

ICE submission to the Environmental Audit Committee's inquiry on HM Treasury and the economics of climate and nature

May 2026

About the ICE

The Institution of Civil Engineers (ICE) is a 97,000-strong global membership organisation with over 200 years of history.

It is a centre of engineering excellence, qualifying engineers and helping them maintain lifelong competence, assuring society that the infrastructure they create is safe, dependable and well designed.

Its network of experts offers trusted, impartial advice to politicians and decision makers on how to build and adapt infrastructure to create a more sustainable world.

For more information, please contact: policy@ice.org.uk.

Submission

This submission focuses on questions 1,4 and 9 of the call for evidence. As noted in our response to question 1b, the ICE is currently undertaking work on the need for the UK government to undertake a review of the economic value of climate adaptation and resilience, and how such a review could be conducted. We will be happy to share our findings with the committee at a later date.

1. What role does HM Treasury play in shaping the UK's response to climate change, nature loss and wider environmental sustainability through economic policy and public spending decisions?

a. To what extent are climate and nature considerations incorporated into Treasury decision making and how do these considerations influence funding decisions?

HM Treasury's Green Book is the UK government's core guidance for appraising policies, programmes, and projects. It helps civil servants and decision-makers evaluate the costs, benefits, and risks of different options.

Updates to the Green Book guidance (most recently in February 2026) have sought to ensure that equal weight should be given to 'unmonetisable' benefits for local areas and communities. Business cases that knit together aspects such as transport, housing, skills, and net zero will be stronger. The guidance also includes ensuring that policies, programmes and projects are resilient to the effects of climate change, and that such effects are being considered when appraising options

The impact of these updates remains to be seen, but they are an opportunity for a bold evolution in how public investment is appraised, allowing for more nuanced, context-sensitive decision-making.

b. Does HM Treasury have the expertise, data and tools needed to assess environmental risks and opportunities, and what developments in modelling or valuation would better reflect the economic value of nature and environmental sustainability?

The collection and sharing of data about infrastructure assets in relation to environmental risks and opportunities is a systems-wide challenge and a challenge for effective decision-making across government.

In particular, more and better data are needed to improve understanding of asset-level resilience and the nature of potential cascading failures across systems.

The ICE has recommended making adaptation reporting mandatory under the UK Climate Change Act for all infrastructure owners and operators.¹ The information collected would fill in data gaps and help identify the most urgently needed climate adaptation measures. Mandating quantitative assessment, including financial quantification of expected damages/losses or impacts in a 'do nothing' scenario, would focus resilience efforts on the most material risks.

The government can only plan effectively for future resilience challenges if they have a complete picture of how the UK's infrastructure systems are linked. To ensure that information regarding asset status is shared, the Department for Environment, Food and Rural Affairs (Defra), under the remit of the Adaptation Reporting Power (ARP), should have the authority to oversee standards of protection for key infrastructure that would be relevant at a systems level and to address concerns around data-sharing by providing equal access. That would provide a clearer picture of how infrastructure works as a 'system of systems'. Defra's current consultation on the strategy for the Fifth Round of the Climate Adaptation Reporting Power is an opportunity to address this.

Better understanding the economic value of climate investments

The risks from climate change have been amplified by a lack of proactive investment in built and non-built solutions. Historically, there has been underinvestment in maintaining and adapting infrastructure systems, which means they are not as resilient as they could be. Policy uncertainty has also deterred private investment and risk-taking to develop new engineering solutions and technologies. The nature and scale of climate change and its effects on weather in the UK are already substantial, pressing, and only going to worsen, making it cheaper and safer to be proactive and invest up front.

This will require a proportionate response targeting investment where it will have the greatest impact – it is unrealistic to immediately adapt every piece of the infrastructure system in every location. Infrastructure owners and operators will need to manage public expectations about the disruption brought on by climate change.

To incentivise investment, the ICE has recommended that the UK Government undertake a national review of the economics of adaptation to understand the value it provides. This could be led by HM Treasury.

One of the challenges with making infrastructure climate resilience and adaptation a priority is that it does not have a market value. Currently, it is not measured or rewarded. In addition, it is not clear how the regulatory framework which sets out the parameters for funding these investments values resilience. A clear understanding of the

¹ ICE (2023) [ICE policy position statement: How can the UK's infrastructure system be made more climate resilient?](#)

economics of adaptation and the reality of a counterfactual where nothing is done would also support improved public engagement and strengthen the narrative around climate investment.

The ICE is currently undertaking work to set out how this review could be conducted and will be able to share our findings with the committee at a later date.

4. How effectively is HM Treasury working with other departments and public bodies to deliver a fair and coordinated transition across the UK?

Responding to the threat of climate change will require a fundamental shift in governance, with clear leadership and coordinated policy that crosses the traditional silos of government departments. The present approach of coordinating climate adaptation via the Defra is not working. Defra has failed to make climate adaptation a top priority within the department or in other central government departments. It is still not sufficiently resourced, particularly in local government.

All departments must engage with adaptation and resilience and recognise the challenges that climate impacts can have across multiple sectors at any one time – and the risks to communities and services the public rely on. Tracking climate resilience across all government infrastructure spending would be a step in the right direction.

9. How effectively is the UK's economic framework supporting the transition to a low carbon and nature positive economy, including through investment and economic policy, and how does this compare with other major economies?

a. What account is HM Treasury taking of regional and social fairness, sectoral transition and local delivery capacity in delivering a green and low carbon economy?

Infrastructure investment is crucial to achieve the government's climate mitigation and adaptation objectives. However, to ensure fairness, the public needs to be more meaningfully engaged in understanding the benefits of investing in infrastructure. In 2024, polling by Opinium commissioned by the ICE indicated that 62% of the public think that information about major infrastructure projects is not being effectively communicated to them.

Public engagement serves many purposes. For example, an awareness of the benefits an asset can deliver can shift public perception away from cost and time metrics and towards outcomes that are achieved via investment in infrastructure.

Public engagement must be done well. The ICE has recommended that NISTA and the Chief Secretary to the Treasury (CST), who has responsibility for the 10-Year Infrastructure Strategy, should more meaningfully engage the public on the benefits of infrastructure investment, including in climate mitigation, resilience and adaptation, and the necessary trade-offs that will inform programme prioritisation.² When trade-offs are required between departmental or sectoral interests, NISTA and the CST will have important roles in advocating for the broader outcomes investments are seeking to deliver, as well as continuing to make the public case for the wider infrastructure system.

² ICE (2025) [ICE policy paper: why do major projects take so long and cost so much?](#)

b. How effective is HM Treasury's approach to mobilising private finance in support of climate and nature outcomes, particularly for adaptation, and nature finance?

The National Wealth Fund (NWF) is a public financial institution set up to partner with the private sector and local government. It is operationally independent but wholly owned by HM Treasury. The Fund has two strategic objectives directed by the Chancellor: supporting regional and local economic growth and addressing climate change, with a particular focus on the clean energy transition.

The NWF seeks to unlock more than £70 billion in private investment towards those objectives. In practice, it will use its £27.8 billion to invest in newer or riskier sectors and technologies that private investors wouldn't otherwise consider. This creates the opportunity to effectively crowd-in private investment in support of climate and nature outcomes, and provide expertise and government guarantees that can help de-risk projects.

Between 2025 and 2050, the UK will need an average investment of £26 billion per year to meet net zero, peaking in the first half of the transition. Most of this will come from the private sector. Public investment should help attract private investment. The NWF should support investment into higher risk sectors (such as carbon capture) to support the net zero transition.

The NWF's ability to mobilise private investment will require it to be clear about its purpose and the additionality it provides by leveraging taxpayer money to mobilise private capital. Public and private investment must be complementary. Public investment – including via the NWF – should target high-growth, innovative sectors to crowd-in private investment. The Fund has an important role in reducing risk via its advisory services and government guarantee provisions to make projects more investable to crowd in private capital.

This will require a commensurate risk appetite. The focus of the Fund's investments should be on riskier projects which would not otherwise be supported by the private sector. This means HM Treasury accepting that some of the projects funded by the NWF will fail or be poor value for money. There is no shortage of private capital ready to invest in infrastructure and other assets. Rather, there is a shortage of investors with the risk appetites to fund and finance projects in the government's priority sectors. The NWF needs to be willing to take on risk in that context.

Another question is whether the government is giving the NWF the right tools and structure to be able to invest in high priority industries and take on that risk. Government accounting frameworks currently constrain investment, including via the treatment of departmental 'subsidies' for loss making loans and guarantees under the Financial Transaction Control Framework. It is often easier to deploy capital on a grant basis with no chance of recouping a return than to invest capital with a below-market rate of return expected.

While HM Treasury will need to be ready to accept making a loss on some projects to support strategic investment across the Fund's portfolio, this will need to be balanced against a clear delineation of departmental responsibility for grant funding. If a project does not work because it isn't economically viable, that is something for government departments to consider for grant funding; the NWF should focus on value-adding, not becoming a grant-giving arm of the state.

The NWF should retain a high degree of operational independence from HM Treasury, matched with a high level of transparency. Those employed by the Fund are best placed to make investment decisions. However, spending public money should be met with public scrutiny. In essence, the Fund should act as though it is regulated as a commercial bank and retain operational independence from HM Treasury whilst still benefiting from an ability to issue sovereign-equivalent guarantees.