification, and therefore could be seen to provide greater opportunity. The flip side to this are genuine concerns about additionality and reliability of outcomes.

It was suggested therefore by some commentators that designing successful nature markets in the UK may therefore require continuing effort to lean into funding small projects that restore local biodiversity, whilst also attempting to enable mechanisms that can be applied to large or aggregated projects. We note that the markets that are emerging are in essence looking to enable the aggregation of supply such that a range of buyer needs and volumes can be met, and as such the two don't necessarily need to be seen as in conflict or mutually exclusive.

More broadly it was also noted that the flow of UK finance enabling international nature outcomes should not be considered a loss or a negative; whilst the Green Finance Strategy assigns targets to achieving domestic green finance goals, the UK Government is a signatory to the Convention on Biological Diversity and is therefore committed to assisting in global biodiversity targets.

## 7.2.2 Challenges to designing Nature Markets

### 7.2.2.1 *Clarity of governance and institutional architecture*

Nature markets are complex. This complexity means their design and development requires a robust set of market rules and standards as well as strong governance including clarity on roles and responsibilities, to ensure integrity of and confidence in the market.

Currently there is seen to be a lack of clear, overarching governance, which in turn leads to a disaggregated set of market mechanisms. The Broadway Initiative's report on 'The State of UK Nature Markets 2023' calls for Government to create and deliver an implementation plan for a robust governance and institutional architecture for nature markets.

Some interviewees proposed various regulatory approaches including the establishment of an independent regulatory authority under Defra. This authority would oversee credits and facilitate their purchase under the UK taxonomy, with an ombudsman either appointed by the government or externally and accessed through (and funded by) membership compulsory to those participating in nature markets. This would introduce a process to both standardise and audit. It was recognised that this would be a significant undertaking, and one which will require iterations through trial and error to ensure a robust and reliable process is developed. It was also suggested that, once developed, this would also provide a firm platform on which the OEP could monitor the flow of finance through nature markets.

It was suggested that regulatory authorities associated with markets should focus on the regulating the outcomes of nature markets rather than looking in depth at the mechanics of each transaction. Overregulation of mechanics could lead to unintended consequences. There is an opportunity for regulation authorities to make the most of best available data and tools to streamline the regulatory process. In addition, there is an opportunity develop a continually improving governance structure which is proportional to the nature markets landscape.

There seems to be a limit to which the OEP can, or indeed needs to, concern itself with the specifics and mechanics of the design and development of nature market. Having said this, given that there is a need for effective governance and institutional infrastructure to be put in place, the OEP could consider if it could have any role to play in this governance landscape (recognising that this is subject of course to the OEP's remit and responsibilities).

### 7.2.2.2 *Monitoring, Reporting, and Verification (MRV)*

The continued development of adequate monitoring and verification standards for nature outcomes is essential to facilitate growth in investment in nature-based solutions, as confidence in nature-based outcome improves. MRV processes and technologies can provide credible evidence of the environmental impact of different projects, which can help to attract and focus investments.

The Biodiversity Metric (BSI, 2023), alongside the in-development British Standards Institution (BSI) nature investment standards programme, has shown strong progress in establishing monitoring, reporting, and verification standards as part of the newly established Biodiversity Net Gain (BNG) and Nutrient Neutrality (NN) markets.

Within this context tracking investment flows is seen as critical to enabling more informed decision making and building confidence in and credibility of the market.

It was noted that there is an opportunity for financial institutions and banks to leverage their expertise and financial intermediation in the design and development of nature markets, and similarly for environmental economists. These are important fields that need to sit alongside deep expertise and knowledge of ecosystems and environmental processes.

### 7.2.2.3 *Stimulating supplier participation - including through capturing all benefits*

Nature-based solutions typically deliver multiple benefits, which in turn creates the potential to generate multiple revenue streams that can be used to finance investment. However, unlocking this requires clear and certain rules about the separate sale of different environmental services from a single activity; or what is commonly referred to as 'stacking'.

The Broadway Initiative’s report on ‘The State of UK Nature Markets 2023’ notes that “Most nature-based projects in the UK are still funded based on a primary environmental service required by buyers. A limited number of buyers are willing to pay an additional amount for the secondary environmental benefits delivered by the projects. Although some progress has been made on ‘stacking’ policy, barriers remain which limit the capacity of landholders to obtain market value for the additional services being delivered.”

Stacking is a complex and sensitive topic, and there is currently not a clear picture of the optimal way to approach if, when and how stacking should be allowed or not. While stacking is recognised to bring benefits, there are very few actual, on-the-ground examples of stacking in practice, and to-date a largely precautionary approach has been applied to try and mitigate what are perceived to be the risks associated with stacking. However, the Nature Markets Framework is clear that ‘Stacking is an important concept to support achieving multiple environmental outcomes’ and sets out the current rules in place. Defra has also commissioned research to carry out analysis to inform the evolution of its stacking policy and determine whether a greater degree of stacking should be permitted.

It is also recognised that any development of stacking policy interfaces with other important facets of market design that are critical to well-functioning nature markets. This includes:

- Ensuring additionality: There is a requirement to define baselines for nature markets to demonstrate additional improvement to the environment. It was noted that agreement of when the baseline should be taken may not be agreed by all parties, and that this therefore needs to be addressed within nature markets principles and standards. In reference to stacking policy, this too should ensure investments in nature that are additional, in other words that would not have occurred anyway.
- Ensuring no double-counting: tracking and tracing the source and sale of credits is critical to ensure transparent accounting of the benefits and to demonstrate there is no double counting or selling. This is one of the reasons why Natural England have put in place the BNG register, to prevent the double-counting of BNG units. In reference to stacking, similarly market infrastructure, in particular market registries, would need to be capable of transparently accounting for the issue and sale of stacked credits.

Stacking policy will have an impact on supplier participation, alongside other important (and related) policies around the ability for suppliers of projects to combine income streams from private and public sources, and polluter pays policy which affects what other parties can fund potential suppliers for.

### 7.2.3 Water company investment

All sectors ultimately impact on nature of course, but imminent and future water company investments are set to be very significant, with water company business plans submitted to Ofwat in October 2023 adding up to £96Bn for the 2025-2030 investment period. Within this approximately £18Bn is allocated to the Water Industry National Environment Programme (WINEP), including approximately £11Bn for storm overflow performance improvements. This is against a wider context of the government’s Storm Overflows Discharge Reduction Plan, which looks for water companies to deliver £56 billion of capital investment over 25 years to tackle storm sewage discharges.

There is a sense that the current proposals fall short on leveraging nature-based solutions to the greatest extent possible, including (but not solely) through nature market mechanisms, which in turn is leading to various calls for and efforts to enabling these much more. This includes for example the Ofwat innovation fund Mainstreaming Nature-Based Solutions project (Ofwat Innovation Fund, 2024) and the Sustainable Solutions for Water and Nature (SSWAN) initiative (SSWAN, 2024).

The impact of directing a greater proportion of the very substantial water company investment towards catchment and nature-based solutions would be a positive development in terms of mobilising green finance and consideration should be given to incorporating this within the OEP’s assessment framework.

There remains an important question as to whether some of the water company ‘grey’ infrastructure investment can be counted towards the mobilising of green finance for nature recovery, given that a large part of this investment is about the protection and improvement of the nation’s water bodies. This is less

relevant (and indeed a useful distinction) in the context of the EIP23 apex goal and associated targets, which the draft assessment framework proposes is the initial and primary focus. However, for the goal of Clean and Plentiful Water this will be highly relevant, which is why in its 2023 annual report the OEP allocated a proportion of storm overflow infrastructure investment in its assessment of the green finance commitment.

#### 7.2.4 Natural flood risk management

Natural Flood Management (NFM) is an example of primarily climate adaptation activity that, by its inherent design, is likely to enhance biodiversity and promote nature recovery. As such the OEP could consider the extent to which funding for Natural Flood Management can be incorporated within its assessment framework. However, the nature benefits of NFM schemes

The majority of NFM funding currently comes from the Environment Agency., as NFM also faces the fundamental challenge of attracting private funding (parties willing to pay for it). As part of a broader work package on financing UK nature recovery, the Department for Environment, Food & Rural Affairs (Defra) commissioned the Green Finance Institute (GFI) to explore how private sector sources of finance could be unlocked to help facilitate the delivery of NFM at scale across England. The GFI published its findings in March 2024. The report concludes that upfront financing or investment in NFM projects from the finance sector is available, but the key challenge is that limited demand from the private sector in buying flood risk reduction means that there are often no revenue streams that would enable upfront investment to be paid back. It is a lack of buyers of NFM outcomes that is the biggest hurdle to overcome if we hope to see private sector finance engaged for NFM projects in the UK.

One of the biggest barriers to adaptation finance is being able to monetise the benefits of adaptation action to repay private investment. Insurance is a major part of the financial response to climate risk, but its viability and affordability is threatened where risks become very high. The GFS states that Government “*will explore opportunities for new financing mechanisms for facilitating insurance markets to build flood resilience, where that will reduce overall costs*”. (HM Government, 2023d)

A set of barriers to increasing investment demand were identified under the themes of Confidence, Co-Benefits, and Coordination with seven key enabling solutions identified by the Strategic Working Group to remove these barriers and unlock private sector co-investment in NFM at scale. These recommendations include an open-access mapping software to prioritise NFM opportunities across England, a framework to guide the development of natural capital assessment tools, funding for the effective facilitation of buyer engagement and demand aggregation, clarity provided for the stacking of individual ecosystem services alongside NFM and co-benefits of FCERM schemes valued as verified credits/units available for third-party purchase.

### 7.3 Recommendations and considerations for OEP

- The OEP should track the ongoing evolution of the Nature Markets Framework and ensure it continues to support the timely development of nature markets, including on the implementation of effective market governance.
- The OEP could explore whether it has any oversight role to play in the governance of nature markets.
- The OEP should consider how it can review and scrutinise the extent to which potentially very significant water company investments towards catchment and nature-based solutions are enabled, and how this funding can be incorporated within its assessment framework.
- The OEP could similarly consider the extent to which funding for Natural Flood Management can be incorporated within its assessment framework.

## 8 Tools and methodologies

There exists a range of established or emerging frameworks, tools, standards and methodologies that have been referenced in the interviews and literature.

### Frameworks and tools

**Task Force on Climate-Related Financial Disclosures (TCFD) and Task Force on Nature-Related Financial Disclosures (TNFD).** These frameworks offer guidelines for reporting and acting on climate and nature-related risks and opportunities.

**The International Finance Corporation's Biodiversity Finance Reference Guide:** provides a structured approach for investors and financiers to identify eligible use of proceeds that constitute biodiversity finance.

**European Sustainability Reporting Standard E4 – Biodiversity and Ecosystems standard:** Includes guidance on disclosure to where operations impact biodiversity and ecosystems.

**WWF – Bankable Nature Solutions:** A programme of tools and methodologies to understand and drive ‘bankability’ of NbS to assist scaling of nature investment.

**Common Success Factors for Bankable Nature-based Solutions:** Highlights the importance of technical design and investment structuring as success factors for generating bankable and investable nature-based solutions projects. It emphasizes the need for collaboration between stakeholders, including private investors, public sector, NGOs, and research institutions.

**UNDP Biodiversity Finance Initiative (BIOFIN):** Various toolkits, definitions, recommendations and signposts have been published by UNDP BIOFIN, aiming to guide countries in integrating biodiversity finance planning in reaching the goals under the GBF

**30x30 Solutions Toolkit:** A set of tools designed to guide best practice in delivering the 30x30 (30% of terrestrial and inland water areas are effectively conserved and managed by 2030).

**eConservation 1.0:** A digital observation platform developed by the Joint Research Centre of the European Commission to provide information about funding from public donors to support biodiversity conservation. This information can help understand the international biodiversity funding landscape, providing learning opportunities that can be applied to the UK.

**Biodiversity Footprint Financial Institutions (BFFI) and the Corporate Biodiversity Footprint (CBF)** (CISL, 2022).

### Standards:

**ISO 14097:2021:** provides a framework including principles and requirements for assessing and reporting investments and financing activities related to climate change.

**The Green Loan Principles:** Provides an international standard for green loans

**Green Bond Principles:** Sets out recommendations for reporting on the use of Green Bond proceeds and promotes transparency in tracking of funds which can assist in regulation, reporting, and encouraging disclosure.

**Social Bond Principles:** Social bonds provide learning opportunities for funding nature projects; in the early stages of social investment there was a disconnect between large institutions willing to fund small charities – this is being repeated for nature projects.

The upcoming **BSI High-Integrity Standards Framework for UK Nature Markets** will also provide UK-orientated standards.

### Methodologies (for measuring, monitoring, reporting and verification):

**The UNFCCC** has proposed a way forward on measuring mitigation and adaptation finance, and progress towards the target and potential formulation and measurement of the current and future climate finance



targets. The UNFCCC has set out recommendations for climate finance which can be applied to other aspects of green finance, including methodologies for increasing data transparency, providing detailed reporting, engaging the private sector, and aligning with international standards and practices (UNFCCC, 2022).

**IUCN Measuring Nature-Positive: Setting and implementing verified, robust targets for species and ecosystems.** This working document has been released for consultation, by IUCN Membership, commissions and the private sector, with the intent that a final version will be presented to the Union during the World Conservation Congress in 2025 (IUCN, Nature-Positive, 2023).

**OECD Comprehensive Overview of Global Biodiversity Finance:** Sets out a comprehensive overview and aggregate estimate of global biodiversity finance, providing insight into where government support is potentially harmful to biodiversity, offering recommendations for improving the assessment, tracking, and reporting of biodiversity finance.

**European Commission Biodiversity Financing and Tracking Report:** This report combined an assessment and recommendations of improvement on the 2014-2020 European Commission methodology for biodiversity tracking, followed by an assessment of financing needs for achieving the EU's biodiversity policy objectives for 2030. Overall, this report identified strengths and weaknesses in current biodiversity tracking, alongside evidence-based proposals for improvement. It also concluded that there is likely to be a EUR 186.89 billion biodiversity financing gap between 2021 and 2030.

# Annex A - Research methodology

The REA comprised of both a set of interviews with relevant specialists and key stakeholders and a review of relevant literature. Our protocol for both the interviews and literature review is detailed in this section.

## A.1 Literature Review

### A.1.1 Search protocol

In line with guidance for production of rapid evidence assessments (Defra, NERC, 2015), and to gather additional literature, a search protocol was implemented. The Project Team initially collated their individual recommendations of key literature based on their industry experience. This was also guided by literature discussed with the OEP during project inception. For additional sources of relevant literature the Project Team reviewed resources compiled in the Green Finance Institute Hive (GFI, 2024), Cambridge Institute for Sustainability Leadership Centre for Sustainable Finance (CISL, 2024), and the UNEP Finance for Nature website (UNEP, 2024). These are curated resource lists regularly updated by industry experts. Together these collections cover a longlist of high-quality UK, European, and worldwide nature finance publications. Using these resources, the project team reviewed publication titles, abstracts, and executive summaries (where applicable) to determine relevance to this project.

Literature was added to the longlist if it mentioned the following themes: Green Finance, Natural Capital Funding Mechanisms, Environmental Markets, and Environmental Regulation with respect to funding and financing. As the green finance space in the UK and internationally is rapidly expanding and new important publications are released regularly, the Project Team continued to check the above resources as well as news streams. This kept the Project Team aware of new publications, which were included as soon as they were published, if relevant, during the evidence gathering phase.

Four categories of Literature were identified:

1. Core Policy Statements, Frameworks and Updates issued by HM Government departments. This totalled 8 documents, as listed in Table A-1.
2. Primary Literature Sources being those that met the inclusion criteria detailed below. These documents were reviewed using the REA protocol approach. This totalled 17 documents, as listed in Table A-3.
3. Other Literature that provided insights on specific factors but that did not meet all of the criteria to warrant full REA assessment. Often these were drawn from specific references within the Primary Literature Sources. These documents are referenced throughout the report and are detailed in the References Section of the report.
4. Documents that were excluded.

Key policy documents relating to nature recovery and green finance published by HM Government and associated departments were highlighted as essential to consider in the REA. This resulted in a Core Literature framework for review as presented below:

**Table A-1: Core Policy Statements, Frameworks and Updates subject to REA review**

	Document Title	Author / Publisher	Publication Date
1	<u>Greening Finance: A Roadmap to Sustainable Investing</u>	HM Government	2021
2	<u>Mobilising Green Investment: 2023 Green Finance Strategy</u>	Department for Energy Security and Net Zero (DESNZ), Department for Environment, Food & Rural Affairs (Defra), HM Treasury, Department	2023

	Document Title	Author / Publisher	Publication Date
		for Business, Energy & Industrial Strategy (BEIS)	
3	<u>Nature Markets Framework</u>	Defra	2023
4	<u>Environmental Improvement Plan 2023</u>	HM Government	2023
5	<u>2030 Strategic Framework for International Climate and Nature Action</u>	Defra, DESNZ, Foreign, Commonwealth & Development Office (FCDO)	2023
6	<u>UK Green Financing Allocation and Impact Report</u>	HM Treasury	2023
7	<u>OEP Annual Progress Report</u>	OEP	January 2024
8	<u>Nature Markets Framework Progress Update - March 2024</u>	Defra	March 2024

### A.1.2 Inclusion criteria

Following generation of the literature longlist, and in line with guidance for production of rapid evidence assessments (Defra, NERC, 2015), further screening criteria were generated. These criteria were designed to shorten the longlist to filter out literature that did not meet acceptable credibility, methodological rigour, or clarity requirements. The criteria also exclude outdated publications published more than three years ago, and publications that have no relevance to England. Publications that do not mention England specifically can still be included provided the content itself is applicable to or can be made applicable to England. The resulting inclusion criteria are presented below:

**Table A-2 - Literature shortlist inclusion criteria**

Inclusion criteria for the shortlist		
1	Relevance	The literature should include mention of the following themes: Green Finance, Natural Capital Funding Mechanisms, Environmental Markets, and Environmental Regulation with respect to funding and financing.
2	Publication date	Should have been published within the last 3yrs.
3	Credibility	Published by a credible organisation.
4	Geographic applicability	Context is applicable to England.
5	Methodological rigor	Includes clear detail on the methodological approach undertaken to reach conclusions, and this methodology is appropriate and rigorous.
6	Clarity	Outlines evidence clearly, and if applicable presents clear next steps and actions which need to be undertaken to reach specific goals.
7	Baseline	Where a document is government published this is deemed a baseline document.

The documents shown in the table below comprised the shortlisted Primary Literature Sources for the REA review.

**Table A-3: Shortlisted Primary Literature Sources subject to REA review**

	Document Title	Author / Publisher	Publication Date
<b>UK</b>			
1	<u>The Finance Gap for UK Nature</u>	Green Finance Initiative	2021
2	<u>Financing Nature Recovery UK: Scaling up high-integrity environmental markets across the UK</u>	Broadway Initiative	2022
3	<u>UK Green Finance Review: Opportunities for Growing Investment in Preserving our Natural Heritage and Supporting Nature Recovery</u>	Finance Earth, National Lottery Heritage Fund	2022
4	<u>Mobilising Private Investment in Natural Capital</u>	Scottish Government	2023
5	<u>A Global Centre for Nature Finance</u>	The City of London Corporation, Global City, PWC and the Green Finance Institute	2023
6	<u>The State of UK Nature Markets 2023</u>	Broadway Initiative	2023
7	<u>A High-Integrity Standards Framework for UK Nature Markets</u>	British Standards Institute	2023
8	<u>Developing high integrity marine natural capital markets in the UK</u>	Finance Earth, Blue Marine Foundation, Crown Estate, Pollination	2023
<b>International</b>			
9	<u>OECD Framework for SDG-Aligned Finance</u>	Organisation for Economic Co-operation and Development (OECD)	2020
10	<u>Biennial Assessment and Overview of Climate Finance Flows</u>	United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance	2022
11	<u>Integrating climate and nature: the rationale for financial institutions</u>	University of Cambridge Institute for Sustainability Leadership (CISL)	2022
12	<u>Scaling Investment in Nature: The Next Critical Frontier for Private Sector Leadership</u>	World Economic Forum	2022
13	<u>High-level road map: Aligning financial flows with the Kunming-Montreal Global Biodiversity Framework</u>	United Nations Environment Programme Finance Initiative (UNEP FI)	2022
14	<u>Innovative Finance for Nature and People: Opportunities and Challenges for Biodiversity-Positive Carbon Credits and Nature Certificates</u>	Global Environment Facility	2023
15	<u>Everything, everywhere, all at once: How can private finance be unlocked for nature and climate in the international financial architecture?</u>	CISL	2023
16	<u>Making Nature Markets Work: Shaping a Global Nature Economy in the 21st Century</u>	Nature Finance / Taskforce on Nature Markets	2023

	Document Title	Author / Publisher	Publication Date
17	<a href="#">Recommendations of the Taskforce on Nature-related Financial Disclosures</a>	TNFD	2023

### A.1.3 Question generation for literature review

To enable synthesis and comparison across the literature review and expert knowledge interviews we required a question set that could be manipulated to handle literature analysis, but also be formed into a flowing question set for semi-structured interviews. The project brief received from the OEP contained an initial question base which the Project Team further considered to develop a question set that could form a basic narrative within a semi-structured interview, but also be applied to interrogate the relevant literature.

The Project Team restructured the questions presented in the invitation to tender, organising them into four topics; Green Finance Landscape, UK Government Green Finance Strategy (GFS), Market Mechanisms, Relevant Tools, and Methodologies for the OEP to Consider. The question list was then distilled into 13 questions, distributed between the four topics. The overarching question list was initially generated for literature review and then modified to be more suited to interview. It was deemed more appropriate to restructure a literature review question list to handle interview responses than *vice versa*. The literature question list is presented below:

**Table A-4: Overarching question list**

Theme	Questions
<b>1. Green Finance Landscape</b>	1a. Who are the key actors and stakeholders for mobilising green finance, and what are their responsibilities?
	1b. What are the drivers and incentives for investing in initiatives that mobilise green finance for nature recovery?
	1c. What strategies and mechanisms do current actors and stakeholders use?
	1d. What sources of investment currently exist?
<b>2. UK Government Green Finance Strategy</b>	2a. How do current sources of investment align with and relate to the government's strategy for mobilising green finance?
	2b. To what extent is the government's green finance strategy adequate considering the current pipeline for projects?
	2c. To what extent is the government's green finance strategy ready to scale up to realise the requisite scale of investment required?
<b>3. Market Mechanisms</b>	3a. What are the critical challenges to scaling up green finance through market-based mechanisms?
	3b. What are the key challenges and risks in designing market-based mechanisms, ensuring additionality, preventing double counting, and preventing offsetting/compensation for damage to nature?
	3c. Relating to nature markets specifically, who are the participating actors and stakeholders?
<b>4. Tools &amp; Methodologies for OEP to consider</b>	4a. What current monitoring gaps can the OEP fill and what tools and methodologies are required?
	4b. What definitions for measuring and monitoring green finance should the OEP adopt, considering national and international standards and private investment practices?
	4c. What methodologies for measuring and monitoring green finance should the OEP adopt, considering national and international standards and private investment practices?



## A.2 Interviews with specialists and key stakeholders

To generate a comprehensive summary of the green finance landscape, experts from various industries were sought to present their opinions. Interviewees were drawn from intergovernmental organisations, national government, central banks and financial regulators, financial institutions, scientific and environmental organisations, financial services firms, and academic institutions. Representing both the ‘greening finance’ and ‘financing green’ elements of green finance, the interviews provided the opportunity to explore the intricacies of green finance through a variety of unique lenses.

The questions asked to interviewees were drawn from the literature review questions and revised to enable a more discursive and open question approach (semi-structured interview).

**Table A-5: Questions for semi-structured interviews**

Theme	Questions
<b>1. Green Finance Landscape</b>	1a. Who are the key actors and stakeholders for mobilising green finance? <i>Including what do you see as their roles and responsibilities?</i>
	1b. What are the drivers and incentives for investing in initiatives that mobilise green finance for nature recovery?
	1c. What is the role of disclosure in mobilising private finance to support environmental goals? <i>[including TNFD]</i>
	1d. What strategies and mechanisms do current actors and stakeholders use to mobilise green finance?
	1e. What role might the UK’s planned green taxonomy play?
<b>2. UK Government Green Finance Strategy</b>	2a. What are your thoughts on the commitment made in the EIP23 in terms of financing nature recovery?
	2b. Do you have any views on the Green Finance Strategy? How does the Green Finance Strategy impact you and what you do?
	2c. What are the strengths and weaknesses of the Green Finance Strategy in further scaling up the mobilisation of finance for nature recovery? <i>Do you think it will drive a scaling up to the necessary scale of investment required to meet the ‘finance gap’?</i>
	2d. Do you have views on the strengths and weaknesses of what the Green Finance Strategy has already mobilised?
	2e. What else do you think the Green Strategy should consider further?
<b>3. Market Mechanisms</b>	3a. Markets are a key part of the Green Finance Strategy - what are the critical dependencies, risks, and opportunities to scaling up green finance through market-based mechanisms?
	3b. What are the key challenges and risks in designing market-based mechanisms?
	3c. Relating to nature markets specifically, who are the participating actors and stakeholders? <i>What are these actors’ and stakeholders’ roles?</i>
<b>4. Tools &amp; Methodologies for OEP to consider</b>	4a. Who has a monitoring and/or scrutinising role in the green finance space? What if any do you see as the monitoring and/or scrutinising gaps?
	4b. What definitions for measuring and monitoring green finance should the OEP adopt, considering national and international standards and private investment practices?
	4c. Considering national and international standards and private investment practices you are aware of: <i>What definitions for measuring and monitoring green finance could the OEP adopt? What tools and methodologies for measuring and monitoring green finance could the OEP adopt?</i>

Interviewees were sought from organisations representing various roles across the UK’s green finance landscape. Interviewee contributions formed part of our REA and helped shape the recommendations set out in this report, which are Arup’s. All interviewees were considered specialist experts and were approved by

the OEP as suitable individuals to interview and contribute to this Green Finance Review. Participating organisations were:

- Broadway Initiative
- British Standards Institution (BSI)
- Department for Environment, Food & Rural Affairs (Defra)
- E3G
- Environment Agency
- Taskforce for Nature-related Financial Disclosures (TNFD)
- Triodos Bank
- World Wildlife Fund (WWF)
- Green Finance Institute (GFI)
- Natural England
- United Nations Environment Programme Finance Initiative (UNEP FI)

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# Annex C - Detailed Actors and Stakeholders List

## Ministerial Departments noted as Specifically Relevant to Nature Finance

### **Prime Minister's Office (10 Downing Street):**

10 Downing Street is a ministerial Department that helps the Prime Minister to establish and deliver the government's overall strategy and policy priorities, and to communicate the government's policies to Parliament, the public and international audiences.

### **UK Cabinet Office (Cabinet Office):**

The UK Cabinet Office is a ministerial Department that supports the Prime Minister and ensures the effective running of government. It is also the corporate headquarters for government, in partnership with HM Treasury, and takes the lead in certain critical policy areas.

### **HM Treasury (HMT):**

HM Treasury is the government's economic and finance ministry, maintaining control over public spending, setting the direction of the UK's economic policy and working to achieve strong and sustainable economic growth.

### **Department for Business & Trade (DBT):**

The department for economic growth supporting businesses to invest, grow and export, creating jobs and opportunities across the country.

### **Department for Energy Security and Net Zero (DESNZ):**

The department focused on securing the long-term net-zero emission energy future, managing consumer pricing and supporting a transition to a lower impact future.

### **Department for Environment, Food and Rural Affairs (Defra):**

The department are responsible for improving and protecting the environment. It aims to grow a green economy and sustain thriving rural communities. The department also supports the UK's food, farming and fishing industries.

### **Department for Levelling Up, Housing and Communities (DLUHC):**

The department are responsible for supporting communities across the UK, making them great places to live and work.

### **UK Export Finance (UKEF):**

The department protect and ensure UK export interests and maintain that no viable UK exports should fail for lack of finance or insurance, in a sustainable and no net-cost to the taxpayer.

## Non-Ministerial Departments and Public Bodies Notes as Specifically Relevant to Nature Finance

Supporting a number of these ministerial departments on a bilateral or cross-government basis with relevance to Nature Finance are the following:

### **Competition and Markets Authority (CMA):**

The CMA help people, businesses and the UK economy by promoting competitive markets and tackling unfair behaviour.

### **Financial Reporting Council (FRC):**

The FRC is an executive non-department public body that promotes transparency and integrity in business. It regulates auditors, accountants and actuaries, and sets the UK's Corporate Governance and Stewardship Codes.

### **The Bank of England (BoE):**

The BoE is the central bank of the UK, and it regulates other banks and financial firms from its position therein. The purpose of the BoE is to promote the good of the people of the United Kingdom by maintaining monetary and financial stability.

### **The Government Legal Department (GLD):**

The GLD is a non-ministerial Department of the UK Government and the government's principal legal advisers. Their core purpose is to help the government to govern well, within the rule of law.

### **Regulatory Policy Committee (RPC):**

The RPC is the independent regulatory scrutiny body for the UK Government. The Committee assesses the quality of evidence and analysis used to inform government regulatory proposals. This independent advice and scrutiny helps ensure that ministerial policy decisions are based on accurate evidence, and helps to produce better regulation.

**The Office of Budgetary Responsibility (OBR):**

The OBR is an executive non-governmental public body giving independent and authoritative analysis on the UK's public finances to HM Treasury and other government departments and bodies.

**Committee on Climate Change (CCC):**

The CCC is an executive non-departmental public body that advises the government on emissions targets and reports to Parliament on progress made in reducing greenhouse gas emissions.

**Forestry Commission:**

The Forestry Commission is a non-ministerial Department focused on increasing the value of woodlands to society and the environment.

**The Water Services Regulation Authority (Ofwat):**

The Water Services Regulation Authority (Ofwat) is a non-ministerial government department that is the economic regulator for the water and sewerage sectors in England and Wales. Ofwat are responsible for making sure that the companies they regulate provide consumers with a good quality and efficient service at a fair price.

**The Animal and Plant Health Agency (APHA):**

The APHA is an executive agency that works to safeguard animal and plant health for the benefit of people, the environment and the economy.

**The Centre for Environment, Fisheries and Aquaculture Science (Cefas):**

The Cefas is an executive agency that collects, manages and interprets data on biodiversity, the aquatic environment, nature and fisheries.

**The Rural Payments Agency (RPA):**

The RPA is an executive agency that manages rural support payments, particularly to farming communities to support a thriving farming and food sector, supporting agricultural and rural communities to create a better place to live.

**The Agriculture and Horticulture Development Board (AHDB):**

The Agriculture and Horticulture Development Board (AHDB) helps to make Great Britain's livestock, dairy and agriculture sectors more successful, providing market information to improve supply chain transparency and stimulating demand in the UK and export markets.

**The Environment Agency (EA):**

The EA is an executive, non-departmental public body that works to create better places for people and wildlife, and support sustainable development.

**The Joint Nature Conservation Committee (JNCC):**

The JNCC is an executive non-departmental public body and the statutory adviser to the government and devolved administrations on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems.

**The Marine Management Organisation (MMO):**

The MMO is an executive non-departmental public body whose purpose is to protect and enhance the UK's precious marine environment, and support UK economic growth by enabling sustainable marine activities and development.

**British Business Bank (BBB)**

BBB supports access to finance for smaller businesses to drive sustainable growth and prosperity across the UK, and also to enable the transition to a net zero economy. Between 2014 and end of August 2022, BBB supported £505 million of equity investment in clean technology companies. BBB can offer, debt, debt guarantees and equity.

**Natural England (NE):**

Natural England is an executive non-departmental public body and the government's adviser for the natural environment in England helping to protect and restore the UK's natural world.

**Seafish (previously the Sea Fish Industry Authority):**

Seafish supports the seafood industry to work for a sustainable, profitable future. It offers regulatory guidance and services to all parts of the seafood industry, including catching and aquaculture, processors, importers, exporters and distributors of seafood, as well as restaurants and retailers.

**The Advisory Committee on Releases to the Environment (ACRE):**

The Advisory Committee on Releases to the Environment is an advisory non-departmental public body that gives statutory advice to

ministers on the risks to human health and the environment from the release of GMOs.

**Science Advisory Council (SAC) – Defra:**

Defra’s SAC is an advisory non-departmental public body that gives expert independent advice on science policy and strategy to the Department for Environment Food and Rural Affairs (Defra).

**The Independent Agricultural Appeals Panel (IAAP):**

The IAAP is an Advisory non-departmental Public Body that considers appeals against decisions of the Rural Payments Agency (RPA).

**The Plant Varieties and Seeds Tribunal (PVST):**

The PVST makes decisions about national listing of new varieties of plants, UK plant variety rights and certain forestry matters for Defra.

**HM Land Registry:**

HM Land Registry is a non-ministerial Department that registers the ownership of land and property in England and Wales.

**The Planning Inspectorate:**

The Planning Inspectorate is an executive agency that deals with planning appeals, national infrastructure planning applications, examinations of local plans and other planning-related and specialist casework in England.

**National Savings and Investments (NS&I)**

NS&I is a non-ministerial Department that acts as a state-owned savings bank in the UK, offering Premium Bonds and a range of other savings and investments, including Direct Saver to the UK market.

**The Government Internal Audit Agency (GIAA):**

The GIAA is an executive agency that provides objective insight so that central government can achieve better outcomes and value for money for the public.

**The National Infrastructure Commission (NIC):**

The NIC is an executive agency that provides the government with impartial, expert advice on major long-term infrastructure challenges.

**The UK Debt Management Office (DMO):**

The DMO is an executive agency that carries out the government’s debt management policy of minimising financing costs over the long term, taking account of risk. The UK DMO minimise the cost of offsetting the government’s net cash flows over time, while operating in a risk appetite approved by ministers.

**The UK Infrastructure Bank (UKIB):**

The UKIB is an executive non-departmental body that provides infrastructure finance to tackle climate change and support regional and local economic growth across the United Kingdom.

**The Crown Estate:**

The Crown Estate is an independent commercial business, created by an Act of Parliament, with a diverse portfolio of UK buildings, shoreline, seabed, forestry, agriculture and common land. The business generates revenue for the government’s Consolidated Fund.

**HM Revenue and Customs (HMRC):**

The HMRC is a non-ministerial Department of the UK Government acting as the UK’s tax, payments and customs authority.

**The Financial Conduct Authority (FCA):**

The FCA is an independent public body that regulates the financial services industry in the UK. Its role includes protecting consumers, keeping the industry stable, and promoting healthy competition between financial service providers.

**UK Government Investment (UKGI):**

UKGI is a government company wholly owned by HM Treasury and the government’s centre of expertise in corporate finance, corporate governance, contingent liability and asset realisation for the UK government.

**The Export Guarantees Advisory Council (ECAG):**

The ECAG is a statutory body that provides advice to the UK government on export finance policies and regulation including environmental, social and human rights, anti-bribery and corruption, sustainable lending and freedom of information and disclosure.

**British International Investment (BII), formally the Commonwealth Development Corporation (CDC):**



BII is a publicly limited company but owned entirely by a sole shareholder of the UK Government Foreign, Commonwealth and Development Office. BII is the development finance institution of the UK and its government.

### **The UK Statistics Authority:**

The UK Statistics Authority is a non-ministerial Department that promotes and safeguards the production and publication of official statistics that serve the public good. It also promotes and safeguards the quality and comprehensiveness of official statistics, and ensures good practice in relation to official statistics using the Code of Practice for Statistics.

### **Forest Research:**

Forest Research is an executive agency that provides research services relevant to UK and international forestry interests, informing and supporting forestry's contribution to government policies. It provides the evidence base for UK forestry practices and supports innovation.

### **The National Forest Company (NFC):**

The National Forest Company is a government owned company that leads the creation of The National Forest, a new, forested landscape and destination across 200 square miles of central England. Forest cover (woods and other habitats) has trebled to almost 20% and alongside a transformed environment the economic and social well-being of the area continue to grow.

### **UK Research and Innovation (UKRI):**

UKRI is an executive non-departmental public body acting as the national funding agency investing in science and research in the UK and coordinating the seven separate research councils.

### **Natural Environment Research Council (NERC):**

The NERC is a non-departmental government body that focuses on the allocation of funding and managing research, training and knowledge exchange in atmospheric, Earth, biological, terrestrial and aquatic sciences on behalf of UK Research and Innovation.

### **National Parks Authorities (Multiple):**

England's National Park Authorities conserve and enhance the natural beauty, wildlife and cultural heritage of the countries National Park Assets, while also promoting opportunities for understanding and enjoying the areas by the public.

### **The Financial Ombudsman Service:**

The Financial Ombudsman Service is a government funded independent consumer-facing service set up by Parliament in 2001 to provide free and service that settles complaints between consumers and businesses that provide financial services.

### **UK Trade and Agriculture Commission (TAC):**

The TAC is an independent expert advisory commission that scrutinise free-trade agreements once signed and provide insight into animal and plant health standards, environmental standards (agricultural products) and advise on international trade law and policy.

### **Local Authorities and Councils:**

Local Authorities implement government policies, programmes, and initiatives on the ground, in a localised geographical area. They are also very prominent landowners and managers and as a result are quite often the public-facing aspect of the wider government to many other supply-side actors and members of the public. Their role in implementing projects across England should not be overlooked.

### **High Profile Government Groups of Potential Relevance to Nature Finance**

#### **Government Finance Function**

The GFF is a Civil Service Group that enables the delivery of high-quality public services and ensures that public money is spent efficiently and effectively.

#### **Geospatial Commission:**

The Geospatial Commission is an expert committee responsible for setting the UK's geospatial strategy and coordinating public sector geospatial activity. It operates under the Department for Science, Innovation and Technology. Its mission is to unlock economic, social, and environmental opportunities through location data and services.

#### **Natural England**

Natural England is an executive non-departmental public body and the government's adviser for the natural environment in England helping to protect and restore the UK's natural world.

Natural England is the government's adviser for the natural environment in England, sponsored by

the Affairs. It helps to protect England's nature and landscapes for people to enjoy and for the services that they provide. Natural England's priorities include creating and protecting resilient ecosystems across land, water, and sea, supporting the use of nature-based solutions to address climate change and environmental hazards and driving sustainable economic growth and healthy communities via natural capital.

### **The Office for Investment (OfI):**

The Office for Investment (OfI) was established by the Prime Minister as a Sub-Group to 10 Downing Street. It is led by the Minister for Investment to ensure the UK's approach to investment comes from the very top of government. It focuses on making the UK a world-leading centre for international investors. And ensuring the most significant investors receive the strongest possible cross-government support to realise their UK investment.

### **Independent National Organisations Specifically Focused on Nature Finance**

#### **Green Finance Institute (GFI):**

The GFI is an 'Action Tank' independent but supported by the UK government whose purpose is to accelerate the transition towards an environmentally sustainable and resilient economy by catalysing investment in net zero and nature positive outcomes. Their wealth of experience, knowledge and expertise is invaluable in guiding policy, planning and regulation from being the nexus of the dual-perspective of public and private interests. The GFI is sponsored by the UK Government, the City of London, Quadrature Climate Foundation, the Laudes Foundation, Climateworks Foundation, FSD Africa and the MCS Foundation.

#### **British Standards Institute (BSI):**

The BSI is the UK national standards body by Royal Charter and seeks to aid innovation, support economic growth and improve quality, safety and well-being through standardization and interoperability of standards with international partners, informed by its 12,200 committee members.

#### **The Broadway Initiative:**

The Broadway Initiative is a coalition of leading trade associations collaborating with government, business and the third sector to deliver the UK's net zero and environmental goals across the whole

economy. Their work programme covers the development of national frameworks and sector plans for sustainability, a UK Business Climate Hub which helps SMEs cut carbon, providing the secretariat for the Net Zero Council and developing frameworks needed to build nature markets. Their 2023 report reviews progress towards high integrity markets for nature in the UK, following the 2022 Financing Nature Recovery UK Report.

#### **Financing Nature Recovery UK (Coalition):**

The Financing Nature Recovery UK initiative brings together a coalition of organisations with the aim of putting nature onto a sustainable financial path. The coalition provides expert independent knowledge and insight and was a collaboration that originated with a proposal from the Broadway Initiative, Finance Earth and the Green Finance Institute in November 2020.

#### **UK Finance:**

UK Finance, as a key player in the financial sector, has a role in scrutinising and monitoring the implementation of green finance strategies in the UK. They are actively involved in shaping the country's green finance policies and strategies, ensuring that they align with the UK's wider sustainability commitments. By providing key recommendations for the Green Finance Strategy (GFS) update, UK Finance helps to guide the direction of the country's sustainability efforts. Furthermore, they play a crucial role in monitoring the financial services sector's compliance with regulatory tools such as the TCFD and the Bank of England's climate stress tests. Through these efforts, UK Finance contributes significantly to the oversight and advancement of green finance in the UK (UK Finance, 2023).

#### **The Office of National Statistics (ONS):**

The ONS is an independent producer of official statistics and the recognised national statistical institute of the UK. It is responsible for collecting and publishing statistics related to the economy, population and society at national, regional and local levels. It plays a leading role in national and international good practice in the production of official statistics.

#### **E3G - Third Generation Environmentalism:**

E3G is an independent climate change think tank, building broad-based coalitions to translate climate politics, economics and policies into action. E3G is funded and supported by an

International and Cross-Governmental group of partners, NGOs and Foundations including the UK Government Department for International Development and Department for Business, Energy and Industrial Strategy.

### **National & International Bodies, and Non-Governmental Organisations (NGOs) Focussed on Nature Finance**

#### **United Nations (UNEP FI, UNFCCC):**

The United Nations is a global organization that promotes international peace, cooperation, and sustainable development. The UN strives to create a harmonious balance between human well-being and environmental preservation.

#### **Multi-Lateral Development Banks (MDBs):**

Multilateral development banks (MDBs) are international institutions established by sovereign states, with these states as their shareholders. Their mandates align with the development aid and cooperation policies set by these nations. MDBs share the collective responsibility of promoting economic and social advancement in developing countries through project financing, investment support, and capital generation, ultimately benefiting global citizens as a whole. Multilateral development banks such as the European Investment Bank, are taking action to mainstream biodiversity considerations in everything they do and scale up nature positive investments. At UNFCCC Cop 26 in Glasgow, 10 MDBs collectively adopted the “Joint MDB Statement on Nature, People, and Planet”, thus committing to stepping up efforts toward the protection, restoration, and sustainable use of nature.

#### **International Finance Institutions (IFIs):**

International Financial Institutions (IFIs) provide financial and technical support for developing countries. They promote economic development, global stability, and sustainable growth. Examples include Multilateral Development Banks (MDBs) like the World Bank, Global Financial Institutions such as the International Monetary Fund (IMF), and Multilateral Trust Funds. These institutions collaborate to achieve the Sustainable Development Goals (SDGs) and address climate change and nature loss.

#### **The Science Based Targets Initiative (SBTi):**

The Science Based Targets initiative (SBTi) is a collaborative effort involving several

organizations, including the Carbon Disclosure Project (CDP), the United Nations Global Compact, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF) which set ambitious emissions reductions targets in line with the latest climate science. These targets are grounded in climate science and aim to align with the latest scientific understanding of climate change. The SBTi aims to drive global companies in their efforts to reduce emissions by 50% before 2030 and achieve net-zero emissions by 2050. By committing to science-based targets, businesses demonstrate their ambition to reduce emissions and contribute to a more sustainable and climate-secure world.

#### **Finance Earth:**

Finance Earth is a mission driven social enterprise working in partnership with world leading environmental organisations to protect and restore nature utilising market based mechanisms and implementing bespoke financial tools. They provide a range of corporate finance advisory and fund management services across the natural and built environment.

#### **Glasgow Financial Alliance for Net Zero (GFANZ):**

The Glasgow Financial Alliance for Net Zero (GFANZ) is the world’s largest coalition of financial institutions committed to transitioning the global economy to net-zero greenhouse gas emissions launched in 2021. GFANZ coordinates efforts across all sectors of the financial system to accelerate the transition to a net-zero global economy.

#### **World Wildlife Fund (WWF):**

The World Wildlife Fund is the world’s leading conservation organization. It is operational across nearly 100 countries to tackle the most critical issues at the intersection of nature, people, and climate. Its mission is to conserve nature and reduce the most pressing threats to the diversity of life on Earth.

#### **UK Land Carbon Registry:**

The UK Land Carbon Registry is the database that stores and publicly displays data about the status of Woodland Carbon Code and Peatland Code projects and ownership and use of carbon units. Managed by S&P Global, it records transactions and provides a public and transparent picture of UK-based Woodland and Peatland Carbon Units. All projects and Carbon Units must be recorded on the UK Land Carbon Registry.

### **The Wildlife Trusts:**

The Wildlife Trusts federation is a partnership of 47 localised wildlife trusts across the UK and its partners are a registered charity and corporate members of the Royal Society of Wildlife Trusts one of the founding members of IUCN – the International Union for the Conservation of Nature. Taken together this federation of 47 charities is known as The Wildlife Trusts.

**The Rivers Trust:** The Rivers Trust is a registered charity focused on creating thriving, wild, health natural rivers for all.

### **The Royal Society:**

The Royal Society is a registered charity and Fellowship of many of the world's most eminent scientists dedicated to promoting excellence in science for the benefit of humanity. It is the oldest scientific academy in continuous existence. It is also the independent scientific academy of the UK, providing authoritative and independent advice on matters of science that support the public good.

### **The Royal Society for the Protection of Birds (RSPB):**

The RSPB is a non-statutory body incorporated by Royal Charter as a charity. Its purpose is to advance the conservation of birds, other wildlife and the natural world, by protecting and restoring habitats and landscapes, saving species and connecting people to nature.

### **Task Force for Nature Related Financial Disclosures (TNFD):**

The Taskforce on Nature-related Financial Disclosures (TNFD) was established by a collaborative effort involving several organisations including the World Wildlife Fund (WWF), Global Canopy, the UN Development Programme (UNDP) and the UN environment Programme Finance Initiative (UNEP-FI). Their ambition is to shift global financial flows toward nature-positive outcomes aligned with the Global Biodiversity Framework by integrating nature into decision-making. The TNFD developed a set of disclosure recommendations and guidance that encourage and enable business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities.

### **Task Force for Climate Related Financial Disclosures (TCFD) – Closed:**

The Task Force on Climate-related Financial Disclosures (TCFD) was created by the Financial

Stability Board (FSB) in 2015 to improve and increase reporting of climate-related financial information. They developed a framework to help public companies and other organizations more effectively disclose climate-related risks and opportunities through their existing reporting processes. In 2023, following the release of the Task Force's 2023 Status Report and upon request of the FSB, the TCFD was disbanded.

### **International Sustainability Standards Board (ISSB):**

The International Sustainability Standards Board (ISSB) is a standard-setting body launched at COP26 by the IFRS Foundation, whose mandate is the creation and development of sustainability related financial reporting standards to meet investors' needs for sustainability reporting. Building on the work of market-led investor-focused reporting initiatives such as TCFD, the goal of their work is to improve the consistency and quality of sustainability reporting worldwide.

### **The Nature Conservancy (TNC):**

The Nature Conservancy is a global environmental nonprofit working to create a world where people and nature can thrive. Their mission is to conserve the lands and waters on which all life depends.

### **Aid Agencies (Various International):**

Aid agencies are organizations that provide emergency relief during crises and work toward long-term sustainable development. They distribute aid, support education, healthcare, infrastructure, and economic growth.

### **Academic Institutions and Universities (Various National and International):**

Academic institutions and Universities are degree-granting educational institutions dedicated to education and research.

### **Private Bodies and Groups Impacted by or Focused on Nature Finance**

#### **Land Owners, Estate Managers, Farmers and Agriculture Services Providers:**

Land Owners, Estate Managers, Farmers and Agriculture Services Providers manage and make decisions about land use role and therefore have an important role to play in terms of land conservation and sustainability matters including soil health, biodiversity and ecosystem management.

## **Corporate Entities:**

### ***Banks***

Banks are financial institutions which accept deposits and provide loans, bridging the gap between savers and borrowers and ensuring the stability of the financial system.

### ***Insurers***

Insurers indemnify policyholders or pay for losses resulting from covered risks. They provide financial security and stability, playing a critical role in risk management. Their actions impact policyholders and the broader economy.

### ***Funds and Asset & Portfolio Managers***

Funds and Asset & Portfolio Managers are responsible for overseeing, investing and managing a fund's assets. They have a direct impact on fund returns.

## **Companies and Other Non-Financial Corporate Entities**

Companies and other non-financial corporate entities are commercial entities that are engaged in producing market goods and non-financial services. Nature finance may be integrated into corporate strategies in order to mitigate risks as well as open up new avenues for sustainable growth and positive impact.

## **Retail and Public Investors (non-Government):**

Retail and Public investors buy and sell securities, contributing to market liquidity to derive financial gain.

## **Nature Technology and Digital Information Providers:**

Nature technology and digital information providers create tools and provide data which improve understanding of environmental hazards. They enable natural resource monitoring, automation and data driven decision-making, and can enhance community engagement.

## **Services and Knowledge Industry Providers:**

Services and Knowledge Industry Providers offer solutions and services to clients. They have a critical role to play in impacting information flow and decision making within organisations.



## Annex D - Acronyms

Acronym	Term
ACRE	Advisory Committee on Releases to the Environment
AHDB	Agriculture and Horticulture Development Board
APHA	Animal and Plant Health Agency
BBB	British Business Bank
BFFI	Biodiversity Footprint Financial Institutions
BII	British International Investment
BIOFIN	Biodiversity Finance Initiative
BNG	Biodiversity Net Gain
BNIF	Big Nature Impact Fund
BoE	Bank of England
BPS	Basic Payment Scheme
BSI	British Standards Institution
BUS	Boiler Upgrade Scheme
BVCA	British Private Equity & Venture Capital Association
CAP	Common Agricultural Policy
CBF	Corporate Biodiversity Footprint
CBI	Climate Bonds Initiative
CCC	Committee on Climate Change
CCUS	Carbon Capture, Usage and Storage
CDC	Commonwealth Development Corporation
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CfD	Contracts for Difference
CISL	Cambridge Institute for Sustainability Leadership
CMA	Competition and Markets Authority
COP	Conference of the Parties
CRA	Credit Ratings Agencies
CS	Countryside Stewardship
DBEIS	Department for Business, Energy & Industrial Strategy
DBT	Department for Business & Trade
Defra	Department for Environment, Food & Rural Affairs
DESNZ	Department for Energy Security and Net Zero
DFNS	Debt for Nature Swaps
DLUHC	Department for Levelling Up, Housing and Communities
DMO	Debt Management Office
DWP	Department for Work & Pensions
EA	Environment Agency
ECAG	Export Guarantees Advisory Council

Acronym	Term
EIB	European Investment Bank
EIP23	Environmental Improvement Plan 2023
ELM	Environmental Land Management
ESG	Environmental, Social, and Governance
ETF	Exchange-Traded Funds
EU	European Union
FCA	Financial Conduct Authority
FCDO	Foreign, Commonwealth & Development Office
FCERM	Flood and Coastal Erosion Risk Management
FIRNS	Facility for Investment Ready Nature in Scotland
FNR	Financing Nature Recovery
FPPH	Future Proofing Plant Health
FRC	Financial Reporting Council
FSD	Financial Sector Deepening
FSMA	Financial Services and Markets Act
GBF	Global Biodiversity Framework
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFANZ	Glasgow Financial Alliance for Net Zero
GFF	Green Financing Framework
GFI	Green Finance Institute
GFS	Green Finance Strategy
GHG	Greenhouse Gas
GIAA	Government Internal Audit Agency
GLD	Government Legal Department
GMO	Genetically Modified Organisms
GRaSS	Grasslands, Rangelands, Savannahs and Shrublands
GSB	Green Savings Bonds
GSS	Green, social and sustainable
GSSSB	Green, Social, Sustainable, and Sustainability-linked Bond
HM	His Majesty
HMRC	HM Revenue and Customs
HMT	HM Treasury
HPBM	Hydrogen Production Business Model
IAAP	Independent Agricultural Appeals Panel
ICMA	International Capital Market Association
IFI	International Financial Institutions
IFRS	International Financial Reporting Standards
IRO	Impacts, Risks and Opportunities
ISSB	International Sustainability Standards Board



Acronym	Term
IUCN	International Union for the Conservation of Nature
JNCC	Joint Nature Conservation Committee
KPI	Key Performance Indicator
LINC	Local Investment in Natural Capital
LNAS	Land, Nature, and Adapted Systems
MDB	Multi-Lateral Development Banks
MiFID II	Markets in Financial Instruments II
MMO	Marine Management Organisation
MRV	Monitoring, Reporting and Verification
MW	Megawatt
NA	Natural England
NAAONB	National Association for Areas of Outstanding Natural Beauty
NARIA	Natural Asset Recovery Investment Analytics
NbS	Nature-based Solutions
NCFF	Nature Capital Financing Facility
NDB	New Development Bank
NEIRF	National Environment Readiness Fund
NERC	Natural Environment Research Council
NFC	National Forest Company
NFM	Natural Flood Management
NGO	Non-Governmental Organisations
NIC	National Infrastructure Commission
NN	Nutrient Neutrality
NPB	Nature Performance Bonds
NPP	National Parks Partnership
NS&I	National Savings & Investments
OBR	Office of Budgetary Responsibility
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OEP	Office for Environmental Protection
OfI	Office for Investments
ONS	Office of National Statistics
PCC	Peatland Carbon Codes
PE	Private Equity
PPP	Public-Private Partnerships
PRA	Prudential Regulation Authority
PVST	Plant Varieties and Seeds Tribunal
RAB	Regulated Asset Base
REA	Rapid Evidence Assessment
REIT	Real Estate Investment Trusts
RPA	Rural Payments Agency

Acronym	Term
RPC	Regulatory Policy Committee
RSPB	Royal Society for the Protection of Birds
SAC	Science Advisory Council / Special Areas of Conservation
SBTi	Science Based Targets Initiative
SDG	Sustainable Development Goal
SDR	Sustainability Disclosure Requirements
SDS	Sustainability Disclosure Standards
SFDR	Sustainable Finance Disclosure Regulation
SFI	Sustainable Farming Incentive
SPA	Special Protected Areas
SuDS	Sustainable Drainage Systems
TAC	Trade and Agriculture Commission
TCFD	Task Force on Climate-Related Financial Disclosures
TNC	The Nature Conservancy
TNFD	Taskforce on Nature-related Financial Disclosures
TTM	Time to maturity
UK	United Kingdom
UKEF	UK Export Finance
UKGI	UK Government Investment
UKIB	UK Infrastructure Bank
UKICFS	UK International Climate Finance Strategy
UKRI	UK Research and Innovation
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UoP	Use of Proceeds
VaR	Value at Risk
WCC	Woodland Carbon Codes
WWF	World Wildlife Fund
ZSL	Zoological Society of London