# Generating a national snapshot of all publicly-reported investments in ecosystem and species conservation across public, private, and philanthropic finance

Alice Stuart*[1,2], Sophus OSE zu Ermgassen[1,2,3]

[1] Leverhulme Centre for Nature Recovery, University of Oxford

[2] Nature-positive Hub, Department of Biology, University of Oxford

[3] Oxford Earth, University of Oxford

* Corresponding author: alice.stuart@ouce.ox.ac.uk

## Abstract

Scaling up investment in ecosystems is a national and international public policy priority, but evaluations of the total amount spent have been severely criticised for a lack of methodological rigour. Increasingly governments are looking to the private sector to fill the nature finance 'funding gap', but a lack of transparent reporting of especially private finance flows is a known limitation. In this assessment we provide a country-wide snapshot of investment in ecosystem conservation and restoration in the UK based on publicly available data. We estimate total annual nature finance flows of £1.1bn. Public investment in agri-environment schemes (£389.1m) and grant schemes (£314.8m) were dominant sources, accounting for 61.7% of identified flows. We demonstrate this public finance is primarily funded through the sale of green bonds and gilts, demonstrating that private finance ultimately plays an important role even in public nature investment. Direct private financial flows (£142.4m) accounted for 12.5% of all flows, with the two largest flows being corporate philanthropy (£71.5m, inclusive of multi-year commitments), and one major investment by a real asset manager into a UK habitat banking business showing the emerging role of commercial investors in domestic nature markets. However, it is too soon to know if the private investment will yield sufficient financial returns. We find major public transparency gaps in nature finance flows within private organisations claiming to have made large green investments, undermining efforts to understand the both the extent of nature finance flows and their likely impact on nature recovery.

**Keywords:** nature finance, biodiversity finance, natural capital, conservation investment, biodiversity net gain, nature markets

# 1. Introduction

We are in the midst of a nature crisis (Díaz et al. 2019) which, if left unabated, will result in the continued the loss of intrinsically valuable nature (Piccolo 2017), with subsequent significant and material negative financial impact on both individual organisations (La Notte et al. 2025) and countries' economies (e.g., Ranger et al. 2024). In response to this, there has been a wide-reaching and global focus on upscaling finance for biodiversity; 118 countries have at least one national target associated with Target 19 of the Kunming-Montreal Global Biodiversity Framework (GBF) (CBD Secretariat 2025b), which calls for the mobilisation of $200 Billion per year for biodiversity through increasing biodiversity related international finance resources from developed countries, significantly increasing domestic resource mobilisation, and encouraging the private sector to invest in biodiversity (CBD Secretariat 2025a). In these contexts, nature finance is generally defined as "finance contributing to [...] delivering measurable positive gains for nature; and enabling a broader transition of economic activity away from harmful practices that are driving nature loss toward those aligned with the goal" (World Bank Group 2024, 3).

A fundamental challenge facing nature finance is that estimates of funding flows towards nature conservation objectives face such severe measurement problems that it remains contested whether they can at all be used as a guide to policy or practice (Gonon et al. 2024; Christiansen et al. 2025; Standing 2024). There is strong evidence that non-biodiversity spending has been included in overall estimates and limited evidence as to whether the included biodiversity projects have been successful (Standing 2024; Christiansen et al. 2025), speaking to a lack of definitional clarity and transparency surrounding nature finance flows (Bull et al. 2018; Kujala et al. 2022; Christiansen et al. 2025). This means it is hard to know what specifically is being funded and how this relates to funding gaps, even where estimates of overall funding are available.

Further complicating measurement is that, while the costs of conservation are poorly reported (White et al. 2022), we know the *cost effectiveness* of conservation actions are highly variable (see e.g., Laycock et al. 2009), meaning the same amount of nature finance spent via different programmes or in alternative locations generate vastly different benefits. As such, without more granular understanding, even if overall nature finance targets are met, it is highly plausible that spending targeted at the wrong conservation interventions might lead to limited real-world biodiversity improvements (Poyser 2025). This has been seen in practice, with some nature finance schemes channelling hundreds of millions in apparent conservation spending, whilst delivering limited ecological improvement (Macintosh, Evans, et al. 2024; Macintosh, Butler, et al. 2024; Pe'er et al. 2020; Poyser 2026). Other interventions, such as strengthening land

tenure of biodiversity stewards, can deliver huge conservation improvements with relatively little real-world conservation spending (Sze et al. 2022).

There have been multiple large-scale attempts to assess global nature finance by both multilateral organisations (see e.g., Deutz et al. 2020; OECD 2020; UNEP 2023; 2026) and academics (see e.g., Waldron et al. 2013; Seidl et al. 2020). The latest of these reports, the State of Finance for Nature 2026, puts public and private finance expenditure on biodiversity at US$82.2 billion and US$7.2 billion respectively, making up 41% of all spending on nature-based solutions globally (UNEP 2026). Most of these reports are based in countries' self-reported data, and provide relatively similar values, with differences primarily explained by the scope of definition of what counts as 'conservation spending'. The dominance of public funds within these estimates is to be expected, as biodiversity and the services it provides are ultimately a public good and their complexity creates conflict between ecological effectiveness and the ease, efficiency, and scalability of investment thought to be required for significant public investment (e.g., Kedward et al. 2023). Despite this, plans to address the nature crisis increasingly rely on large-scale private finance (zu Ermgassen et al. 2025; Löfqvist and Ghazoul 2019; Löfqvist et al. 2023).

The UK has strong commitments to upscaling nature finance flows, with the 2021 Spending Review (SR21) "set[ting] a stretching new target to raise at least £500 million in private finance for nature's recovery [in England] every year by 2027 and more than £1 billion a year by 2030" (HM Treasury 2021, para. 4.85; HM Government 2023, 23). It has several established interacting nature markets which attract some degree of private investment. In addition, the UK has relatively high levels of financial transparency (sixth lowest financial secrecy indicator score globally, Financial Secrecy Index 2025), making it a good candidate for assessing the feasibility of producing a more granular estimate of national nature finance flows. A previous assessment of the finance gap for UK nature estimated spending on protecting and/or restoring biodiversity in the UK to be approximately £700m per year (Green Finance Institute et al. 2021, 32) with an estimated required spend of approximately £2.8bn per year 2022-2032 (Green Finance Institute et al. 2021, 32).

In this analysis, we analyse the extent and transparency of domestic investment in ecosystems and species, a subset of nature finance, in the UK across public, private, and philanthropic sectors using publicly available data. In line with previous rapid evidence assessments of financial flows related to biodiversity (Reyes-García et al. 2025), our primary purpose was to develop a robust estimate of financial flows in our system of interest, with a secondary objective of assessing the quality and availability of information on these flows and the impact on our overall estimate. This review deals with the definitional uncertainty surrounding nature finance by focussing on funds disbursed through individual schemes or transactions that are specifically focussed on

investment in ecosystems and species, thus coming as close as possible to reporting money verifiably spent on nature conservation, restoration, and sustainable activities. This is in contrast to assessing historical commitments (as in Green Finance Institute et al. 2021) or self-reported aggregate nature finance flows (as used in Deutz et al. 2020; OECD 2020; UNEP 2023; 2026).

# 2. Methods

To assess the transparency of nature finance flows in the UK, we gathered potential sources of nature finance flows using the authors' existing knowledge and initial scoping searches (Table 1), as well as consultation with government officials. All schemes or actors found that were evidenced to fund nature in the UK were collated into a database (provided as pdf in Supplementary Materials). Once we had a database of potential schemes and actors financing nature in the UK, we grouped them into five categories of interest: government-origin funding, philanthropic funding, financial institutions, markets and project platforms, and private capital and operational spending. For each actor or scheme, we used Google Searches between March and June 2025 to assess the projects and amount of funding flowing through the scheme or organisation. The protocol for gathering information differed between types of finance and are detailed below.

*Table 1: Resources used in gathering UK nature finance flows and the reason for their inclusion.*

| Type of nature finance | Source | Reason for inclusion |
|---|---|---|
| **Agri-environment schemes** | Government pages on funding for farmers and rural payments for England (Defra et al. 2025), Northern Ireland (DAERA 2021), Scotland (Scottish Government 2025), and Wales (Welsh Government 2025) | Lists of government agri-environment schemes |
| **Government woodland grants** | Government woodland grants and incentives overviews for England (Forestry Commission 2024), Northern Ireland (DAERA 2015), Scotland (Scottish Forestry 2025), and Wales (Natural Resources Wales 2025) | Lists of government woodland grants |
| **Private finance** | Members of GFI UK Group of Financial Institutions for Nature | Institutions committed to furthering green finance in the UK, taken as the most likely to be contributing to and reporting nature finance. |
| | UK pension funds either in the top 10 by overall AUM in 2022 according to Exelerating or the top 50 natural capital investors in 2023 according to IPE Real Assets | Pensions funds are known as a potential source of nature finance due to long timescales, large natural capital holdings indicate engagement with nature finance. |

| | | |
|---|---|---|
| **Philanthropic funding** | Environmental Funders Network Where the Green Grants Went 9 report (Cracknell et al. 2024) | Gathers information on funding from philanthropic funds |
| **Funding for projects** | Nature-based Solutions Knowledge Hub funding programmes tool (Nature-based Solutions Initiative 2025) | Large scale review of sources of funding for nature-based solutions in the UK |
| | Ecosystems Knowledge Network Nature Finance Learning Hub (Ecosystem Knowledge Network 2025), including the 2023 Nature Finance Review (Ecosystems Knowledge Network 2023) | Review of sources of funding/finance for nature projects in the UK plus newsletters giving information on recent projects and their finance. |
| | Emerging funding opportunities for the natural environment report by the Esmée Fairbairn Foundation (Esmée Fairbairn Foundation 2020) | Review of sources of funding/finance for nature projects in the UK |

For each scheme or organisation, we included a qualitative assessment of the quality of information available on individual projects funded and their location on a scale of low/ medium/ high/ very high. Schemes were ranked 'low' where only very basic information such as project name or county was available, and very high where comprehensive information was given such that it would be possible to assess the project's biodiversity impacts with reasonable confidence. Full justifications and sources are given for each classification in the supplementary data provided. Where additional schemes or organisations funding nature finance were found while gathering information, these were included and assessed.

## 2.1 Data collection protocol for different nature finance flows

**Government-origin funding:** Google search "[scheme name]" alongside the following terms: projects, funds, budget, funding, funding allocation, spending, agreement, shapefile (for agri-environment)

- The year 2023-24 was chosen as this had the most complete funding information across schemes
- For forest grant schemes, we also searched for the budget of bodies managing the schemes (e.g., Forestry England)

**Philanthropic funding:** Total amount was calculated using the data on UK grants underlying the Where the Green Grants Went 9 report, which was provided by the Environmental Funders' Network on request. Information on transparency was gathered for the top 10 funders by total 'nature' grant value by assessing the grant transparency tools on their website.

Grants were excluded from the estimate of nature finance using the following excel formula:

```
=OR(ISNUMBER(SEARCH("garden",[@Grantee])),
ISNUMBER(SEARCH("zoo",[@Grantee])),
ISNUMBER(SEARCH("garden",[@Description])),
ISNUMBER(SEARCH("communit",[@Description])),
ISNUMBER(SEARCH("heritage",[@Description])),
ISNUMBER(SEARCH("young",[@Description])),
ISNUMBER(SEARCH("youth",[@Description])),
ISNUMBER(SEARCH("children",[@Description])),
ISNUMBER(SEARCH("wellbeing",[@Description])), ISNUMBER(SEARCH("well-
being",[@Description])))
```

**Financial institutions:** searched the annual reports, annual reviews, investment or stewardship reports, ESG or sustainability reports, and TNFD or TCFD reports. We first attempted to find these documents on the companies' website or, if not there, by searching

"[institution name]" nature disclosure

or

"[institution name]" annual report

Reports from 2023, 2024, or the 2023/24 financial year were included. Where multiple reports gave relevant values, the most recent was used.

**Markets and project platforms:** searched websites for information on projects, used value given for total financial flow or calculated using average price per unit and number of units sold.

## 2.2 Manual classification of actions into nature finance categories

### *2.2.1. agri-environment scheme options*

Agri-environment scheme actions were manually classified into categories using the option names, descriptions, and tags provided on the Countryside Stewardship and Sustainable Farming Incentive websites. A full list of option codes within Sustainable Farming Incentive and Countryside Stewardship is given in Table 2.

*Table 2: Manual classification of SFI and CS agri-environment interventions used within our analysis. Classification was done using option names, descriptions, and tags provided on the Countryside Stewardship and Sustainable Farming Incentive websites. Codes for these schemes consist of letters, denoting the option group (e.g. AB for arable) and numbers denoting specific options within that group. Where we deemed a specific option to differ in nature finance category to the rest of the group, we include it in this table separately with the appropriate nature finance category used within the analysis.*

| Option code | Summary | Nature finance category |
|---|---|---|

| | | |
|---|---|---|
| **AB** | Arable | Farmland habitat |
| **AC** | Access capital | Access and heritage |
| **AGF** | Agroforestry | Hedgerows, trees and orchards |
| **AHL** | Arable habitat (?) | Farmland habitat |
| **AHW** | Arable habitat (?) | Farmland habitat |
| **AQ** | Air quality (slurry management) | Artificial structures and boundaries |
| **BC** | Tree Guard Post and wire | Hedgerows, trees and orchards |
| **BE** | Tree-related capital items | Hedgerows, trees and orchards |
| **BFS** | Buffers | Farmland habitat |
| **BFS4** | Protect in-field trees on arable land | Hedgerows, trees and orchards |
| **BFS5** | Protect in-field trees on intensive grassland | Hedgerows, trees and orchards |
| **BN** | Boundaries | Artificial structures and boundaries / hedgerows |
| **BN1** | Boundaries | Artificial structures and boundaries |
| **BN2** | Boundaries | Artificial structures and boundaries |
| **BN3** | Boundaries | Artificial structures and boundaries |
| **BN4** | Boundaries | Artificial structures and boundaries |
| **BN5** | Boundaries | Hedgerows, trees and orchards |
| **BN6** | Boundaries | Hedgerows, trees and orchards |
| **BN7** | Boundaries | Hedgerows, trees and orchards |
| **BN8** | Boundaries | Hedgerows, trees and orchards |
| **BN9** | Boundaries | Hedgerows, trees and orchards |
| **BN10** | Boundaries | Hedgerows, trees and orchards |
| **BN11** | Boundaries | Hedgerows, trees and orchards |
| **BN12** | Boundaries | Artificial structures and boundaries |
| **BN13** | Boundaries | Artificial structures and boundaries |
| **BN14** | Boundaries | Artificial structures and boundaries |
| **BN15** | Boundaries | Artificial structures and boundaries |
| **BND** | Boundaries | Artificial structures and boundaries |
| **CAHL** | Arable habitat (?) | Farmland habitat |
| **CHRW** | Hedgerow | Hedgerows, trees and orchards |
| **CIGL** | Improved grassland | Farmland habitat |
| **CIPM** | Integrated pest management | Farmland habitat |
| **CLIG** | Low input grassland | Farmland habitat |
| **CMOR** | Moorland | Priority habitat |
| **CNUM** | Nutrients management | Soil, water and air |
| **CSAM** | Soil-condition related measured (including herbal leys) | Soil, water and air |

| | | |
|---|---|---|
| **CT** | Coastal | Priority habitat |
| **ED** | Education | Access and heritage |
| **FG** | Fencing and gates | Artificial structures and boundaries |
| **FM** | Feature management? | Priority habitat |
| **FY** | Forestry (?) | Other natural habitat |
| **GRH** | Grazed habitat? | Farmland habitat |
| **GS** | Grassland | Other natural habitat |
| **HE** | Historic environment | Access and heritage |
| **HEF** | Historic environment | Access and heritage |
| **HRW** | Hedgerow | Hedgerows, trees and orchards |
| **HS** | Historic environment | Access and heritage |
| **IGL** | Improved grassland | Farmland habitat |
| **IPM** | Integrated pest management | Farmland habitat |
| **LH** | Lowland heathland | Priority habitat |
| **LIG** | Low input grassland | Other natural habitat |
| **LV** | Livestock | Artificial structures and boundaries |
| **MOR** | Moorland | Priority habitat |
| **MPA** | Management payment | SFI Management payment |
| **MPAY** | Management payment | SFI Management payment |
| **NUM** | Nutrients management | Soil, water and air |
| **OFA** | Organic farmland | Farmland habitat |
| **OFC** | Organic conversion | Soil, water and air |
| **OFM** | Organic conversion | Soil, water and air |
| **OP** | Organic arable habitat interventions | Farmland habitat |
| **OR** | Organic conversion | Soil, water and air |
| **OT** | Organic management | Soil, water and air |
| **PA** | Plan | Other natural habitat |
| **PRF** | tech to avoid chemicals | Artificial structures and boundaries |
| **RP** | Rainwater management | Soil, water and air |
| **SAM** | As CSAM | Soil, water and air |
| **SB** | Priority habitat restoration actions | Priority habitat |
| **SCR** | Scrub | Other natural habitat |
| **SOH** | No till and cover crops (soil) | Soil, water and air |
| **SP** | Supplements | Priority habitat |
| **SP8** | Native breeds at risk supplement | Access and heritage |
| **SPM** | native breeds | Access and heritage |
| **SW** | Surface water | Soil, water and air |
| **SW18** | Raised water levels on grassland on peat soils | Priority habitat |
| **TE** | Trees | Hedgerows, trees and orchards |
| **UP** | Upland | Priority habitat |
| **UPL** | Upland livestock | Priority habitat |
| **WB** | Wildlife box | Farmland habitat |
| **WBD** | Ponds, ditches and nutrient reduction (possible water bourne disease) | Soil, water and air |

| | | |
|---|---|---|
| **WD** | Woodland | Priority habitat |
| **WD2** | Woodland improvement | Other natural habitat |
| **WD3** | Woodland edges on arable land | Other natural habitat |
| **WN** | seems to be peatland | Priority habitat |
| **WS** | Woodland supplement | Other natural habitat |
| **WS4** | Access for people | Access and heritage |
| **WT** | Wetland | Priority habitat |

### *2.2.2. Water Industry National Environment Programme (WINEP)*

WINEP Actions were split into six categories (species conservation; habitat conservation; nature-based water quality; grey infrastructure water quality; investigation and monitoring; and not nature related). This was done by first categorising all actions tagged as investigation or monitoring into the 'investigation and monitoring' category. Next, actions were split four categories (see Table 3: habitat conservation; species conservation; (surface) water quality; and not nature finance) based on information given on their driver codes (i.e., the regulatory pressure the action is in response to) and intended outcomes. Finally, to understand if the action related to nature-based solutions, the action description was searched using the regular expression "natur|green inf|green sol|suds|sustainab|wetland|peatland|[ (]nbs|nbs[ ).,]", which was used to further split 'water quality' into 'nature-based water quality' and 'grey infrastructure water quality'.

*Table 3: Coding of regulatory drivers and outcomes within WINEP.*

| **Regulatory Driver** | **Outcome** | **Category** |
|---|---|---|
| 25YEP | Meeting 25YEP goals | water quality |
| 25YEP | Protect and improve abstracted water supply quality | Not nature finance |
| BW | Improve and maintain the BW quality | Not nature finance |
| BW | Improve and maintain the BW quality class | Not nature finance |
| BW | Protect the environment from the effects of intermittent discharges. | water quality |
| BW | Improve and maintain the BW quality | Not nature finance |
| DrWPA | Protect and improve abstracted water supply quality | Not nature finance |
| DrWPA | Protect and improve abstracted water supply quality | Not nature finance |
| EDWRMP | Enhancing water environment to meet outcome of regional plan | habitat |
| EE | Ensure Structures meet requirements of fish and eel legislation | species |

| | | |
|---|---|---|
| EnvAct | Protect the environment from the effects of intermittent discharges. | water quality |
| ENVAct | Protect the environment from the effects of intermittent discharges. | water quality |
| EnvAct | Water company contribution to achieve improved water quality. | water quality |
| HD | Maintain or restore favourable conservation status at European sites | habitat |
| HD | Maintain or restore favourable conservation status at European sites. | habitat |
| HD | Preventing deterioration from current status within a catchment | habitat |
| HD | Maintain or restore favourable conservation status at European sites. | habitat |
| INNS | Achieve improvement objectives or prevent deterioration | habitat |
| INNS | Achieve improvement objectives or prevent deterioration | habitat |
| INNS | Achieve water body status or prevent deterioration | habitat |
| NERC | Conserve and enhance biodiversity | habitat |
| NERC | Conserve and enhance biodiversity. | habitat |
| SSSI | Conserve and enhance biodiversity | habitat |
| SSSI | Maintain or restore favourable conservation status at European sites. | habitat |
| SSSI | Maintain or restore SSSI's to favourable condition | habitat |
| SSSI | Maintain or restore SSSI's to favourable condition | habitat |
| SSSI | Maintain or restore SSSI's to favourable condition | habitat |
| SUiAR | Manage sewage sludge sustainably | Not nature finance |
| SUiAR | Manage sewage sludge sustainably | Not nature finance |
| SW | Improve and maintain SW quality | Not nature finance |
| SW | Improve and maintain SW quality | Not nature finance |
| SW | NA | Not nature finance |
| U | Protect the environment from wastewater collection and discharges | water quality |
| WFD | Achieve improvement objectives for WQ or prevent deterioration | water quality |
| WFD | Achieve improvement objectives or prevent deterioration | habitat |
| WFD | Achieve water body status or prevent deterioration | habitat |
| WFD | Achieving water body objective status within a catchment | habitat |

| | | |
|---|---|---|
| WFD | Actions benefitting poor or bad ecological status | habitat |
| WFD | Ensure Structures meet requirements of fish and eel legislation | species |
| WFD | Implements mitigation to meet WFD objectives in designated A/HMWBs | habitat |
| WFD | Achieve improvement objectives for WQ or prevent deterioration | water quality |
| WFD | Achieve improvement objectives or prevent deterioration | habitat |
| WFD | Achieve water body status or prevent deterioration | habitat |
| WFD | Achieving water body objective status within a catchment | habitat |
| WFD | Implements mitigation to meet WFD objectives in designated A/HMWBs | habitat |
| WFD | Preventing deterioration from current status within a catchment | habitat |
| WFD | Water Company contribution to preventing deterioration from current status within a catchment | habitat |
| WFDGW | Achieve good status, protected area, prevent deterioration and/or imp objectives for gw quantity, quality and/or land contamination. | Not nature finance |
| WFDGW | Achieve water body status or prevent deterioration | Not nature finance |
| WFDGW | Achieve good status, protected area, prevent deterioration and/or imp objectives for gw quantity, quality and/or land contamination. | Not nature finance |
| WFDGW | Protect and improve abstracted water supply quality | Not nature finance |

# 3. Results

We find that it is not possible to report a single entirely robust and verifiable number for total nature finance flows in the UK, largely because publicly available information on these flows is subject to large uncertainties that come from a lack of transparency, incomplete reporting, and inconsistencies in definitions and classifications. Different sources of information, even on the same nature finance flows, often differed in the time periods they report for, whether that be financial vs calendar years or differences in the most recent year of available data; what was included in reported nature finance flows, such as budgets, transaction costs, or promised funds as opposed to funding disbursed to land managers implementing conservation; and what was included as nature finance. We have attempted to limit reported flows to those that directly benefit nature, to provide a baseline measure of nature finance. Despite these difficulties, we provide a best attempt at mapping nature finance flows in the UK in Figure 1 and

describe each of the three main sources of funds below: public nature finance flows; philanthropic and charitable nature finance flows; and private nature finance flows. Values and references for individual finance flows can be found in the Supplementary Materials. All values used in the flowchart are highlighted in bold in text for ease of interpretation.

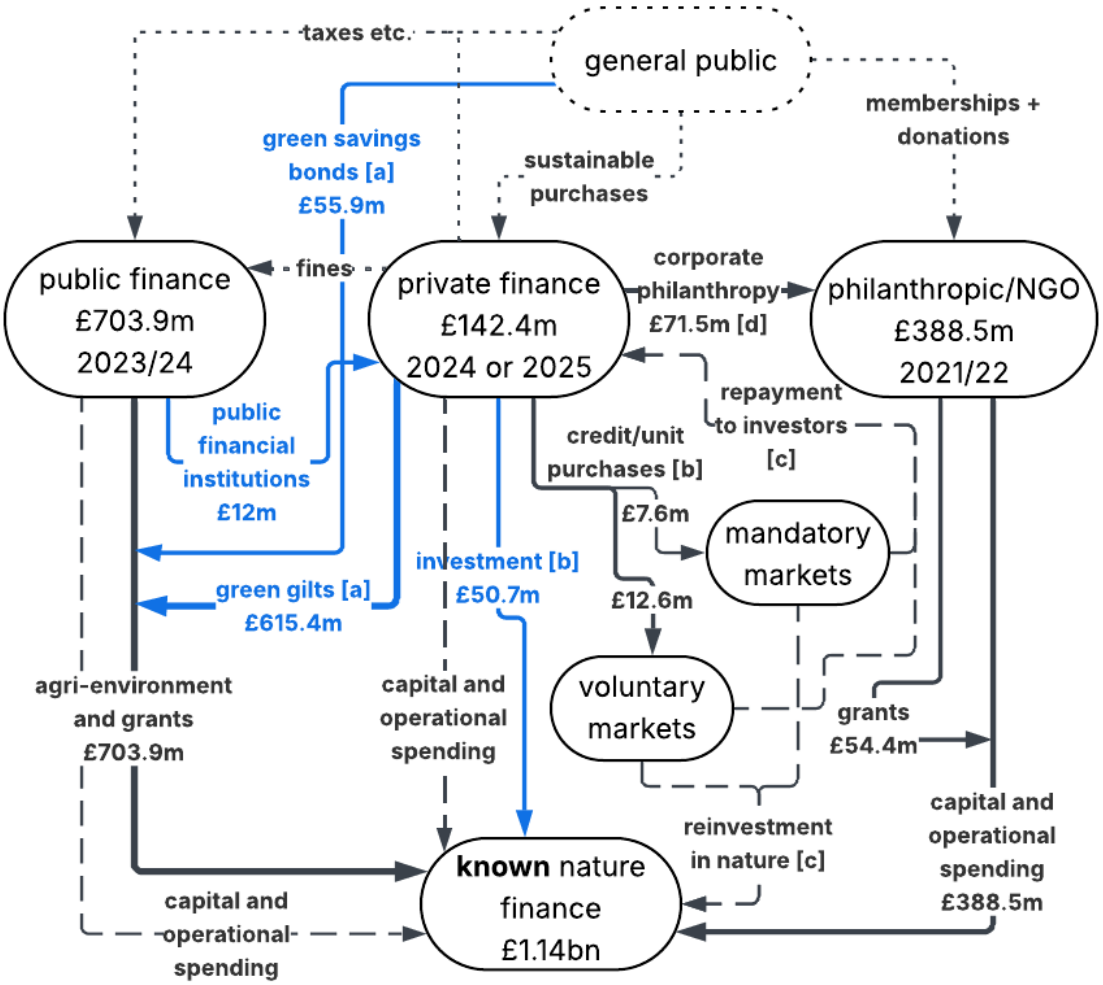


*Figure 1: Flow chart showing the nature finance flows for which we were able to find a minimum estimate (solid arrows) for nature finance flows in the UK found within this rapid review. Known flows that we were unable to find data for are shown with dashed arrows. Dotted lines (i.e. corporate fines and flows from the general public) represent flows we did not include in this analysis but have included in the figure for context. Black arrows represent non-return-seeking funding and blue arrows represent return-seeking finance. All returns seeking finance has been counted in the recipient (as opposed to the loaner's) category to avoid double counting. In all cases, We were only able to include capital and operational spending for 'philanthropic/NGOs' as this had previously been estimated by the JNCC, it is known that both the government (i.e. public finance) and companies (i.e. private finance) spend money on nature as part of their day-to-day operations, but there is not the data available to estimate this. Full explanations for all flows are included in text.*

*[a] "Living & Natural Resources" allocation from green gilts (sovereign green bonds) and green savings bonds, split between the two funding mechanisms by proportion of total revenue contributed. In line with the rest of this analysis, 59.5% of allocation to agri-environment schemes has been counted as nature finance, however it is unclear whether this value includes allocation for transaction costs.*

*[b] £35m of the private investment found was an investment by Gresham House in 2023 into the Environment Bank, which creates and sells biodiversity units in England domestic biodiversity market 'biodiversity net gain'. In this way there will inherently be double counting between private investment and credit/unit purchases.*

*[c] Note the two sets of arrows representing flows from markets, demonstrating that revenues may be used to pay dividends to equity holders (repayment to investors), as well as put into further nature restoration (reinvestment in nature), as such we have not included market transactions in our overall estimate of nature finance (although their impact would be negligible).*

*[d] Corporate philanthropy flows found predominantly consist of £70.9m of charitable payments by Aviva to the Wildfowl & Wetlands Trust, Woodland Trust, Wildlife Trusts, and WWF UK, all of which are included in the capital and operational spending estimate for philanthropic / NGO flows, thus this has not been considered additional in calculating final known nature finance value.*

## 3.1. Public funding

According to official statistics released by HM Treasury, the UK public sector spent £15,333m on "environmental protection" in 2023/24, of which £583m was spent on protection of "biodiversity and landscape" (HM Treasury 2024, 73). These values come from self-classification of transactions and spending according to the OECD's Classifications of Functions of Government (COFOG). The JNCC provide an alternate estimate as part of their UK Biodiversity Indicator, including: a proportion of agri-environment scheme spending deemed to be biodiversity-related (previously set at 70%), national lottery funding, and identified direct spending on biodiversity by public sector bodies, which gives a substantially higher value of £1,066m in 2023/24 (JNCC, 2024). Even ignoring their inconsistency, due to their aggregated nature these values' primary use is for tracking progress towards Target 19. They are less useful for understand nature finance flows in the UK, as they do not provide information on what was funded.

Our search found 43 government schemes through which projects or organisations could receive funding for nature-related projects in 2023/24. Of these, we found funding data for 33 (8 budgets for the year and 25 payments, awards or allocations), totalling **£703.9m** (Figure 2). Data aggregated by nation was available from public bodies for some intervention types, namely agri-environment schemes (Defra 2024a) and forestry (Forest Research 2024). However, we have used individual scheme spending or budgets where possible, only using aggregated values where information on individual schemes was not available, as they do not provide sufficient transparency to assess outcomes. Hereafter, we divide public nature finance into three broad categories: agri-environment schemes; other government grants; and public financial institutions. Additionally, we discuss green bonds and gilts as a, perhaps surprising, origin of most public nature finance in the UK.

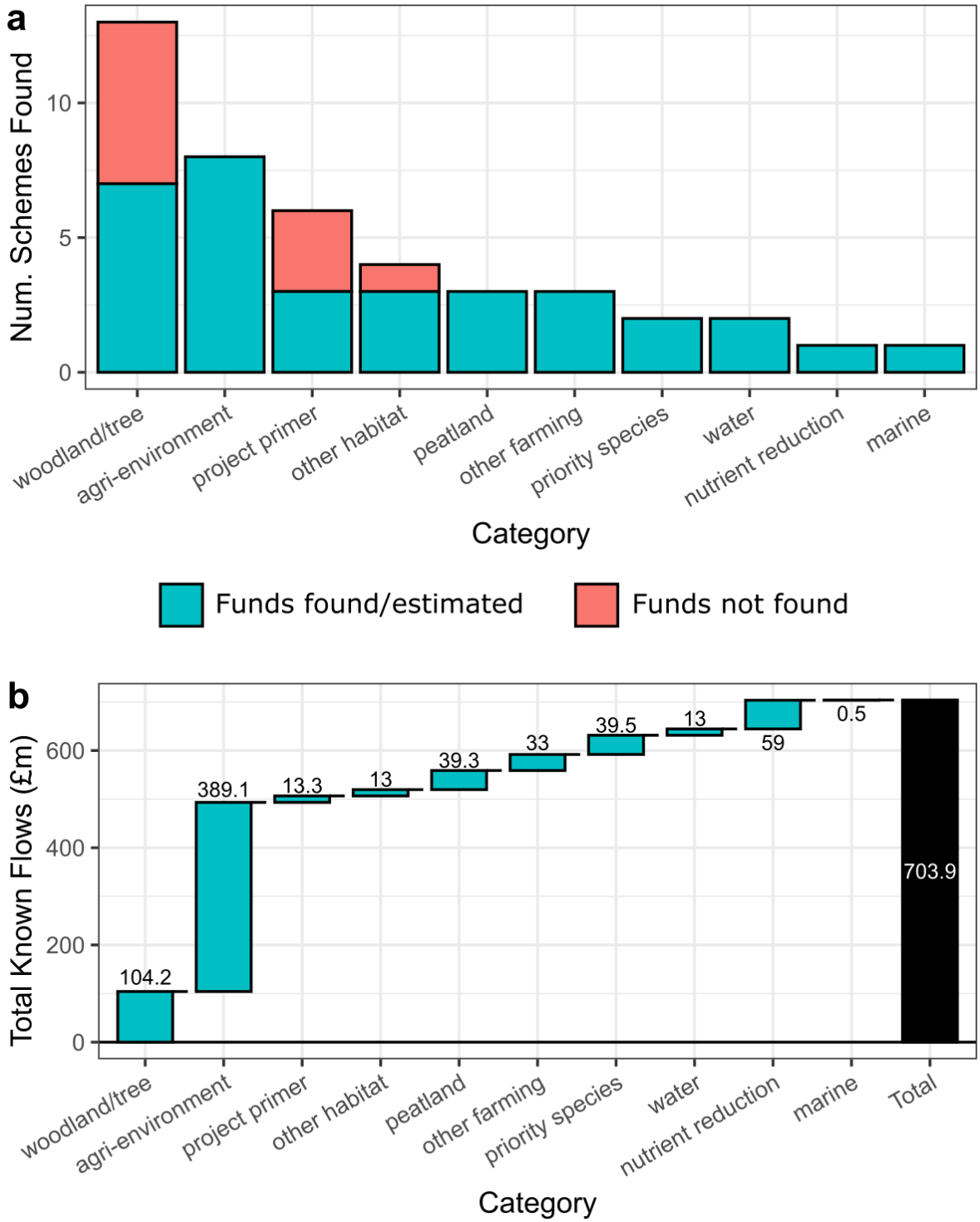


*Figure 2: Public non-returns-seeking funding to schemes likely to contribute to nature finance in 2023/24 (a) number of schemes of each type and whether an amount or estimate was found for disbursement from the scheme in 2023/24. (b) Total funding for each category attributable to a specific scheme. For agri-environment schemes this is taken to be 59.5% of the total funds disbursed through the schemes, based on the proportion of Countryside Stewardship and the Sustainable Farming Incentive classified as nature finance.*

### 3.1.1. Agri-environment schemes

Agri-environment schemes fund multiple outcomes beyond biodiversity, such as the restoration and conservation of heritage buildings and sites (Historic England 2024). This means understanding the breakdown of actions funded by agri-environment schemes is essential for understanding their contribution to UK nature finance flows. Transparency varied considerably between schemes; we were able to find project and location data for all English and Northern Irish schemes, although for the two English grant-like schemes (Landscape Recovery Scheme and Farming in Protected Landscapes) this was just a project description and broad location. We were only able to find a breakdown of funding disbursed by action for two of the agri-environment schemes (Figure 3; Countryside Stewardship and Sustainable Farming Incentive, both in England).

It is, difficult to know exactly where 'nature finance' begins and ends within agri-environment schemes as some actions, such as maintaining priority habitats, are clearly nature finance, there are others for which this is less clear, such as actions for improving soil health. To better understand these distinctions, we split available agri-environment scheme spending into eight categories (see Table 2 for options included in each category): "priority habitat", "other natural habitat", "farmland habitat", "hedgerows, trees, and orchards", "soil, water, and air", "artificial structures and boundaries", "SFI management payment", and "access and heritage". Of these eight categories, we would argue four fall outside of our definition of nature finance as financial flows that directly benefit nature: the SFI management payment, which covers management and administrative costs (Defra and Rural Payments Agency 2023); "access and heritage", which relates to increasing public access and restoring heritage sites; "soil, water, and air", which relates to grey and green infrastructural solutions to reducing nutrients and air pollution, and organic conversion; and "artificial structures and boundaries", which relates to fencing and farm yard improvements. Excluding these four categories, we take the average allocation to nature finance within CS and SFI in calendar years 2023 and 2024 to be 59.5% (Figure 3). Assuming all agri-environment schemes in the UK had the same allocation to nature finance in the financial year 2023/24, we get a best estimate of nature finance flowing through agri-environment schemes of £389.1m.

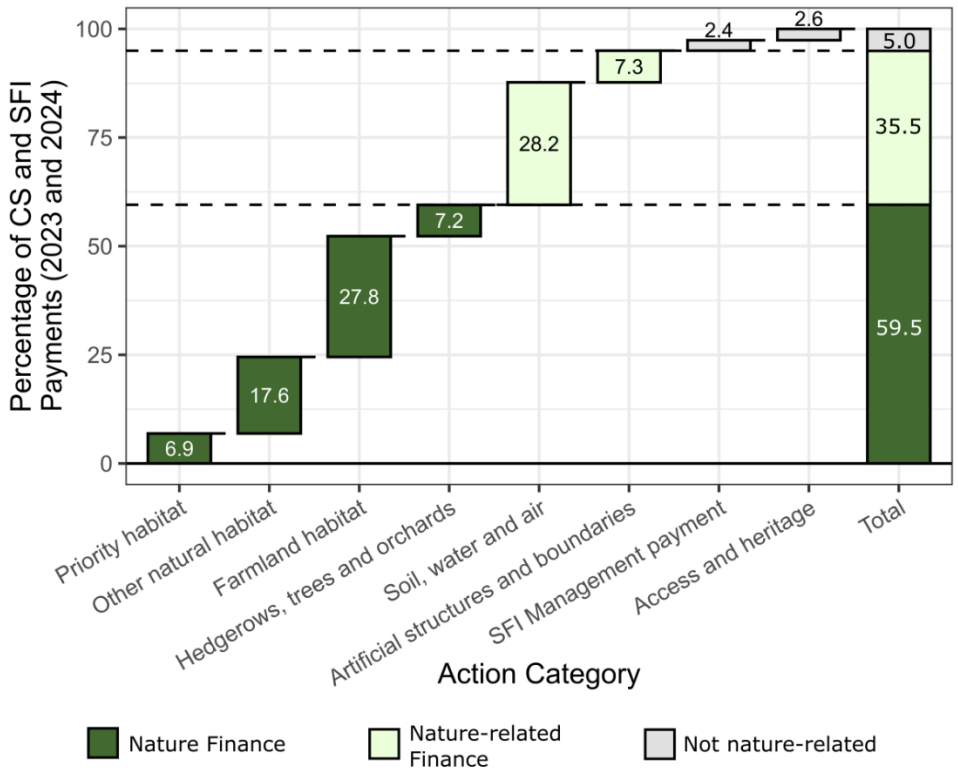


*Figure 3: Percentage of payments made through the Countryside Stewardship (CS) and Sustainable Farming Incentive scemes across 2023 and 2024, split into author-designated categories and ordered by relevance to nature finance. Categorisation was done using the names, descriptions, and tags of actions within the schemes and ordered roughly by relevance to nature finance, full details of this process are available in the supplementary materials. Note that due to inconsistencies in accpunting methods in public reporting, these results are reported as relative rather than absolute spend across the calendar years 2023 and 2024.*

### 3.1.2. Other government grants

Three out of four of the devolved nations have announced large long-term specific nature funds, which fund nature either directly (Scottish Nature Restoration Fund, £65m invested 2021-present [NatureScot 2025]; Northern Irish Environment Fund 2023-2028, £100m budget 2023-2028 [Foster 2023]), or by funding specific grant schemes (English Nature for Climate Fund, £764m budget 2020-2025 [NAO 2025]). These funds primarily focus on woodland and peatland.

In the 2023/24 financial year, the UK and devolved governments provided substantial funding for nature through grant schemes (£314.8m). The majority of this went to habitat creation and restoration projects (£156.6m), primarily focussing of woodland (£104.2m) and peatland (£39.3m), much of which was funded as part of the large nature restoration funds discussed above, showing a dual purpose of habitat restoration and carbon capture. One difficulty in establishing the amount spent through government grants is that much of the funding is provided as a multi-year funding commitment, as opposed to the amount spent in that specific year. Where possible, we have included the amount transferred in 2023/24, however, in some cases we were only able to find the funds committed under the scheme in 2023/24 and thus this is the value included.

Government grants generally had a moderate level of transparency, with most providing at least a title and the name of recipients, and some providing a detailed description of the projects. However, there was little location data available.

### 3.1.3. Public financial institutions

Public financial institutions act to provide catalytic funding for private projects, with the aim of crowding in private finance where desired projects may be too risky or low profit to be delivered by market forces alone. We were able to find 3 public financial institutions that would potentially provide nature finance (Scottish National Investment Bank, British Business Bank, National Wealth Fund), of which one had a verifiable nature finance transaction: a **£12m** loan from the National Wealth Fund to Highlands Rewilding Ltd for purchasing the Tayvallich Estate in Scotland.

### 3.1.4. The origin of public finance for nature

Whilst the majority of public funds in the UK are raised through taxation (Office for Budget Responsibility 2025), of surprising interest and relevance are green gilts (sovereign green bonds) and Green Savings Bonds, two debt-based financing instruments managed by the UK Debt Management Office (DMO) and National Savings and Investments' (NS&I), respectively. In 2023-24, £9.9bn from green guilt issuance and £0.9bn from green savings bonds was allocated to the UK's Green Financing Programme (UKGFP) for that financial year (HM Treasury et al. 2024). Of this, £992.8 million (9.2%) was allocated to "Living & Natural Resources", of which estimate a total of £671.38m satisfies our definition of investment in nature (see Table 4). When split between green bonds and guilts in accordance with their contribution to the UKGFP, this results in **£615.4m** from green gilts and **£55.9m** from green bonds.

Based on the values in Table 4, we can gather that a substantial proportion of 2023-2024 English agri-environment schemes (£764.8m allocated from UKGFP to agri-environment and £806m spent on environmental land management (ELMs) Defra 2024b) and Nature for Climate Fund (£220.2m allocated, spend could not be identified due to lack of clarity on which schemes were included) expenditure was funded *retrospectively* via the earmarked proceeds from the green gilts. In addition, although it falls outside of the time period included in this analysis, we found one example of the UK Government using environmental fines and penalties collected from private companies to directly fund nature restoration projects (the Water Restoration Fund, Rural Payments Agency 2024)

*Table 4: The UK's Green Financing Programme expenditure allocation to "Living & Natural Resources". All funds were received by DEFRA, adapted from Table 2 of (HM Treasury et al. 2024).*

*(*) Calculated using the estimate of 59% of agri-environment scheme disbursements allocated to nature finance from section 2.1.1. Note that this is more than calculated nature finance through agri-environment schemes which may be explained by the inclusion of transaction costs.*

*(**) Excluded from nature finance estimate as does not directly benefit biodiversity*

| Name | Expenditure Description (as in original) | 2023-24 Allocation (£ Million) | Amount nature finance (£ Million) |
|---|---|---|---|
| **Agri-environment schemes** | A collection of agricultural environmental and forestry schemes including: countryside stewardship offer, future plant health, and environmental land management | £764.80 | £451.23* |
| **Nature for climate fund** | Fund supporting tree-planting and peat-restoration schemes in england *[sic]* | £220.15 | £220.15 |
| **Defra green finance** | Defra scheme to promote private finance investing into biodiversity and environmental measures | £7.87 | £0** |
| **TOTAL** | | **992.82** | **£671.38** |

## 3.2. Private Financial Flows

### 3.2.1. Markets and project platforms

We identified two regulatory nature-related markets, offsite BNG and nutrient neutrality, and seven voluntary markets and/or project investment platforms (see Table 2). Biodiversity Net Gain (BNG) was responsible for an estimated minimum nature finance flow of **£7.6m** in the 2024-25 financial year, based on an estimated minimum of £7.3m in transactions through the offsite market, based on Duffus *et al.* (2025)'s finding that 286.8 offsite biodiversity units had been sold as of May 31st 2025 and an estimated price per unit of £25,500 for other neutral grassland (from Biodiversity Units UK 2025), the cheapest and most common habitat promised within BNG (Rampling et al. 2023). Interestingly, the verifiable unit transactions are almost 30 times lower than the estimated demand for biodiversity units based on an analysis of 500 planning applications (BNG500 2025). We are unable to say whether this is due to overestimated demand, or whether there are time lags in developers purchasing the number of units required to achieve BNG. Additionally there has been the sale of eight statutory BNG credits, which can be purchased from the government by developers deemed to have exhausted all other options, totalling £247,416 (Defra 2025). We were unable to find public data on finance flows through nutrient neutrality, the other statutory market.

Flows through voluntary biodiversity-related markets totalled **£12.6m**. The largest voluntary flows found were through the Woodland Carbon Code (£7.5 million in 2024) and the Peatland Code (£4.7 million in 2024), both well accepted carbon standards. Of the other six voluntary markets and project investment platforms, we were able to find or estimate financial flows for two, totalling £0.41 million per year. It is notable that both BNG and voluntary nature markets had high levels of transparency surrounding the projects from which credits are being sold (Table 2).

*Table 2: Financial flows through nature markets in the UK. Detail available is given as a qualitative assessment: schemes were ranked 'low' where only very basic information, such as project name or county was available, and very high where comprehensive information was given such that it would be possible to assess the project's biodiversity impacts with reasonable confidence. Full justifications and sources are given for each classification in the supplementary data provided.*

*(*) unknowable as number of units is only confirmed upon transaction due to location multiplier used in Statutory Metric;*

*(**) using approximate cost of other neutral grassland units, the most common and cheapest unit type, of £25,500 from Biodiversity Units UK's July 2025 Pricing & Key Insights report, actual value based on number of transactions on offsite register as of May 2025;*

*(***) estimated as weighted average price per unit x number of units sold in that year;*

*(****) likely to be because information is given during the auction so does not need to be made public*

| Market | Unit type | Detail available on projects | Detail available on locations | No. units available to buy | No. units sold | Total annual funds (£m) | Year(s) included in funds |
|---|---|---|---|---|---|---|---|
| **BNG offsite market** | BNG biodiversity unit (mandatory) | Medium (habitat allocation) | Good – polygons on static map | unknown* | 286.8 | >7** | February 2024 - May 2025 |
| **BNG statutory credits** | Statutory biodiversity credit (mandatory) | None | None | unknown | 8 | 0.25 | 2024-25 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Nutrient Neutrality** | Nutrient credits (mandatory) | none | none | unknown | unknown | unknown | |
| **UK Woodland Carbon Code** | Carbon (woodland) | Very high | Good – GIS point and polygons on static map | 6,171,800 (including PIUs) | 277,815 | 7.5*** | 2024 |
| **UK Peatland Code** | Carbon (peatland restoration) | Very high | Good – GIS point and polygons on static map | unknown | 187,291 | 4.7*** | 2024 |
| **Wilder Carbon** | Carbon (minimal intervention restoration) | Very high | Good – polygons on static map | 244,001 | 10,517 | 0.25 (1 over 4 years) | 2021-2025 |
| **Earthly** | Various (project investment; bng units; voluntary biodiversity units; trees) | Medium – very high | Medium / good – point or polygons on static map depending on project | unknown | unknown | unknown | |
| **Ecologi** | Various (UK Climate & Nature Fund; | Poor – very high | Poor / excellent – little to no location information for some projects, GIS polygons for others | unknown | unknown | unknown | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CreditNature** | Various (Nature Investment Certificate; carbon; nature credit) | High | Good – polygons on static maps | 1,591 | unknown | unknown | |
| **EnTrade** | Various (biodiversity units; phosphorous units; hedgerow) | None**** | None**** | unknown | 15 biodiversity units; 96 phosphorous credits; 230m of hedgerow | 0.16 (1.4 over 9 years) | 2016-2025 |
| **Revere** | Project investment | Medium | Poor – only region or general location given | unknown | unknown | unknown | |

### 3.2.2. Private investment

Of the 37 private financial institutions assessed (see Table 1 in methods for selection criteria and the Supplementary Data for the full list), we found investments in UK nature finance from companies in 2023 or 2024, totalling **£50.7m**: Oxbury, with loans totalling £11.9m "to deliver nature-based opportunity or positive impact … Equate[d] to financing for Pillar 2 of NFU Net Zero plan" (Oxbury 2023, 49), with Pillar 2 of the NFU Net Zero plan consisting of a mixture of soil carbon and habitat creation/ restoration; Triodos UK, with a £3.8m loan to Avon Needs Trees (Triodos Bank UK Limited 2024, 39); and Gresham House, with an estimated £35m investment in Environment Bank Ltd habitat banks in England (see Box 1 for details of the difficulty estimating this). One company reported a UK nature finance stock: the South Yorkshire Pension Fund, with a natural capital allocation of £149.1m (South Yorkshire Pensions Authority 2024, 102), all of which appears to be allocated as part of UK place-based impact investing (South Yorkshire Pensions Authority 2024, 103), however this was not included as the sources did not reveal what the associated financial flows were within 2023 and 2024.

---

*Box 1: Gresham House's investment in the Environment Bank Limited as a case study of the difficulty of estimating private nature finance investments.*

Gresham House are a specialist investment manager primarily based in the UK with a public commitment to sustainability (Gresham House 2026). The Environment Bank Limited (EBL) is a private sector company set up to facilitate biodiversity offsetting (Environment Bank Ltd 2014) and were involved in lobbying for biodiversity net gain in the England (Hill 2024). Biodiversity net gain requires that developers create or purchase habitat such that the 'value' of biodiversity, as calculated by an area-based metric, increases by 10% relative to the site's baseline (Stuart et al. 2025). The policy became mandatory for most terrestrial developments in England in February 2024, having been legislated as part of the Environment Act (2021) (ibid). EBL are one of England's leading specialists in creating 'habitat banks' from which developers can purchase biodiversity units to meet their BNG requirements and also sell voluntary biodiversity credits (Gresham House 2025a).

Gresham House's public reporting on nature finance flows is amongst the most transparent in our database; yet here we highlight how even best-in-class reporting does not provide sufficient public information for a reliable estimate of nature finance flows. Gresham House's Sustainable Infrastructure division invested in EBL in 2021, aiming to pioneer habitat banks as a new infrastructure asset class (Gresham House 2024b, 36), likely as part of the first tranche of their British Sustainable Infrastructure Fund (BSIF). The exact size and timings of this investment is unclear from publicly-available information. Gresham House's 2024 Sustainable Infrastructure Overview (Gresham House 2024c) notes that the BSIF targets 20% of its portfolio to the 'regeneration' theme, for which ELB is the only portfolio company. The BSIF had AUM of

approximately £975m by the end of 2024, with £350m in the first tranche (BSIF I) and £450m the second (BSIF II), including co-investment vehicles, as revealed in Gresham House's 2024 Sustainable Infrastructure Report (Gresham House 2024c) with an additional £175m raised for the third tranche (BSIF III) in 2024, as revealed in their 2024 Annual Report (Gresham House 2025b). This would give an approximate total investment in ELB of £195m at the end of 2024, assuming an allocation of 20%. This is shown to be an underestimate, with a press release from February 2024 giving £236m as the total amount committed to EBL up until that date ('over $300mn' converted using listed exchange rate of £1:$1.27, Gresham House 2024a). However, this value is a stock and does not give a financial flow for any of the years of interest (2024, 2025, or 2024/25 financial year).

Of the monetary values given in the previous paragraph, one is useful in calculating the likely financial flow from Gresham House to ELB in 2024; the £175m raised for the third tranche (BSIF III) in 2024. Another potentially useful value is given in an external news report: £40m invested in the Gresham House Biodiversity Co-invest (GHBC) by clients of WTW (Wilis Towers Watson, a British-American multinational advisory, broking and solutions company) as a cornerstone investment (Ali 2025). However, within both the 2024 and 2025 Sustainable Infrastructure Overviews (Gresham House 2024c; 2025c), funds invested through co-investment vehicles are included in totals given for the BSIF tranches, so this £40m cannot be assumed to be additional. As such, the best estimate of financial flows from Gresham House to ELB in 2024 is to assume 20% of the £175m raised for BSIF III, giving £35m.

---

For all other organisations assessed (86.5%), there was either no value given for nature investments in the UK, or generic 'green' or 'sustainable' financial stocks or flows. Where breakdowns were given, very little of the finance labelled as 'green' or 'sustainable' was attributable to nature, instead constituting investment in renewable energy, mortgages on properties with high EPC ratings, and financing for low emissions vehicles (see e.g., Santander UK Group Holdings plc 2024, 35). As such, the reporting and inclusion of generic 'green' finance values as nature finance could result in substantial overestimates of nature finance flows from individual organisations.

### 3.2.3. Corporate philanthropy

We found non-returns-seeking flows (corporate philanthropy) from one of the 37 private financial institutions assessed, Aviva, totalling £70.9m across four recipient organisations: £21m to the Wildfowl & Wetlands Trust (WWT) for Aviva Natural Capital Carbon Sequestration (ANCCS) Project announced June 2023 and spanning 17 years; £10m to Woodland Trust to support Woodland Carbon scheme over five years announced Feb 2023; £38.9m to Wildlife Trusts for temperate rainforest restoration announced June 2023; and £1 million to WWF's Save Our Wild Isles Community Fund opened in March 2023 (Aviva UK 2025). Note that these donations are largely multi-year

funds for long-term projects, however, as the payment schedules are not clear and they were announced within the target time period we have included them here.

An additional £0.62m of corporate philanthropy was channelled through two government-backed schemes, the Scottish Marine Environmental Enhancement Fund (£0.27m) and Projects for Nature (£0.35m), a Defra, Natural England and Environment Agency backed crowdfunding platform for nature projects. Both schemes had relatively high transparency regarding project descriptions, but did not provide geospatial information. Combined with the financial flows from Aviva, this results in a total of **£71.5m** of investment in nature through corporate philanthropy.

### 3.2.4. Private capital and operational spending

A full analysis of the contribution of private capital and operational spending to nature finance flows in the UK would require assessing the budget of every large landholding organisation operating within the country, which was not possible as this information is not routinely publicly reported. However, such spending likely makes a substantial contribution to UK nature finance, particularly where organisations are subject to environmental regulations dictating how their land is used. There are two clear examples of this in the UK: spending on habitat creation and enhancement for on-site BNG, and the Water Industry National Environment Programme (WINEP) spending by water companies in England and Wales. There is little publicly available information on the costs of creating and maintaining on-site BNG units. However, given it is the preferred option for developments (BNG500 2025; Rampling et al. 2024), it is presumably substantially lower than the cost of buying off-site units.

Water companies in England and Wales are subject to an unusual regulatory structure that allows some insight into their capital and operational spending as their business plans and budgets are assessed by Ofwat on a five-year price review cycle within which performance commitments are set and the maximum cost that can be passed on to the customer is determined (Ofwat 2024). Many of the targets set within price reviews are related to the WINEP, which consists of statutory and non-statutory environmental actions contributing to the delivery of River Basin Management Plans and other statutory plans (Environment Agency 2025b). The actions committed to in PR24, the most recent price review covering 2025-2030, are budgeted at £22.1 billion of investment related to environmental outcomes (Beament 2025). However, again, the specifics of spending are important.

Although we were unable to find information on spending allocation under WINEP, Figure 4 gives a breakdown of the actions promised in 2025-2030: of the 18,598 actions within the dataset provided by the Environment Agency (Environment Agency 2025a), the most common category was investigation and monitoring (67.5%, 12,553), followed by grey infrastructure water quality interventions (21.0%, 3,920), such as storm tanks.

Only 5.7% of actions (1,052) were directly related to species or habitat conservation, with an additional 1.4% of actions (264) related to nature-based water quality solutions.

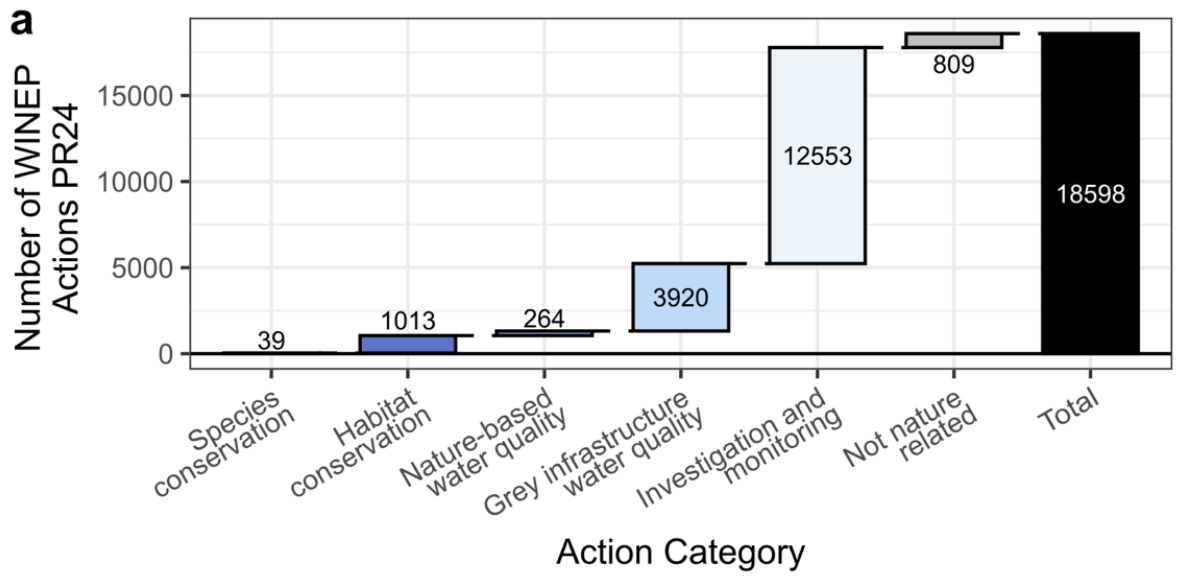


*Figure 4: Actions promised within WINEP PR24, split by categories relating to nature finance.*

## 3.3. Philanthropic and NGO funding

### 3.3.1. Philanthropic grants

Using data on philanthropic grants collected by the Environmental Funders' Network for their Where the Green Grants 9 report (WTGGW9), we find 1808 non-anonymous grants in 2021/22 (the most recent year analysed), totalling £68.5m from philanthropy within thematic categories related to nature finance ("Biodiversity & species preservation", "Terrestrial ecosystems & land use", "Coastal & marine ecosystems", "Fresh water", and "Toxics & pollution"). However, of the 1808 nature-related grants included in WTGGW9, 809 (totalling £22.6m) contained words in the grantee name or grant description to suggest they were primarily targeting social, as opposed to environmental, outcomes. Although such funding represents an essential component of green finance, its inclusion as nature finance is less clear. For this reason, after excluding these grants, we estimate total philanthropic grant funding in 2021/22 to have been £45.9m across 999 grants, accounting for inflation of 18.5% between 2021 and 2023 (Bank of England 2026), and thus making this value more comparable with the rest of this dataset, we estimate a value of **£54.4m**.

To assess the transparency of grant funding, we searched for information on projects funded by grants from the top 10 philanthropic funders of nature in the UK within the WTTGW9 dataset, cumulatively accounting for 63.1% of nature grant funding (see Table

6). We find a moderate level of transparency overall, with most projects named and summarised, but little information available on their locations.

*Table 6: Transparency of grants given by top ten nature finance philanthropic foundations and funds within WTGGW9. (*) information on the largest donation (£2m) is available from the Wildlife Trusts (recipient) but not their own website.*

| Organisation | Relevant grant amount (£m) | Detail found on projects/ outcomes | Detail found on project locations | Detail on allocation of funding between projects? |
|---|---|---|---|---|
| **The National Lottery Heritage Fund** | 9.7 | good - names and short summary of projects given | poor - by region (when included in name or description) / none | Yes |
| **Esmée Fairbairn Foundation** | 8.2 | good - names and some details of projects given | poor - by region (when included in name or description) / none | Yes |
| **Garfield Weston Foundation** | 2.9 | poor - names of recipients | medium - by city | Yes |
| **Reece Foundation** | 2.1 | none* | none | No |
| **Kusuma Trust** | 1.9 | good - names and summary of projects given | medium - by city | Yes |
| **Wolfson Foundation** | 1.4 | good - names and short summary of projects given | good - points on map | Yes |
| **Local Trust** | 0.8 | none | none | No |
| **The National Lottery Community Fund** | 0.7 | good - names and short summary of projects given | poor - by region (when included in name or description) / none | Yes |
| **Leverhulme Trust** | 0.7 | medium - recipient and title of projects given | N/A - research grants | Yes |
| **Scottish Power Foundation** | 0.6 | good - names and short summary of projects given | none | No |

### 3.3.2. NGO and charitable capital and operational expenditure

The JNCC estimate spending on biodiversity by NGOs in the UK in 2021/22 to have been £348.2m, based on the total amount spent on 'Charitable Activities' of 41 large UK-based NGOs as part of the UK Biodiversity Indicators (UKBIs) (JNCC 2024). We note

that, as this covers all charitable activities by these NGOs, it is likely to represent a broader definition of nature finance than used in the rest of this paper but is the best estimate publicly available. This estimate is not fully independent to the philanthropic grants discussed in section 2.3.1; 148 grants were to one of the 41 organisations included in the JNCC's indicator, with 5 containing words suggesting a focus on social goals, leaving 143 grants totalling £11.9m (14.3% of grants totalling 25.9% of nature finance through philanthropic grants). Removing these to prevent double counting with the JNCC estimate, and accounting for inflation on the remaining £34m of philanthropic grants, we estimate £40.3m of charitable spending on nature not accounted for by the JNCC and a total financial flow of **£388.5m**.

# 4. Discussion

This work has provided to our knowledge the first comprehensive snapshot of an entire country's nature investment ecosystem. Focusing only on verifiable direct expenditure on nature, we estimate nature finance flows in the UK of approximately £1.1 billion per annum, of which £703.9m is public finance. We show that public and philanthropic finance continue to dwarf private investment, even in a country with a relatively advanced system of nature markets seeking to attract private investment. We also show systemic shortcomings with the public reporting of private finance flows into ecosystem conservation that indicate that current publicly available estimates are unlikely to be an accurate reflection of the true size and outcome of flows, thus cannot be used as a reliable guide to policy or practice.

In line with previous work (e.g, OECD 2020; Deutz et al. 2020; UNEP 2026) public funds remain the largest identifiable source of finance for nature in the UK with the, perhaps surprising, finding that this tended to be raised through green bonds and gilts as opposed to direct spending from taxation. In addition, the largest returns-seeking flow within the £142.4m of private finance found is in response to Government policy: an estimated £35m investment by Gresham House in the Environment Bank, effectively an indirect investment in the offsite BNG market. We also find the potential for massive regulation-led private sector capital and operational spending, primarily through the Water Industry Environmental Program, which promises £22.1bn in environmental sending between 2025 and 2030 (Beament 2025); however, very little of this is likely to be direct spending on nature (7.1% of actions included within the spending were nature-based). In contrast, we identified relatively little finance found to be flowing through both voluntary and mandatory nature markets.

Our results show the potential magnitude of private investment in nature where regulation creates private investment opportunities (zu Ermgassen et al. 2025). Private investment shows some progress towards the £500m target for private finance by 2027 set by the Government (HM Government 2023). However, if nature finance through

green gilts is included, private finance increases to £813.8m, close to the Government's target of £1bn by 2030 (HM Government 2023), showing the appetite for private investment in nature, or any other investment opportunities, where returns are effectively risk-free.

Potentially the most important finding of this work has been the difficulty in carrying out such an exercise, due to inconsistencies in reporting, time periods, financial years, definitions of nature finance, lack of transparency and robust aggregated data. In addition, two of the large financial flows included in this analysis (£35m investment by Gresham House into the Environment Bank and £70.9m of corporate philanthropy by Aviva) the start, or a part, of multi-year agreements and thus, unless other organisations make similar commitments, are likely to not be representative of nature finance flows in an average year. Attempting to account for inconsistencies in the definition of nature finance, we focus specifically on investment in habitats and ecosystems as 'financial flows verifiably spent on the conservation and restoration of biodiversity and habitats', thereby increasing our certainty in our estimates. We recognise other financial flows excluded from this analysis (such as investments in technologies that reduce biodiversity pressures, or interventions to increase nature connectedness) are likely to contribute to halting and reversing biodiversity loss, and thus might legitimately be included in calculations of progress towards Target 19 of the GBF.

We highlight the importance of transparency of nature finance flows, both to allow quantification and for assessment of the funded outcomes and effectiveness of spending. Transparency of public funds was relatively high, with funding data for 33 out of 43 of the identified schemes found, allowing us to identify a focus on multi-purpose spending, namely agri-environment schemes and grants for the creation of carbon-sequestering habitats. Flows from philanthropic funds and NGOs in the UK represented the second largest flow; reporting requirements for charities in the UK mean it is possible to estimate capital and operational spending on nature, which was not possible for any other actor.

Transparency was a particularly key issue for private finance, where we were only able to confirm UK nature finance flows for three organisations, totalling £50.7 in investments in 2023 or 2024, of which £35m was a single investment in English nature markets by Gresham House, an asset manager. This is interesting as it outstrips the demand we identified for purchases, which we estimate to be approximately £20m across both mandatory and voluntary markets in 2024/2025. Transparency within nature markets was mixed as, whilst there was little information about prices, transactions or financial flows, there was a relatively high level of transparency surrounding the individual projects from which units or credits are available to purchase, likely reflecting the need to gain and maintain legitimacy with potential buyers in a context of increasing controversy around offsets (Swinfield et al. 2024; zu

Ermgassen et al. 2025; 2026). We also demonstrate the double counting likely to be present where both investment in, and sales from, nature markets are included in nature finance estimates, as some of the revenues from unit sales are likely to be used to repay investors as opposed to funding further investment in nature.

Our results have important implications for conservation practice. We emphasise the need to assess the nature finance landscape as an integrated whole, explicitly accounting for linkages between public and private investment in nature. A longstanding concern with nature markets is the risk of cost shifting, whereby the expansion of market-based mechanisms and private investment does not generate genuinely additional resources, but instead displaces or cannibalises existing public or philanthropic funding (Narain and Maron 2018; Maron et al. 2025). Analyses that focus on only one component of the nature finance system—such as assessing the scale of private finance alone—risk overlooking these interactions. This is a critical oversight. Achieving global biodiversity conservation and financing targets requires tracking whether increases in private finance complement or undermine other funding sources, and therefore whether they deliver truly additional resources for nature conservation. Our work here has the potential to create a vital baseline to track the evolution of different forms of nature investment over the coming years, capturing public, private and philanthropic investment within the same framework.

Another key finding is the relatively small contribution of private finance in the UK country snapshot. Despite having one of the most advanced and interconnected systems of nature markets globally, including two mandatory markets, actual financial flows through these mechanisms have remained modest in their early years of operation. In the case of biodiversity net gain, this largely reflects the multiple regulatory pathways available to developers to meet their biodiversity obligations. In particular, there is strong evidence that the option to deliver biodiversity gains on-site within developments significantly reduces demand for off-site biodiversity credits, thereby limiting investment through the market (Duffus et al. 2025; zu Ermgassen et al. 2021). This demonstrates that even where nature markets are established and made mandatory, the extent to which they mobilise finance remains uncertain, as buyers may adapt their operational practices to minimise exposure to market-based liabilities. For countries seeking to scale up nature markets, a further implication is that financial flows tend to grow slowly. Nature markets therefore should not be viewed as a rapid mechanism for generating substantial additional revenues for biodiversity conservation.

It is critical that investment in ecosystems increases to address biodiversity loss and achieve Target 19 of the Kunming-Montreal agreement. Our work highlights that evaluating funding flows towards nature conservation goals is almost meaningless if individual funding flows are treated in isolation; it is the whole interacting network of investment streams that matters. Transparency of private finance flows remains too

limited to make robust assertions about the role of private finance. This will have to change if we are to accurately evaluate progress towards Target 19 and assess progress towards achieving global biodiversity conservation goals.

## 5. Funding and acknowledgements

This work was funded by the Leverhulme Trust as part of the Leverhulme Centre for Nature Recovery. A.S. was also supported by the CBA Sir Evelyn de Rothschild Fellowship for Reimagining Nature Finance and Inclusive Capitalism. The CBA's Fellowship is endowed by the Eranda Rothschild Foundation.

We would like to thank Nicola Ranger and David Cooper for their comments on earlier versions of this manuscript.

## 6. Supplementary data

Supplementary data will be available on FigShare upon publication of this article

doi.org/10.6084/m9.figshare.31293577

# References


Ali, Binyamin. 2025. 'A Model for Biodiversity Infra Investment'. Content. *Infrastructure Investor*, March 20. https://www.infrastructureinvestor.com/gresham-house-readies-itself-for-a-big-year-in-biodiversity/.

Aviva UK. 2025. 'Taking Action with Our Partners'. January 10. https://www.aviva.com/sustainability/taking-action-with-partners/.

Bank of England. 2026. 'Inflation Calculator'. https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator.

Beament, Emily. 2025. 'Water Companies to Invest £22bn in Wide-Ranging Programme to Protect Environment'. Climate. *The Independent*, January 29. https://www.independent.co.uk/climate-change/news/government-steve-reed-environment-agency-ofwat-natural-england-b2688073.html.

Biodiversity Units UK. 2025. 'BNG Pricing & Key Insights Report - June 2025-10'. June.

BNG500. 2025. *#BNG500 – What Lessons Can We Learn from Analysis of 500 BNG-Compliant Planning Applications Made in 2024?* https://www.linkedin.com/posts/francis-hesketh-a733191a_bng500-learnings-from-500-planning-applications-activity-7306301210817384448-yVjP?utm_source=share&utm_medium=member_desktop&rcm=ACoAACglBFMBd9eI5Ll_eGGZ_LbjD8L3FFIwvUo.

Bull, Joseph W., Kerstin Brauneder, Marianne Darbi, et al. 2018. 'Data Transparency Regarding the Implementation of European "No Net Loss" Biodiversity Policies'. *Biological Conservation* 218 (February): 64–72. https://doi.org/10.1016/j.biocon.2017.12.002.

CBD Secretariat. 2025a. 'Global Biodiversity Framework Target 19'. Convention on Biological Diversity, Secretariat of the Convention on Biological Diversity. https://www.cbd.int/gbf/targets/19.

CBD Secretariat. 2025b. 'Online Reporting Tool'. https://ort.cbd.int/national-targets/analyzer?globalTargets=GBF-TARGET-19#0.8/0/0.

Christiansen, Jens, Audrey Irvine-Broque, Jessica Dempsey, et al. 2025. 'Off the Charts? Reasons to Be Skeptical of the Growth in Biodiversity Finance'. *Current Opinion in Environmental Sustainability* 75 (August): 101544. https://doi.org/10.1016/j.cosust.2025.101544.

Cracknell, Jon, Florence Miller, Patricia Cremona, and Heather Godwin. 2024. *Where the Green Grants Went 9*. Environmental Funders Network. https://www.greenfunders.org/wp-content/uploads/WTGGW9-FINAL1.pdf.

DAERA. 2015. ‘Forestry and the Environment’. Department of Agriculture, Environment and Rural Affairs, April 26. https://www.daera-ni.gov.uk/topics/forestry-and-environment.

DAERA. 2021. ‘Farming Grants’. Department of Agriculture, Environment and Rural Affairs, October 6. https://www.daera-ni.gov.uk/articles/farming-grants.

Defra. 2024a. ‘Chapter 10: Public Payments’. GOV.UK, July 22. https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2023/chapter-10-public-payments.

Defra. 2024b. *Farming and Countryside Programme Annual Report 2023 to 2024 (HTML Version)*. https://www.gov.uk/government/publications/farming-and-countryside-programme-annual-report-2023-to-2024/farming-and-countryside-programme-annual-report-2023-to-2024-html-version.

Defra. 2025. ‘Biodiversity Net Gain Statutory Credits: Annual Report 2024 to 2025’. GOV.UK, March 14. https://www.gov.uk/government/publications/biodiversity-net-gain-statutory-credits-annual-report-2024-to-2025/biodiversity-net-gain-statutory-credits-annual-report-2024-to-2025.

Defra and Rural Payments Agency. 2023. ‘Sustainable Farming Incentive (SFI) Handbook for the SFI 2023 Offer’.

Defra, Rural Payments Agency, and Forestry Commission. 2025. ‘Funding for Farmers, Growers and Land Managers’. GOV.UK, February 25. https://www.gov.uk/guidance/funding-for-farmers.

Deutz, Andrew, Geoffrey M. Heal, Rose Niu, et al. 2020. *Financing Nature: Closing the Global Biodiversity Financing Gap*. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

Díaz, Sandra, Josef Settele, Eduardo S. Brondízio, et al. 2019. ‘Pervasive Human-Driven Decline of Life on Earth Points to the Need for Transformative Change’. *Science* 366 (6471): eaax3100. https://doi.org/10.1126/science.aax3100.

Duffus, N. E., S. O. S. E. zu Ermgassen, R. Grenyer, and O. T. Lewis. 2025. ‘Early Outcomes of England’s New Biodiversity Offset Market’. Preprint, bioRxiv, June 27. https://doi.org/10.1101/2025.06.22.660961.

Ecosystem Knowledge Network. 2025. ‘Nature Finance Learning Hub’. Ecosystems Knowledge Network. https://ecosystemsknowledge.net/hubs/nature-finance-learning-hub/.

Ecosystems Knowledge Network. 2023. *Nature Finance Review 2023*. https://issuu.com/ecosystemsknowledge.net/docs/ekn_nfr_2023_single_pages.

Environment Agency. 2025a. ‘PR24 Water Industry National Environment Programme’. Defra Data Services Platform, March 5.

https://environment.data.gov.uk/dataset/39b11ea0-3cfa-4cbb-b3a1-b5950019f169.

Environment Agency. 2025b. 'Water Industry National Environment Programme (WINEP)'. Engage Environment Agency, January 30. https://engageenvironmentagency.uk.engagementhq.com/winep.

Environment Bank Ltd. 2014. 'HS20023 - Evidence on HS2 and the Environment'. March 7. https://committees.parliament.uk/writtenevidence/49340/pdf/.

Ermgassen, Sophus O. S. E. zu, Isobel Hawkins, Thomas Lundhede, Qian Liu, Bo Jellesmark Thorsen, and Joseph W. Bull. 2025. 'The Current State, Opportunities and Challenges for Upscaling Private Investment in Biodiversity in Europe'. *Nature Ecology & Evolution* 9 (3): 515–24. https://doi.org/10.1038/s41559-024-02632-0.

Ermgassen, Sophus O. S. E. zu, Tom Swinfield, Joseph W. Bull, et al. 2026. 'Five Rules for Scientifically Credible Nature Markets'. *Nature Ecology & Evolution*, January 12, 1–12. https://doi.org/10.1038/s41559-025-02932-z.

Esmée Fairbairn Foundation. 2020. *Emerging Funding Opportunities for the Natural Environment*. https://esmeefairbairn.org.uk/our-aims/learning-and-insights/emerging-funding-opportunities-natural-environment/.

Financial Secrecy Index. 2025. *Full List – Financial Secrecy Index*. June 3. https://fsi.taxjustice.net/full-list/.

Forest Research. 2024. *Forestry Statistics 2024 Chapter 8: Finance & Prices*. https://cdn.forestresearch.gov.uk/2024/09/Ch8_Finance_FS2024.pdf.

Forestry Commission. 2024. 'Woodland Grants and Incentives Overview Table'. GOV.UK, July 18. https://www.gov.uk/government/publications/woodland-grants-and-incentives-overview-table/woodland-grants-and-incentives-overview-table.

Foster, David. 2023. 'IUCN Peatland Conference Country Update: Northern Ireland'. Beyond Restoration 14th IUCN UK Peatland Programme Conference, The Maltings, Ely, UK, October 3. https://web.archive.org/web/20240815183953/https://www.iucn-uk-peatlandprogramme.org/sites/default/files/2023-11/%23PeatConf23%20Day%201%20Plenary%20slides%20UK%20Strategy%20Summary%20of%20Progress.pdf.

Gonon, Morgane, Romain Svartzman, and Jeffrey Althouse. 2024. *Bridging the Gap in Biodiversity Financing: A Review of Assessments of Existing and Needed Financial Flows for Biodiversity, and Some Considerations Regarding Their Limitations and Potential Ways Forward*. IIPP WP 2024-14. UCL Institute for Innovation and Public Purpose (IIPP) Working Paper Series. UCL. https://www.ucl.ac.uk/bartlett/public-purpose/WP2024-14.

Green Finance Institute, eftec, and Rayment Consulting Services. 2021. *The Finance Gap for UK Nature*. https://legacy.greenfinanceinstitute.com/wp-content/uploads/2021/10/The-Finance-Gap-for-UK-Nature-13102021.pdf.

Gresham House. 2024a. *Gresham House Launches Strategy to Accelerate Restoration of UK Biodiversity and Enhance Natural Capital*. February 19. https://greshamhouse.com/news-media/gresham-house-launches-strategy-to-accelerate-restoration-of-uk-biodiversity-and-enhance-natural-capital/.

Gresham House. 2024b. *Investing Sustainably for Our Future*. https://greshamhouse.com/wp-content/uploads/2024/08/GH-SI-Report-2024-2.5.pdf.

Gresham House. 2024c. *Sustainable Infrastructure Overview*. https://greshamhouse.com/wp-content/uploads/2025/05/GH-Sustainable-Infrastructure-Overview-Nov-24.pdf.

Gresham House. 2025a. 'Biodiversity Net Gain Q&A'. https://greshamhouse.com/wp-content/uploads/2025/10/Gresham-House-Biodiversity-Net-Gain-QA.pdf.

Gresham House. 2025b. *Delivering Financial Returns: Gresham House Annual Review 2024*. https://greshamhouse.com/wp-content/uploads/2025/04/Gresham-House-Annual-Review-2025.pdf.

Gresham House. 2025c. *Sustainable Infrastructure Overview*. https://greshamhouse.com/wp-content/uploads/2025/11/Sustainable-Infrastructure-Overview-2025-1.5.pdf.

Gresham House. 2026. 'About Us | Gresham House Specialist Asset Management'. Gresham House. https://greshamhouse.com/about/.

Hill, David. 2024. 'The UK's BNG Journey | Environment Bank | The Biodiversity Experts'. *Environment Bank*. https://www.environmentbank.com/blog/the-uks-bng-journey-a-transformative-compliance-market-mechanism/.

Historic England. 2024. 'Support and Funding for Rural Heritage | Historic England'. https://historicengland.org.uk/advice/caring-for-heritage/rural-heritage/support-and-funding/.

HM Government. 2023. *2023 Green Finance Strategy; Mobilising Green Investment*. https://assets.publishing.service.gov.uk/media/643583fb877741001368d815/mobilising-green-investment-2023-green-finance-strategy.pdf.

HM Treasury. 2021. 'Autumn Budget and Spending Review 2021'. GOV.UK, October 27. https://assets.publishing.service.gov.uk/media/61c495ebe90e07196d2b8383/Budget_AB2021_Print.pdf.

HM Treasury. 2024. *Public Expenditure Statistical Analyses 2024*. CP 1131. https://assets.publishing.service.gov.uk/media/66a8dd93ab418ab055592fb9/E03149684_PESA_2024_Web_Accessible.pdf.

HM Treasury, NS&I, and United Kingdom Debt Management Office. 2024. *UK Green Financing Allocation Report*. October. https://assets.publishing.service.gov.uk/media/6717ae60e319b91ef09e383a/HMT-UK_Green_Financing_Allocation_Report_2024_Accessible.pdf.

JNCC. 2024. 'UKBI - Biodiversity Expenditure | JNCC - Adviser to Government on Nature Conservation'. https://jncc.gov.uk/our-work/ukbi-biodiversity-expenditure/.

Kedward, Katie, Sophus zu Ermgassen, Josh Ryan-Collins, and Sven Wunder. 2023. 'Heavy Reliance on Private Finance Alone Will Not Deliver Conservation Goals'. *Nature Ecology & Evolution* 7 (9): 1339–42. https://doi.org/10.1038/s41559-023-02098-6.

Kujala, Heini, Martine Maron, Christina M. Kennedy, et al. 2022. 'Credible Biodiversity Offsetting Needs Public National Registers to Confirm No Net Loss'. *One Earth* 5 (6): 650–62. https://doi.org/10.1016/j.oneear.2022.05.011.

La Notte, Alessandra, Alexandra Marques, Marco Petracco, et al. 2025. 'The Assessment of Nature-Related Risks: From Ecosystem Services Vulnerability to Economic Exposure and Financial Disclosures'. *Ecological Economics* 235 (September): 108636. https://doi.org/10.1016/j.ecolecon.2025.108636.

Laycock, Helen, Dominic Moran, James Smart, David Raffaelli, and Piran White. 2009. 'Evaluating the Cost-Effectiveness of Conservation: The UK Biodiversity Action Plan'. *Biological Conservation* 142 (12): 3120–27. https://doi.org/10.1016/j.biocon.2009.08.010.

Löfqvist, Sara, Rachael D. Garrett, and Jaboury Ghazoul. 2023. 'Incentives and Barriers to Private Finance for Forest and Landscape Restoration'. *Nature Ecology & Evolution* 7 (5): 707–15. https://doi.org/10.1038/s41559-023-02037-5.

Löfqvist, Sara, and Jaboury Ghazoul. 2019. 'Private Funding Is Essential to Leverage Forest and Landscape Restoration at Global Scales'. *Nature Ecology & Evolution* 3 (12): 1612–15. https://doi.org/10.1038/s41559-019-1031-y.

Macintosh, Andrew, Don Butler, Pablo Larraondo, et al. 2024. 'Australian Human-Induced Native Forest Regeneration Carbon Offset Projects Have Limited Impact on Changes in Woody Vegetation Cover and Carbon Removals'. *Communications Earth & Environment* 5 (1): 149. https://doi.org/10.1038/s43247-024-01313-x.

Macintosh, Andrew, Megan C. Evans, Don Butler, et al. 2024. 'Non-Compliance and under-Performance in Australian Human-Induced Regeneration Projects'. *The Rangeland Journal* 46 (5): RJ24024. https://doi.org/10.1071/RJ24024.

Maron, Martine, Amrei von Hase, Fabien Quétier, Laura J. Sonter, Sebastian Theis, and Sophus O. S. E. zu Ermgassen. 2025. 'Biodiversity Offsets, Their Effectiveness and Their Role in a Nature Positive Future'. *Nature Reviews Biodiversity* 1 (3): 183–96. https://doi.org/10.1038/s44358-025-00023-2.

NAO. n.d. 'The Nature for Climate Fund - NAO Work in Progress'. *National Audit Office (NAO)*. Accessed 15 December 2025. https://www.nao.org.uk/work-in-progress/the-nature-for-climate-fund/.

Narain, Divya, and Martine Maron. 2018. 'Cost Shifting and Other Perverse Incentives in Biodiversity Offsetting in India'. *Conservation Biology* 32 (4): 782–88. https://doi.org/10.1111/cobi.13100.

Natural Resources Wales. 2025. 'Trees, Woodlands and Forests'. https://naturalresources.wales/guidance-and-advice/environmental-topics/trees-woodlands-and-forests/?lang=en.

Nature-based Solutions Initiative. 2025. 'Funding Programmes Tool'. NbS Knowledge Hub. https://nbshub.naturebasedsolutionsinitiative.org/funding-programmes-tool/.

NatureScot. 2025. 'Scottish Government Nature Restoration Fund (NRF)'. https://www.nature.scot/funding-and-projects/scottish-government-nature-restoration-fund-nrf.

OECD. 2020. *A Comprehensive Overview of Global Biodiversity Finance*. Organisation for Economic Cooperation and Development (OECD). https://www.oecd.org/en/publications/a-comprehensive-overview-of-global-biodiversity-finance_25f9919e-en.html.

Office for Budget Responsibility. 2025. *A Brief Guide to the UK Public Finances*. March. https://obr.uk/docs/Brief_guide_March_2025.pdf.

Ofwat. 2024. 'Price Reviews'. Ofwat. https://www.ofwat.gov.uk/regulated-companies/price-review/.

Oxbury. 2023. 'Natural Capital Report 2023'. https://www.oxbury.com/media/hicmfzoj/oxbury-natural-capital-report-2023.pdf.

Pe'er, Guy, Aletta Bonn, Helge Bruelheide, et al. 2020. 'Action Needed for the EU Common Agricultural Policy to Address Sustainability Challenges'. *People and Nature* 2 (2): 305–16. https://doi.org/10.1002/pan3.10080.

Piccolo, John J. 2017. 'Intrinsic Values in Nature: Objective Good or Simply Half of an Unhelpful Dichotomy?' *Journal for Nature Conservation* 37 (June): 8–11. https://doi.org/10.1016/j.jnc.2017.02.007.

Poyser, Andre. 2026. ‘Does Financing Biodiversity Reduce Biodiversity Loss? Evidence from EU Funding of Science and Innovation’. *Review of Finance* 30 (1): 273–319. https://doi.org/10.1093/rof/rfaf064.

Rampling, Emily E., Sophus O. S. E. zu Ermgassen, Isobel Hawkins, and Joseph W. Bull. 2023. ‘Achieving Biodiversity Net Gain by Addressing Governance Gaps Underpinning Ecological Compensation Policies’. *Conservation Biology* 38 (2): e14198. https://doi.org/10.1111/cobi.14198.

Rampling, Emily E., Sophus O. S. E. zu Ermgassen, Isobel Hawkins, and Joseph W. Bull. 2024. ‘Achieving Biodiversity Net Gain by Addressing Governance Gaps Underpinning Ecological Compensation Policies’. *Conservation Biology* 38 (2): e14198. https://doi.org/10.1111/cobi.14198.

Ranger, Nicola, Tom Oliver, Jimena Alvarez, et al. 2024. *Assessing the Materiality of Nature-Related Financial Risks for the UK*. https://www.greenfinanceinstitute.com/wp-content/uploads/2024/06/GFI-GREENING-FINANCE-FOR-NATURE-FINAL-FULL-REPORT-RDS4.pdf.

Reyes-García, Victoria, Sebastian Villasante, Karina Benessaiah, et al. 2025. ‘The Costs of Subsidies and Externalities of Economic Activities Driving Nature Decline’. *Ambio* 54 (7): 1128–41. https://doi.org/10.1007/s13280-025-02147-3.

Rural Payments Agency. 2024. ‘About the Water Restoration Fund’. GOV.UK, June 8. https://www.gov.uk/government/publications/water-restoration-fund-guidance-for-applicants/about-the-water-restoration-fund.

Santander UK Group Holdings plc. 2024. ‘Annual Report 2024’. https://www.santander.co.uk/assets/s3fs-public/documents/Santander%20UK%20Group%20Holdings%20plc%202024%20Annual%20Report.pdf.

Scottish Forestry. 2025. ‘Home’. https://www.forestry.gov.scot/.

Scottish Government. 2025. ‘Rural Payments and Services’. https://www.ruralpayments.org/topics/all-schemes/.

Seidl, Andrew, Kelvin Mulungu, Marco Arlaud, Onno van den Heuvel, and Massimiliano Riva. 2020. ‘Finance for Nature: A Global Estimate of Public Biodiversity Investments’. *Ecosystem Services* 46 (December): 101216. https://doi.org/10.1016/j.ecoser.2020.101216.

South Yorkshire Pensions Authority. 2024. ‘Annual Report 2024’. https://www.sypensions.org.uk/About-us/Who-we-are/Annual-Reports.

Standing, Andre. 2024. ‘Why the $700 Billion Funding Gap for Biodiversity Is Dangerous Nonsense: Implications for the Oceans and Small-Scale Fisheries’. Coalition for Fair Fisheries Arrangements, October 24. https://www.cffacape.org/publications-blog/funding-gap-dangerous-nonsense.

Stuart, Alice, Alan Bond, Aldina M. A. Franco, et al. 2025. ‘How England Got to Mandatory Biodiversity Net Gain: A Timeline’. *Ambio*, ahead of print, December 3. https://doi.org/10.1007/s13280-025-02277-8.

Swinfield, Tom, Siddarth Shrikanth, Joseph W. Bull, Anil Madhavapeddy, and Sophus O. S. E. zu Ermgassen. 2024. ‘Nature-Based Credit Markets at a Crossroads’. *Nature Sustainability* 7 (10): 1217–20. https://doi.org/10.1038/s41893-024-01403-w.

Sze, Jocelyne S., L. Roman Carrasco, Dylan Childs, and David P. Edwards. 2022. ‘Reduced Deforestation and Degradation in Indigenous Lands Pan-Tropically’. *Nature Sustainability* 5 (2): 123–30. https://doi.org/10.1038/s41893-021-00815-2.

Triodos Bank UK Limited. 2024. *Annual Report 2024*. https://www.triodos.co.uk/binaries/content/assets/tbuk/press-and-media-page/triodos-bank-uk-limited-annual-report-2024.pdf.

UNEP. 2023. *State of Finance for Nature 2023: The Big Nature Turnaround - Repurposing $7 Trillion to Combat Nature Loss*. United Nations Environment Programme. https://doi.org/10.59117/20.500.11822/44278.

UNEP. 2026. *State of Finance for Nature 2026: Nature in the Red - Powering the Trillion Dollar Nature Transition Economy*. United Nations Environment Programme. https://wedocs.unep. org/handle/20.500.11822/49119.

Waldron, Anthony, Arne O. Mooers, Daniel C. Miller, et al. 2013. ‘Targeting Global Conservation Funding to Limit Immediate Biodiversity Declines’. *Proceedings of the National Academy of Sciences of the United States of America* 110 (29): 12144–48. https://doi.org/10.1073/pnas.1221370110.

Welsh Government. 2025. ‘Rural Grants and Payments | Sub-Topic’. GOV.WALES. https://www.gov.wales/rural-grants-payments.

White, Thomas B, Silviu O Petrovan, Alec P Christie, Philip A Martin, and William J Sutherland. 2022. ‘What Is the Price of Conservation? A Review of the Status Quo and Recommendations for Improving Cost Reporting’. *BioScience* 72 (5): 461–71. https://doi.org/10.1093/biosci/biac007.

World Bank Group. 2024. ‘INTERNATIONAL DEVELOPMENT ASSOCIATION’S TWENTIENTH REPLENISHMENT MID-TERM REVIEW: NOTE ON NATURE FINANCE TRACKING METHODOLOGY’. https://documents1.worldbank.org/curated/en/099020524182036310/pdf/BOSIB1722f330c0fd18f8818b41d9bbe465.pdf.