The nature of our economy

Implementing the Dasgupta Review

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Green Alliance
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Foreword

Dame Fiona Reynolds, member of the Dasgupta Review Advisory Panel

"We are dangerously close to breaching our planet's ability to recover from nature's losses."


Marcus Ginns

The Dasgupta Review on the economics of biodiversity was groundbreaking. This was true on many levels, including for those, like me, who served on its advisory panel. For many of us, it was the first time the whole, global picture of the declining state of biodiversity and the dependence of our economy on nature's goods and services had been brought together, along with searing clarity on just how far adrift we are from our economic systems properly accounting for nature's true value. As the review made clear, we are dangerously close to breaching our planet's ability to recover from nature's losses; and the UK is one of the most nature depleted countries in the world.

The review called for a fundamental shift in our economic systems to reflect our deep reliance on the natural world, and we presented our report to its commissioner, the Treasury, confident of its analysis and persuasive messages. Yet progress in responding to, let alone embedding these ideas has been frustratingly slow.

The natural world is the foundation of all life on earth, shaping everything, including our climate. Its destruction – and the destruction of the natural beauty that makes life worth living – puts the environment, the global economy and our collective future at risk. And yet, despite this evidence, the urgency of protecting nature is still not reflected in economic policy making.

One reason for this lag is that nature's decline is harder to quantify than, for example, carbon emissions. Nature protection measures and ambitions lag behind those for decarbonisation. As an example, the 2006 Stern Review of the Economics of Climate Change had more traction within the Treasury than the Dasgupta Review. But the landscape is shifting. We now have legally binding targets for nature, a government that accepts the economy is in need of reform, and a better understanding of how the climate and nature crises are interdependent and require urgent action. A serious rethink of our economic system is no longer optional, but essential.

"A serious rethink of our economic system is no longer optional, but essential."

The Dasgupta Review contains powerful messages which, if heard, would set us on the right track. But it seems to have been forgotten by the Treasury. This must change.

Green Alliance's report seeks to drive this change by translating the Dasgupta Review's findings into actionable policy. It puts forward implementable policy proposals on how nature can be meaningfully integrated into economic decision making, getting us step by step towards a more Dasgupta-aligned, sustainable and resilient economy. On top of short term change, these practical steps focus on long term prosperity, looking beyond what money can buy, and better policy making for future generations.

There can be no sustainable development – and no economic growth – without a thriving natural environment. The Dasgupta Review makes that alarmingly clear. Yet we continue to rely on flawed measures of economic success and mismanage the very assets that underpin our future.

If this government acts on the Dasgupta Review, we will soon begin to see a stronger, fairer and more resilient UK. An economy that values nature would deliver benefits for all: improved mental health, lower household costs, job creation, a stronger connection between citizens and policy making, and greater confidence in a sustainable future. The time for action is now.

Summary

> **Mainstream economics ignores the true value of nature to the economy.”**

The Dasgupta Review was the high level report on the economics of biodiversity, commissioned by the Treasury from the eminent economist Professor Sir Partha Dasgupta and published in 2021. It showed how mainstream economics ignores the true value of nature to the economy. As a result, institutions, policies and the financial system, acting together, are depleting nature without control or limits.

While the government is right to push for a higher growth rate, it should ensure that this does not come at the expense of further decline in the country’s nature and biodiversity, undermining long term economic prosperity.

The Dasgupta Review highlighted that, between 1990 and 2014, the UK’s ‘produced capital’ (including manufactured goods and built infrastructure) rose by a fifth but, in the same period, its stock of ‘natural capital’ declined by 30 per cent. This neglect harms the economy. Analysis by the Green Finance Institute suggests that depletion of nature at the present rate will have the effect of cutting UK gross domestic product (GDP) by six per cent by the 2030s.

Nature must be seen as an asset, along with other business assets, for it to be properly accounted for and invested in. The government already intervenes to encourage businesses to protect nature, for example through the biodiversity net gain (BNG) policy in the construction sector. The previous

government passed the landmark Environment Act in 2021, enshrining targets for nature protection in law. But decline in the natural world is accelerating. This needs to be reversed through more rapid and profound action to avoid severe economic damage that will harm the nation's ability to maintain a healthy environment and improve people's lives.

Significant systemic reasons why nature is disregarded by economics were identified by the Dasgupta Review. One was the use of common economic metrics.

GDP, by its nature, is an incentive to depreciate natural assets. The system for measuring the state of the public finances discourages investment in maintaining the UK's stock of natural capital and Bank of England mandates do not recognise the value of protecting nature.

> **"The economic system allows companies to extract value from nature without encouraging them to preserve it."**

More broadly, the economic system allows companies to extract value from nature without encouraging them to preserve it for future business.

We argue that the political system is too short term in its decision making cycles to allow politicians to address these challenges.

Professor Dasgupta convincingly showed us what is wrong. But his review stopped short of offering detailed solutions to reverse nature depletion to protect the UK economy, businesses and society.

Building on the report's valuable findings and our subsequent research into the issues, we offer a manual for policy makers, on how to factor the services nature provides into economic decisions over the short (within a year), medium (to the end of the current parliament) and long term (over the next decade or more).

Our policy proposals are presented under the following three categories:

1. **the macroeconomy:** measuring economic growth, assessing the public finances and monetary policy;

2. **the microeconomy:** business investment in protecting nature and the role of the National Wealth Fund in encouraging this;

3. **political reforms:** a Commissioner for Future Generations, using citizens' assemblies and clearer metrics on the state of nature.

Summary recommendations

		Short term (within a year)
Macroeconomic	**Replace GDP with a new prosperity metric**	Accelerate Office for National Statistics' (ONS) work on 'Beyond GDP'
Macroeconomic	**Reform public finances**	Accelerate work on natural capital accounting Issue government statements on the long term fiscal position over five, ten and 20 years
Macroeconomic	**Require the Bank of England to protect nature**	Update the Bank's remit letters Set guidance for the banking and insurance industries' risk approach Introduce a climate and nature capital requirements framework for the bank and insurance industries
Microeconomic	**Develop natural capital markets**	Publish the consultation on the governance of carbon and nature markets
Microeconomic	**Equip the National Wealth Fund to invest in natural capital**	Strengthen the National Wealth Fund (NWF)'s mandate to invest in nature Replace the duty for the NWF to generate a return on investment with a broader set of success metrics Create a public platform now to aggregate data on nature markets as they develop and as new metrics become available
Political	**Political reforms**	Develop now, and then regularly publish, clearer, simplified indicators on nature and biodiversity loss to show progress

Medium term (to the end of the current parliament)	**Long term** (a decade or more)
Introduce a ‘GDP plus’ measure to show ‘inclusive’ growth, defined in the Dasgupta Review as a measure of the social worth of produced, human and natural capital	Develop and implement an internationally comparable replacement for GDP
Introduce mandatory nature impact assessments in all budgets and spending reviews Reform fiscal rules to target improvements in Public Sector Net Wealth	Move to a system of accruals-based accounting for the public finances
Stress test the banking and insurance industries’ vulnerability to the effects of nature loss Enhance the Bank’s leadership on climate and nature, through personnel and a science-based taxonomy	
Mandate reporting aligned with the Taskforce on Nature-related Financial Disclosures (TNFD) Set out a roadmap for how the government will scale up private finance Reform fiduciary duties on company directors	Regulate the food and water sectors to introduce new nature markets
Hold citizen’s assemblies to inform local decisions on nature protection Appoint a commissioner for future generations to scrutinise long term policy impact	Explore embedding rights for nature into law

Introduction

> “As nature declines, so does quality of life.”

Rethinking nature and the economy

The UK’s economy is not delivering prosperity for most people. Whether it’s soaring labour market inactivity, the cost of living crisis or a deteriorating public realm, too many things in society seem to be on the wrong track.

The government recognises this malaise. It was elected in 2024 on a radical programme to galvanise the economy and improve public services. To do this, it made achieving the fastest growth rate among G7 nations its central mission. The focus on economic expansion is understandable. Higher growth could tackle many of Britain’s problems by generating more wealth, paying down debt and making more funds available for vital public services.

Ministers also recognise the importance of climate and nature to national wellbeing. Alongside the growth mission, a goal to deliver clean power by 2030 was one of the government’s five core pledges. It has acted early to protect nature by appointing the UK’s first nature envoy and pledging to strengthen support for national parks. The government has picked up the torch from the previous government, which passed the landmark Environment Act in 2021.

Governments are taking these actions because they know nature is important to people’s lives; as nature declines, so does quality of life.[1] But something is still very wrong with the current system: the UK is now one of the most nature depleted countries in the world, and people are noticing. Opinion polls consistently show people worry about nature loss and want the government to reverse it.[2]

Protecting nature has always been a second order priority for policy makers, behind achieving economic growth. This relative neglect has seen a halving of the country’s biodiversity over the past few decades.[3] There is a blind spot arising from a failure to understand that a strong economy and healthy environment are two sides of the same coin.

The Dasgupta Review

> "Nature must be valued as the essential economic asset it is."

It was this understanding of the co-dependency of nature and the economy that led the Treasury to commission a review of the economics of biodiversity by the eminent British economist Professor Sir Partha Dasgupta, published in 2021.

The review showed how mainstream economics ignores the true economic value of nature. The design of economic institutions and financial systems means they effectively collude in depleting it. This neglect, in turn, harms the economy, albeit in ways that are invisible to standard economic measures. Instead of being ignored, nature must be brought to the fore of economic thinking, valued as the essential economic asset it is, properly accounted for and invested in.

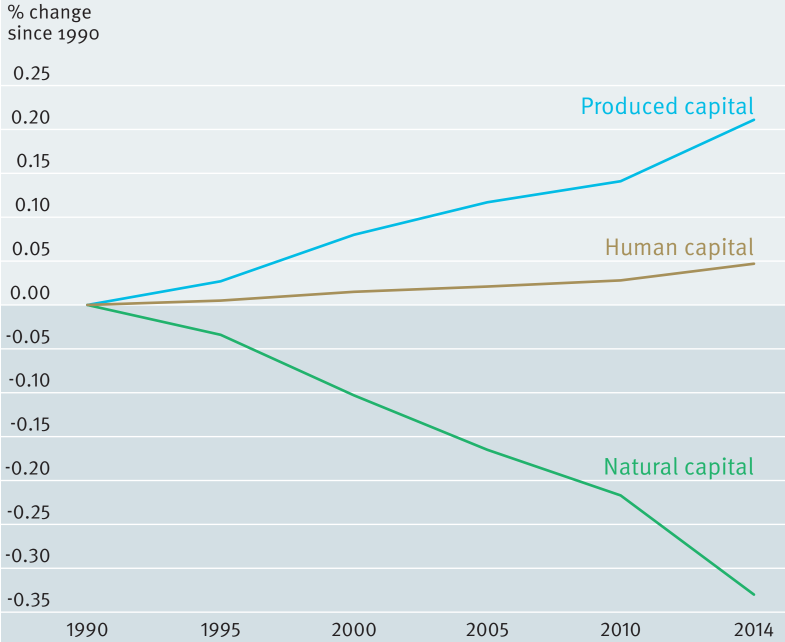
To illustrate the systemic problem, a tree, which provides vital services while alive, such as absorbing carbon from the atmosphere, cleaning the air or cooling urban areas, only has economic value when it is cut down and used for commercial purposes.

This failure to account for the true worth of nature, for all its uses to businesses and society, has led to careless overconsumption and destruction of natural assets. But humanity, the economy and society are all completely reliant on the services nature provides. Human life cannot exist without it and is limited by the limits of nature.

“Environmental damage is already slowing down the UK’s economy.”

Economic growth has come at the expense of steep natural capital decline

UK wealth per capita, 1990 to 2014[4]



Shrinking nature harms the economy

Environmental damage is already slowing down the UK’s economy and the Green Finance Institute predicts this could lead to an estimated six per cent reduction in GDP by the 2030s. This is larger than falls in GDP caused by the severe economic shocks of the 2008 global financial crisis or the Covid-19 pandemic.[5]

In line withProfessor Dasgupta’s findings, the co-dependent relationship between nature and the economy must be better acknowledged, so the social advances promised by the government can be sustained and are not undermined by the depletion of the natural world on which the economy depends.

This means rethinking an approach to macroeconomics and the public finances which measures and prioritises the wrong things: ever higher consumption instead of investment, myopic time horizons to judge economic gains and losses, and a view of nature as a commodity to be freely exploited, rather than as an asset to be valued and retained.

> “Although many businesses understand their dependence on nature they lack incentives to address the problem.”

It also means changing incentives for the private sector which continually depletes nature’s resources, with no obligation to restore and preserve it for future businesses and generations. Although many businesses understand their dependence on nature they lack the mechanisms and incentives to address the problem. And those who actively choose to free ride on nature should be made to internalise the long term costs to their sector and the wider economy.

The government’s signal that it wants to include quality of life indicators as part of its growth mission is an ideal opportunity to rethink the relationship governments, businesses and consumers have with nature.

Of course, it will not be easy to change the workings of an entire economic system, built up since its industrial foundations on the apparently cost-free consumption of limitless natural resources. But change is possible and vital to ensure the wellbeing of UK citizens now and in the future. The prize will be a healthier, resilient and more prosperous society.

The Dasgupta Review as a manual for change

> **“Professor Dasgupta’s analysis can be translated into concrete, practical action.”**

Despite the compelling argument and overwhelming evidence presented in the Dasgupta Review, little has been acted on by government in the four years since its publication, aside from feeding into the existing work on the Green Finance Strategy and the ONS’s ‘Beyond GDP’ project. Why is this?

In our work over the past two years, looking at how to take forward the findings of the Dasgupta Review, we have spoken to over 60 politicians, civil servants, business people and academics. Many of them were close to the review process, contributed to its findings and had an interest in seeing it put into effect. They gave many possible reasons for inaction. A major one may be that the review itself was complex and high level. But this was deliberate, as Professor Dasgupta saw his task as demonstrating what was fundamentally wrong with the economic system, rather than offering immediate solutions. However, bureaucratic inertia, a lack of political direction and the unwillingness of Treasury ministers to prioritise it were also cited as reasons why there had been no action on its important insights.

In this report, we show how Professor Dasgupta’s analysis can be translated into concrete, practical action. We identify the first steps needed to reorient the economy towards a nature-positive vision, aligned with the review’s findings. We also outline how this action can be maintained and augmented over the medium and long term to sustain change.

Governments need the ability to commit to policies that , although they have short term costs, have much greater long term payoff, as would be the case with direct public investment in nature restoration. This may involve political reform to allow longer term thinking in decision making and public mobilisation. People already overwhelmingly support more action on nature but need ways to hold politicians accountable.[6]

> **The state and central bank shape the whole economic approach to nature.”**

The macroeconomic framework fails to take account of the importance of assets, particularly natural assets

GDP measures the monetary value of goods and services produced and consumed

National accounts focus on cash flows and ignore assets

Both of these economic frameworks prioritise financial flows over assets

Creating a pro-nature economic system

Acting to preserve nature will make the economy more resilient. But, to achieve this, how economists, politicians and central bankers measure prosperity, manage the government’s finances and direct capital flows must change. New incentives are needed for businesses and investors.

We start by looking at the macroeconomy, how the economy functions as a whole. The state and central bank operate at its heart and shape the whole economic approach to nature. But current macroeconomic policy making, developed

“During the mid-20th century it was convenient to exclude nature from economic modelling.”

during the mid-20th century, when it was convenient to exclude nature from economic modelling, are no longer fit for purpose.

Our macroeconomic proposals cover three areas:

1. Changes in economic growth measurement, so the apparent rising prosperity of society does not happen at the expense of nature.

2. Reforms to public finance accounting, providing better incentives for governments to protect nature.

3. Monetary and financial stability policy to support a nature-positive economy, to direct financial flows towards economic activity that protects and enhances nature.

Rethink GDP

What's the problem?

> **Forest fires and oil spills perversely raise GDP.”**

GDP, which represents the monetary value of all the goods and services produced in an economy during a given period, is one of the most important statistics ever invented. Consumers, businesses and policy makers have all internalised it as the ultimate policy objective and a global benchmark for success.

Its major flaw is that, since there is no natural way of assessing or comparing the value of very different things like a car or a tree, economists must estimate a market price as a proxy for something's true value. This assumption makes GDP easier to calculate. But it underplays the value of assets and activities for which there are no or incomplete markets.[7]

For example, GDP ignores the value of domestic work as this takes place outside a market setting. And it treats natural assets as valuable only when they are destroyed to be used for a commercial process. Forest fires and oil spills perversely raise GDP as only the economic worth of clearing them up is counted, not the destruction of a valuable part of nature.

As mentioned, the government made achieving the highest GDP growth among G7 nations a core mission in its 2024 election campaign. It later qualified this by pointing to the importance of quality of life, saying it aims to “raise living standards”. This will be scored according to whether it raises real household disposable income (RHDI, a measure of actual purchasing power after taxes and inflation) and GDP per capita in every region of the UK.[8]

Enlarging the scope of growth policy to encompass more of the government's intended outcomes is a good idea. But, where targets continue to be based on the monetary components of GDP – output and consumption – they will continue to obscure the value of non-monetary goods that play a significant role in ensuring wellbeing: health, opportunity, prosperous communities, fulfilling work and a thriving environment.

Some governments around the world have experimented with alternative growth measures, although the UK is unlikely to abandon GDP entirely as a target, for fear of suggesting it is giving up on growth and prosperity. But it should change the way GDP is calculated or supplement it with indicators of wellbeing and biodiversity that give a more rounded view of progress and the true state of the economy. The long term aim should be to use an indicator that dynamically represents progress towards the UN's sustainable development goals of a prosperous, high quality of life that is sustainable and equitable.

The European Commission and UN produce composite indicators covering health, education, equality, governance, security, environment and happiness, and are exploring how these can supplement GDP. Many of these are strongly correlated with a country's ecological footprint, showing the importance of nature and its value as a proxy for wider social wellbeing.[9] China's Gross Ecosystem Product and New Zealand's Living Standards Framework are other examples of sustainable alternatives to GDP.

How to include nature in economic measures

> **“The ONS should develop a successor to GDP over the longer term.”**

1. A ‘GDP-plus’ indicator for growth for the short term

This would include traditional GDP data supplemented with an additional indicator, Net Inclusive Income (NII). It would align with the inclusive wealth concepts outlined in the Dasgupta Review and a form of it is already produced quarterly by the ONS under its ‘Beyond GDP’ programme. NII measures the flow of benefits received from national assets, including nature, adjusted for any depreciation through, for example, loss of land to flooding or depleted fish stocks.[10] This work should be expedited and the ONS should begin publishing GDP and NII in tandem as soon as possible.

2. A long term dynamic and sustainable measure of prosperity

The ONS should develop a successor to GDP over the longer term that tracks both flows and stocks of built, human, social and natural capital and it should make future projections under different policy scenarios.

A Social Welfare Index (SWI), based on the UN’s Social Development Goals (SDGs), would indicate the net contribution of the economy to wellbeing. As well as measuring the net inputs of production and consumption, it would include continually updated metrics on the positive contributions made to the economy by natural and social capital.[11]

Examples of this approach include Scotland’s National Performance Framework and the Canadian Index of Wellbeing. These tend to provide both a composite index of progress overall, using dashboards covering separate indicators, such as living standards and the state of the environment, in more detail.

Reform public finances

What's the problem?

> "Ignoring assets obscures the true financial position and discourages public investment."

There is an urgent need to increase the amount of public and private investment going into nature, to restore past damage and increase resilience. Public funding for nature projects is often the catalyst for later private sector investment (explored further below). But public investment is severely constrained by the system of government accounts and the way investment is appraised.

UK public spending is more than 40 per cent of GDP and the government's vast balance sheet lies at the heart of decisions about how public money is spent. Yet the way government finances are recorded and handled makes it hard to manage these funds sustainably.

The current system of national accounting asks a narrow and unrealistic question: is the government balancing its books in simple cash terms? In addition, governments since the late 1990s have introduced fiscal rules that tie their own hands when it comes to debt and deficits, to signal probity to financial markets. The design of these have limited room for manoeuvre to invest sustainably.[12]

Focusing on cashflows ignores the importance of physical and financial assets on the government's balance sheet. While cash indicates short term flows, assets reflect long term economic sustainability. Ignoring assets obscures the true financial position and discourages public investment, since the beneficial effect of this investment is not captured on the government's balance sheet.

This approach to accounting may lie behind the UK's more recent pitiful public and private investment record.[13] It also encourages bad decisions, such as fire sales of public assets to provide a short term boost to the debt to GDP ratio which often comes at the price of longer term mismanagement. As an example, capital investment by the ten biggest water companies, privatised in the 1990s, has fallen by 15 per cent since, even as poorly managed and maintained infrastructure has posed risks to public health and damaged local environments.[14]

> Any meaningful measure should include natural, human and physical assets."

Many economists urge a shift away from appraising the public finances based on cashflows and totals (deficits and debts) towards a system of accruals-based accounting.[15] Accruals accounting is not exotic, it is practised in much of the private sector and by countries like New Zealand. Using it enables governments to subtract liabilities from assets, yielding an assessment of the country's Public Sector Net Wealth (PSNW), which is a much more accurate representation of the true health of government finances.[16] It is an incentive to governments to create public value for this and future generations, because it recognises that public investment creates valuable assets.[17]

In the light of the Dasgupta Review's arguments about the importance of nature to the economy, any meaningful measure of assets on the public balance sheet should include natural, human and physical assets.[18]

The fiscal watchdog, the Office for Budget Responsibility (OBR), already tries to estimate the future cost of current policies through publications such as its 'Fiscal risks' report. The 2024 edition contains stark warnings about future environmental shocks to the public finances.[19] However, the OBR does not publish a long term view of the overall public balance sheet, aside from the trajectory of government debt, and pays little attention to the asset side of the balance sheet.

How to take better account of nature

1. Create a new financial management framework based on accruals accounting

This should produce a comprehensive government balance sheet, assessing the current net worth of all public assets, including natural assets. Economic and public finance decisions should be made with a view to enhancing the value of these over each parliament or forecast period.

> “The Treasury should report on how it implements the Environmental Principles Policy Statement.”

2. Publish a statement on the UK’s long term fiscal position, over five, ten and 20 years

This should be based on projections for changes in the value of assets (as New Zealand’s government does). It should be jointly and independently assessed by the Climate Change Committee and the OBR, with advice sought from the Office for Environmental Protection.

3. Set new fiscal rules

The shift to Public Sector Net Financial Liabilities as a measure of the government’s fiscal position, announced in the 2024 budget, was welcome as it enlarges the fiscal space available for investment. However, it does not change the government’s underlying incentives around investment and should be replaced by PSNW as the main measure of the underlying health of the public finances, accompanied by a fiscal rule requiring the government to grow the value of PSNW over a parliamentary term.

4. Require the Treasury to report on the environmental impact of budget and spending review decisions

This would enable the government to stay on course to meet its nature and climate goals. In not doing this, it is failing to implement the duty to have due regard to the Environmental Principles Policy Statement (EPPS).[20] The EPPS duty was a central measure in the 2021 Environment Act and one of the four cornerstones of the UK’s post-Brexit system of environmental governance. It requires government departments to take account of environmental principles in policy making. In view of evidence of the mounting damage to the economy, outlined in both the Dasgupta Review and the Green Finance Institute’s reports, the exclusion of fiscal policy making from the scope of the EPPS duty is unsustainable. It may not be feasible to report on climate and nature impacts annually in every budget, but it should be done at least every two to three years and in every multi-year spending review. The Treasury should, in any case, report on how it implements the EPPS more broadly and include the duty in its Green Book.

Make monetary and financial stability policy work for nature

> “Climate change and nature’s degradation are increasing price and financial instability.”

What’s the problem?

While the government has the primary tools to direct the economy, the Bank of England is a state institution with significant influence on the economy’s trajectory, through setting interest rates and ensuring a stable financial system. However, the Bank is currently not using these tools to protect nature as a determinant of a resilient economy.

The Bank operates independently of government, but its objectives are set in legislation and its remit is set by the chancellor to supplement its objectives. The government and the Bank work in lockstep. They should be aligned on ensuring the economy works with, not against, nature.

The Bank’s objectives task it with ensuring low inflation (known as monetary policy) and a stable financial system, both of which underpin a healthy economy. Low and stable inflation gives businesses confidence to invest and consumers a stable cost of living. Financial stability is critical to ensure the financial sector provides the loans and insurance to businesses and households the economy depends on.

But climate change and nature’s degradation are increasing price and financial instability, undermining economic success.[21] At present, the Bank is not acting sufficiently to mitigate the risks. These range from physical risks triggering price shocks, such as soil health or weather negatively affecting a harvest, and deforestation, causing flooding and droughts, through to a major drop in financial asset prices causing financial instability.

The Bank needs to take preventative action to change the underlying profile of climate and nature risk to fully meet its objectives. This, in turn, will help to redirect financial flows away from activity that undermines the economy towards actions that support economic resilience.[22] This would be in line with the Bank’s own objectives and the government’s economic aim to create a “climate resilient, nature positive, net zero economy”.

> “The Bank should focus its next biennial exploratory scenario stress test in 2027 on nature risk.”

How to improve monetary and financial stability policy for nature

Actions the Bank of England can take

1. Lower funding costs for renewables

The Bank should introduce a Term Funding Scheme for renewable energy development, linked to a wider, science-based UK green taxonomy, if and when that is introduced by the Treasury (see opposite), to make the process of investing in nature and the environment simple and transparent. Renewables will provide a stable energy price, protecting the UK from gas price shocks and the spiralling inflation that occurred in 2021.

2. Set guidance for the banking and insurance industries’ approach to climate and nature financial risks

This should be done the end of 2025, setting expectations on banks and insurers to manage the financial risks of nature degradation and integrating the risk into an updated supervisory statement, ensuring financial firms make appropriate assessments ahead of the next round of stress tests in 2027.

3.Outline a climate and nature capital requirement framework for banks and insurers

The Bank should commit to consult by the end of 2025 on methodologies for sizing capital requirements on banks and insurers, in relation to climate and nature related financial risks, to ensure they are resilient, and in place sufficiently ahead of the next round of stress tests.

4. Stress test the banking and insurance sectors

The Bank should focus its next biennial exploratory scenario stress test in 2027 on nature risk, to assess financial risks from nature degradation at the level of the financial sector and individual banks and insurers. It should then integrate climate risk, no later than 2027, and nature risk, no later than 2029, into its biennial cyclical stress test scenarios for banks and insurers.

“The Treasury should create an independent scientific advisory committee on climate and nature to advise the Bank's committees.”

Actions the Treasury can take to support the Bank

1. Enhance the Bank's leadership on climate and nature

The Treasury should appoint at least two individuals with climate and nature expertise to the Bank's committees responsible for price and financial stability. It should also include this expertise in the job requirement for the appointment of the next Bank governor, due in 2028; and it should create an independent scientific advisory committee on climate and nature to advise the Bank's committees responsible for price and financial stability.

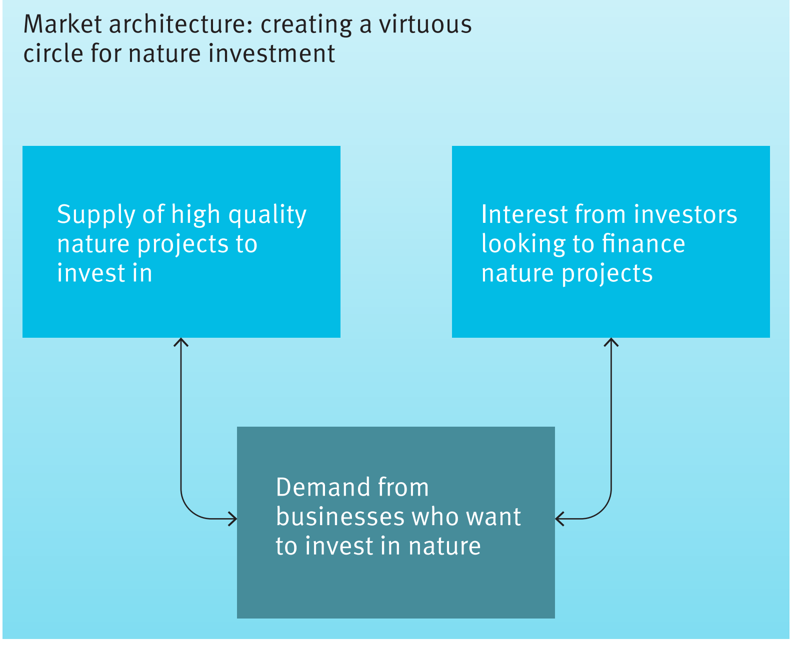
2. Introduce a science-based green taxonomy

This would provide the government, regulators, companies, investors and consumers with credible, science-based information on the environmental impact of economic activities, providing clarity on what activities contribute to a climate resilient, nature positive, net zero economy.

3. Update the Bank's remit letters

This would ensure the Bank's three committees, responsible for meeting its objectives, all have priorities on climate and nature risks, putting nature risk on an equal footing with climate change.

"When nature's value is recognised, new private sector opportunities emerge."



Driving investment in nature restoration

The economy relies on nature, yet everyday economic activity routinely depletes it at an unsustainable rate. Businesses must play their part in preventing or repairing this damage, especially as it threatens the viability of future business activity.

Policy makers, with the help of regulation, can use the market to achieve this. When nature's value is recognised, new private sector opportunities emerge, ensuring the business stake in the state of nature is recognised, as public money alone cannot pay for the scale of nature restoration required. The 'finance gap' – the amount of money still needed to meet UK nature restoration targets – is at least £44 billion over the next ten years.[23]

“Businesses would be able to buy and sell nature ‘credits’.”

The government set a goal in 2023 of £1 billion in private finance for nature every year by 2030.[24] But, in 2022, only £95 million had been secured.[25] The previous government’s approach to the funding gap was to focus on supporting voluntary nature markets, where businesses would be able to buy and sell nature ‘credits’, similar in principle to existing voluntary carbon markets. This could mean farmers being paid per hectare to increase biodiversity and restore habitats, like native woodlands and wetlands. A Nature Markets Framework was set out in 2023 and the Natural Environment Investment Readiness Fund (NEIRF) has supported farmers to create business cases for investment.[26] But these positive moves are not sufficient on their own to deliver the scale of investment required.

How to boost private investment

1. Demonstrate that nature can deliver economic value, by boosting the supply of high quality nature projects demonstrating outcomes to interest investors, such as large scale carbon storage.

2. Create business incentives to invest in nature, so it becomes business as usual.

3. Combine public and private finance through the National Wealth Fund, unlocking sufficient private finance to meet the UK’s nature goals.

Demonstrate that nature is investible

> “Investors are nervous about what claims they can make.”

What’s the problem?

Markets need three elements to function well: effective architecture, such as standards and governance; supply, in this case of high quality nature projects to invest in; and demand, in this case from businesses who want to invest in nature.

To date, the government has focused largely on nature market architecture, for example setting standards for investments. It has also supported farmers to create business cases for investors in environmental projects through the Natural Environment Investment Readiness Fund (NEIRF) scheme. This is enabling farmers to start supplying to the market.

But investors remain cautious, for three main reasons. First, there is a mismatch in scale between the projects farmers and landowners can offer to market, and the scale that investors are interested in. Second, the information projects can provide on outcomes are not communicated in terms that make sense to investors. For example, landowners talk in terms of hectares of woodland created, while investors want to know how much carbon will be stored and how much flood risk is reduced. Third, investors are nervous about what claims they can make based on their investments, with the lessons of ‘worthless’ carbon credits looming large.[27]

The government has an important role in demonstrating that nature investments deliver economic value and that proper governance is in place to build a robust market.

How to demonstrate the value of nature investment

1. Public investment should create a pipeline of nature projects to attract private investment

This can be done by directing more of the existing budget for the Environmental Land Management (ELM) schemes towards the Landscape Recovery scheme which is best suited to private investment, with long term, large projects restoring peat and planting trees at scale. This funding has not been targeting high impact projects as most of the farming support budget is being spent on the lower impact Sustainable Farming Incentive. But farmers want to do more large scale, ambitious projects. The 2023 Landscape Recovery application round was oversubscribed, with half of the applications rejected.[28] A third of the ELM budget should be reserved for Landscape Recovery.

"Farmers want to do more large scale, ambitious projects."

2. Public money should be invested based on outcomes

This will create market information that private investors can learn from. For example, communicating quantities of carbon stored, water quality and flood protection improvements as project outcomes would demonstrate the benefits and monetary value to investors. This would increase the appetite to invest as well as reduce the risks around novel markets.

3. Robust standards and governance for new nature markets

The voluntary carbon market has suffered from a lack of standards and governance, leading to claims of worthless carbon credits and greenwashing.[29] Standards for nature markets need to be developed beyond carbon market parameters, such as under the UK Woodland Carbon Code, including rules about what nature claims can be made by businesses, and an independent body judging whether they are being met. Business is currently filling the governance gap.[30] The government should step in with a system of independent governance that builds greater trust and confidence.

Create incentives for business to invest

What's the problem?

> “As nature declines, the risks will become increasingly material to business operations.”

Markets need adequate supply and demand to function. For nature markets, supply means a large pipeline of high quality nature restoration projects. On the demand side, businesses must be willing to pay for them. This is a challenge, as there are not yet enough businesses willing to invest in nature projects, even though nature delivers many goods and services that underpin their success, such as healthy soils reducing flood risks to property.[31] The problem is that, until now, nature's benefits have come free, without businesses contributing to their upkeep.

However, as nature declines, the risks will become increasingly material to business operations. Some businesses are therefore choosing to invest in nature to improve the resilience of their supply chains. For example, food manufacturers, water companies and a county council jointly fund measures on farms in East Anglia to support their operations in the region, including storing carbon, reducing flood risk, improving water quality and increasing supply chain resilience, through the Landscape Enterprise Network model.[32]

Regulation that requires large companies to report on the nature risks they are exposed to, and the impacts they have on nature through their supply chains, would help to increase visibility of the risks and should motivate more businesses to invest in restoration along their supply chains. Making the recommendations of the Taskforce for Nature-related Financial Disclosures (TNFD) mandatory would be an important step, but is not sufficient. Voluntary nature markets alone will not drive the levels of private finance into nature required to meet UK nature restoration targets.

Other ways to encourage businesses to invest in nature should be explored by the government to scale private finance up significantly over the years of this parliamentary term. This could mean new regulation. Currently, only the water and construction sectors are covered by regulation, through biodiversity net gain (BNG) and nutrient neutrality

requirements in the construction sector. But the compliance markets these have created will not be enough on their own to reverse nature decline across the UK. Even under the most optimistic scenario, BNG could only deliver just over one per cent of the government's target to protect 30 per cent of land for nature by 2030.[33]

Markets are not the only way to drive private finance into nature. Other options include: charging a levy on businesses to account for their impacts, with the revenue invested in nature, similar to the proposed design of the Nature Restoration Fund for the construction sector; setting up national asset companies that manage natural infrastructure and charge fees to users, such as those who benefit from reduced flood risk; and changing incentives by expanding the responsibilities of company directors to include nature protection.[34] A more detailed exploration of the different options is presented in our 2024 briefing 'How to increase private investment in nature'.[35]

> Markets are not the only way to drive private finance into nature.”

Some of these measures could support market development, and some go beyond market structures to mandate nature-positive action by companies. These are not alternatives, but should work together for the most impact.

How to increase business incentives to invest

1. A government roadmap

This should set out how policy will drive demand from businesses to invest in UK nature restoration. It would give certainty to market actors, including farmers, landowners, companies and investors.

2. Make reporting under the Taskforce for Nature-related Financial Disclosures (TNFD) mandatory in the UK

Setting a timeline for this will create greater visibility of nature related risks for business and incentivise engagement with voluntary nature markets.

3. Reform fiduciary duties to include nature protection as a key responsibility of company directors.

This would change the incentives all companies face, from primarily delivering returns to shareholders, to delivering wider benefits, including nature.

4. Reform water sector regulation to increase incentives to invest in nature.

The government's new independent commission to review regulation should ensure reforms actively encourage, rather than prevent, investment in nature-based solutions.[36]

5. Work with the food industry to explore new incentives for investment in nature along supply chains.

A joint Treasury, Department for Business and Trade and Department for Environment, Food and Rural Affairs (Defra) commission should investigate new incentives for supermarkets and food producers to invest in nature through their supply chains, as this is the sector which depends on nature the most. The commission should include industry, academic and civil society representatives and consider new compliance markets and levies in line with nature impacts.

Use the National Wealth Fund to unlock private finance

> “There is a vital role for a state backed investor willing to take on risks in a nascent market.”

What’s the problem?

Nature markets are still novel and novelty carries risk. Investors are not yet confident they can demonstrate sufficient revenue streams from nature markets, despite promising early evidence of two to 12 per cent returns from five nature-based projects with blended public and private finance. These were assessed by The Green Purposes Company and Finance Earth, a specialist environmental impact investment adviser and fund manager, and cover a range of locations, habitats and project sizes. [37]

There is a vital role for a state backed investor willing to take on risks in a nascent market and accept a lower rate of return than commercial banks. Such an investor could unlock more private capital for nature markets by bolstering private investor confidence. The National Wealth Fund (NWF), being developed from the existing UK Infrastructure Bank, will be in a prime position to play that role as the government’s self described “impact investor”.[38]

However, the UK Infrastructure Bank’s previous remit, on which the NWF’s is being built, needs reform to make it possible. There is a golden opportunity to shape the NWF as legislation to formalise the fund and its strategic objectives is expected in 2025.

How to unlock more private finance with the NWF

1. A statutory objective for the NWF to help meet the UK’s nature targets

This should include halting the decline in species populations by 2030, as set under the Environment Act 2021. This would put nature and climate objectives on equal terms in the NWF’s remit, which would be an improvement on the remit of its predecessor, the UK Infrastructure Bank, which was only to invest in ‘nature-based solutions’ to climate change.

2. Replace the duty for the NWF to generate a return on investment with a broader set of success metrics

This would mean amending the NWF's investment principles to deliver against key performance indicators (KPIs) that include a 'nature positive' objective and enable the NWF to make strategic decisions aligned with public policy, rather than be constrained by the obligation to deliver a financial return.

3. Set up a public platform to aggregate economic data on nature markets

This will be necessary as the market develops and as more metrics become available. It should include pricing on compliance schemes, voluntary carbon and biodiversity credit schemes, and it could extend to buyer and seller accreditation.[39] Gathering data in one publicly accessible place would help bodies like the NWF assess the stability of projected revenues to aid risk assessment.

Getting the politics right for the long term

> **"Long term policy making is hard in a system which is short term and prone to inertia."**

We have outlined the macroeconomic and microeconomic policies that would allow the relationship between the UK's economy and the environment it depends on to flourish. Only some of these measures can be implemented immediately. Others require considerable political commitment over the longer term.

However, long term policy making is hard in a system which is, by nature, short term and prone to inertia and inconsistency. Investment in maintaining the country's natural assets in a good state is a long term commitment across generations. Measures that take effect over 20 years or more can be difficult to introduce in a political system based on four to five year election cycles, with regular churn of ministers and civil servants within those periods.

But long term thinking is possible. Constructing the Thames Barrier to protect central London from a once in a 1,000 year flood was a major challenge, involving considerable upfront costs and complex negotiations between different government agencies over 16 years. Yet, it was completed in 1982 and has protected London from the risk of devastating floods.

Government departments are often capable of original and ambitious policy thinking, but this is frequently undermined by a lack of follow through. The Treasury demonstrated this by commissioning the Dasgupta Review but then failing to put it into effect. Wider problems with the political and executive system often make it hard for politicians and civil servants to address profound underlying challenges, in the face of immediate priorities.

> “The Welsh commissioner has succeeded in embedding longer term thinking.”

Flaws in the political and policy making structure need to be addressed to achieve long term reform. One is the lack of a single high profile voice in government to prioritise long term impacts over short term expediency. Another is weak legal protections for the rights of future generations. Fostering a better informed debate and more closely engaging the public in decisions is also necessary, both to inform decision making in the public interest and increase public pressure on governments to preserve nature. It could also help to reduce the risk of pushback arising from the sense that policies are inflicted on people, if they have greater visibility of their role in the economy and society.

How to create the conditions for longer term decisions

1. Establish a future generations commissioner to consider and advise on long term impacts

The commissioner’s task would be to review government projects and strategies and ensure consequences are fully considered in all policy making. Departments would need to explain how policies and plans meet wellbeing indicators, such as improving biodiversity. The government would need to incorporate potential impacts on future generations in regulatory impact assessments. The commissioner should be independent of government, with a term of five years not concurrent with the electoral cycle to enable longer term thinking across electoral cycles. The commissioner’s office should consider policies, strategies and projects and report back to the government on a horizon of at least 20-30 years, assessing fairness to future generations and impacts on natural capital.

This appointment could learn from the Welsh government’s 2015 Wellbeing of Future Generations Act 2015, which established national frameworks and wellbeing goals for public bodies, as well as starting a national conversation on future generations. The Welsh commissioner has succeeded in embedding longer term thinking, such as instigating a ten year national healthcare strategy, the UK’s first solar energy farm owned by a hospital and directing funding away from motorway expansion towards local transport investments.

2. Consider embedding legal rights for nature and future generations

Legal protections for nature could theoretically be strengthened by enshrining a right to a clean and healthy environment in law. There is also growing interest in giving legal personhood and associated rights to natural assets such as rivers. In March 2025, Lewes District Council agreed to recognise the rights of the River Ouse, paving the way for it to become the first river in England to have legal rights recognised in this way. The government should consider this under its duty in section 21 of the Environment Act 2021 to reflect on developments in international environmental protection legislation.

3. Use citizen's assemblies to support longer term thinking

Opinion polls reflect growing public mistrust in the ability of leaders to implement change that reflects their opinions. Involving the public in the policy process could help to build support for action on nature loss and other long term challenges. Deliberative democracy, such as citizens' assemblies, directly gathering public opinion on how policy might work, can be useful in suggesting answers to complex problems that have public backing.

> **"Citizens' assemblies could have an important role in assessing major long running challenges related to nature and the economy."**

Examples show its potential at both local and national level. Kendal's climate jury deliberated over energy generation, transport and food. Its recommendations heavily influenced the local council's actions and increased public engagement in climate issues, building a network of 256 community volunteers. Ireland's citizens' assembly helped to inform a national referendum on abortion rights, with acceptance of the assembly's recommendation for change. Citizens' assemblies could have an important role in assessing groups of policies or major long running challenges related to nature and the economy.

4. Use straightforward indicators to show progress on biodiversity

The latest assessment of progress on the government's flagship Environmental Improvement Plan (EIP) from the Office for Environmental Protection (OEP) showed that eight out of ten areas were "largely off track" to meet environmental goals.[40] There is a wealth of evidence revealing the disappointing progress being made on nature restoration, including separate annual progress reports from the government and the OEP, responses to these from the government and the independent State of natural capital reports, compiled by Natural England.[41,42]

These assessments are necessarily nuanced and complex, but they can obscure the overall message to politicians. We suggest an annual 'state of biodiversity and environment dashboard' could be developed alongside the EIP reports. This could reveal headline metrics and breakdowns indicating progress towards targets, including on the state of wildlife, habitat protection, air and water quality.

The OEP's College of Experts should be asked for recommendations on what to include in a dashboard. This could accompany a call for increased citizen science to boost the availability of data on nature already harnessed by organisations like RSPB.[43]

Change for the good of the UK

> **“Acting to reverse the damage is economically rational.”**

Economic growth has damaged the natural world on which the future of our economy depends. This is already coming back to bite us in the form of ecosystem depletion, flood damage and crop destruction, and these effects will intensify over time unless something changes. Acting to reverse the damage by changing how the economy is managed is economically rational.

The government should recognise that the economy, nature and wellbeing are inseparable, with the health of nature ultimately determining whether we have a successful economy in which people and businesses flourish.

We have outlined actions to make sure economic and financial policies support, rather than undermine, our national natural wealth.

None of the measures we propose will impede economic growth. On the contrary, they will make it fairer and more sustainable, according to the government’s aim. Nor do they involve high levels of spending. The change needed will be significant and transformative but can be achieved through regulatory and policy adjustments.

Some additional public investment in nature should be used to unleash a much greater amount of private investment. By assessing the value of public assets and liabilities differently, the government can create the fiscal space to allow this.

The public is very concerned about nature loss, worried about the direction the country is taking and pessimistic about the future under our current system, so now is the time to stem the decline. The prize is a healthier, resilient and more prosperous economy for everyone.

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