



ICE Autumn Budget representation 2025

October 2025

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: Martina Moroney, Policy Manager, policy@ice.org.uk.

Submission

The Autumn budget must represent a shift from strategy to delivery

The government is clear about the direction for the UK's infrastructure. The 10-year infrastructure strategy (10YIS) was welcomed by infrastructure leaders earlier this year.

The spending review also emphasised long-term investment, decarbonisation, and regional growth, signalling a shift in how the UK approaches infrastructure planning, prioritisation, and delivery.

The establishment of the National Infrastructure and Service Transformation Authority (NISTA) has brought together the functions of the Infrastructure and Projects Authority, and the National Infrastructure Commission. Their dynamic online pipeline tool, while at an early stage of development, provides information about upcoming infrastructure spending and, as it develops further, will include regional information as well as further detail on the skills required to deliver.

The 10YIS, spending review, establishment of NISTA and pipeline provide a useful strategic base for infrastructure investment in the UK and together mark an important step change in the government's approach to strategic long-term planning, which is very welcome.

It is now time to move from strategy to delivery, and the Autumn budget must resource this shift. Major infrastructure projects are expensive, take significant amounts of time, and can be perceived to fail to deliver on the benefits they promised. Getting the right settings in place to improve infrastructure delivery and attract private capital will be crucial to the government building and retaining the public's trust, delivering on its ambitious infrastructure plans and facilitating the transition to net-zero.

Getting the settings right for delivery now will mean that the government is in a better position to resource and plan for the next iteration of the infrastructure strategy. The Autumn budget must consider what will be needed to deliver on the next phases of the pipeline, as well as the immediate need to resource project and community needs.

Reducing cost and time overruns will rely on existing guidance being properly applied

The UK collates major project delivery lessons, has developed guidance for major infrastructure project investment delivery and evaluation and can look to other countries as well as domestic projects for global best practice. Yet these lessons and insights are not being applied consistently across the Government Major Project Portfolio (GMPP).

The ICE recommends the following to improve government's ability to deliver major infrastructure projects more effectively.¹

- Establish, as part of NISTA, a roving delivery unit comprised of senior government infrastructure leaders to support public bodies with limited major project delivery expertise. Civil service departments and client bodies face a delivery capability challenge. Non-executive directors and senior advisers are a useful aid, but they aren't adequately embedded in or responsible for project success. New Zealand's Crown Infrastructure Delivery Ltd. provides a useful model of a delivery body staffed by senior leaders with major project experience that can supplement in-house expertise.
- NISTA and the Chief Secretary to the Treasury should meaningfully engage the public on the benefits of infrastructure, but also the necessary trade-offs that will inform project and programme prioritisation. Public trust in government and their ability to deliver will rely not just on the success of major project delivery over the long term, but the narrative about the benefits of infrastructure, and the quality of public engagement that characterises the 'how' of project delivery. CST and NISTA have important roles in facilitating this engagement and communicating a narrative that retains the sector's – and the government's – social licence to build.

Crowding in private finance

The government has been clear about the need to attract private capital to support its infrastructure ambitions. Doing so will require much of the change signalled above – a clear and stable pipeline, policy stability, strategic, consistent leadership and improved cost and schedule outturns, but it will also require improved alignment of public and private investment, better commercial skills across government and public engagement on the role of private finance.

The ICE makes the following recommendations about how the government can attract the private capital it requires.²

- Clarify investment plans: The recently released 10YIS addresses this challenge directly and must evolve as the strategy develops further. The 10YIS outlined some projects as candidates for private investment, including HS2's Euston terminus, the Lower Thames Crossing and the new hospitals programme. However, more detail is needed on the preferred model for these projects and the framework for investment in future projects.
- Align public and private investment: A more collaborative narrative around private investment could improve investors' risk appetite. Public investment should target high-growth, innovative sectors to crowd-in private investors, especially in high growth, innovative sectors. The role of institutions like the National Wealth Fund (NWF), where this is the focus, should be clarified in comparison to others including the British Business Bank, and Great British Energy (GBE). The upcoming strategic plan for the NWF and the statement of strategic priorities from GBE are vital to clarify responsibilities and ensure the institutions are not duplicating roles.
- Engage the public: The public want to hear more about infrastructure projects. The government should engage people more about how infrastructure investment meets their needs and the benefits of private sector involvement, as well as the costs. As set out earlier, there is a role for NISTA in engaging the public in order to rebuild trust and effectively communicate about the benefits and trade-offs.

Work is underway to revise private finance models as signalled in the 10YIS. This is encouraging, but ICE research shows that a refreshed model alone will not shift sentiment on infrastructure investment.

¹ ICE (2025) [Why do major projects cost so much and take so long? And what can be done about it?](#)

² ICE (2025) [Paying for Britain's Infrastructure System](#)

The UK has a particular opportunity to attract globally mobile capital. As a stable democracy, with London as a global financial capital – including for green finance – and in the context of a more unstable geopolitical environment, with many global leaders turning away from their net-zero commitments, getting the domestic settings right to attract investment is the next important step.

The government should use this Budget to continue investing to raise the bar for deliverability, public engagement and public-private investment alignment as it seeks to attract much-needed capital.

Skills investment and supply chain readiness

Delivering a £725 billion pipeline of infrastructure projects will require the government to address the current skills gap and ensure that infrastructure supply chains are capable of delivering.

The UK is experiencing a massive increase in capital investment, which hasn't been seen since the post-war era. Total capital investment forecasted across 8 of the key sectors for construction (including energy, commercial and industrial, rail, institutional, digital, water, roading and airport development) between 2025 and 2030 ranges from £700 billion to £900 billion, a 2.1x to 2.7x increase over the previous five years. Some industries, like renewable energy, nuclear, and water could see up to four times the investment compared to the past five years.³

The focus to date has been on where the money will come from to support this investment, but the government will have to also support supply chains to quickly develop the capacity deliver on the upcoming pipeline of work if it wants to boost growth, deliver the energy transition and launch a wave of national renewal.

The UK faces both a chronic skills gap – resulting from both a long-term decline in people working in certain sectors (i.e. the construction workforce has fallen by 15% in the past 15 years) and acute pressures on the ecosystem's ability to deliver (i.e. line works to support the energy transition, tier one construction firm failures in recent years, and challenges with the skilled worker visa regime).⁴

Alongside this challenge, historic underinvestment in capacity-building means that, as things stand, the UK's supply chains cannot deliver on the government's ambitions. There is a mismatch between demand and supply which risks more bottlenecks, inflation and delays.

Signs of this stress in the system were evident on HS2, where the main works contracts encompassed nearly the whole of the UK supply chain. This effectively maxed out capacity and left little room for manoeuvre when costs escalated or schedules overran. The Stewart Review of HS2 recommends ensuring that future projects have more regard for the capacity and capability of the supply chain when structuring contracts and deciding work packages.

A more strategic approach to project planning and sequencing is needed to ensure that supply chain capacity isn't stretched on an ad-hoc basis. This will require further coordination at the political, civil service and industry levels.

Investing in supply chain capacity and resilience is also required to support not only this 10YIS period, but also the next iteration of the strategy.

The UK is an outlier among international comparators in having a highly fragmented construction sector made up of a large number of smaller firms and relatively few large firms. Several Tier 1 suppliers have collapsed recently, notably Carillion in 2018 and ISG last year, but well before those failures, the ICE warned in 2008 that there were relatively few UK companies big enough to lead on major UK infrastructure projects, contributing to construction inflation. In 2010, HM Treasury and

³ Boston Consulting Group (2025) [Uplift in Demand, Shortfall in Supply: Can the UK Deliver on Its Infrastructure Investment Ambitions?](#)

⁴ Boston Consulting Group (2025) [Uplift in Demand, Shortfall in Supply: Can the UK Deliver on Its Infrastructure Investment Ambitions?](#)

Infrastructure UK noted the UK construction market was the smallest of the big five European countries, a symptom of sustained uncertainty and the cyclical nature of infrastructure investment over several decades. Low returns and high risk have deterred new entrants.⁵

Among G7 economies, the UK has seen the steepest decline in manufacturing as a share of economic output since the 1970s, according to the Institute for Public Policy Research (IPPR).⁶ A particular concern is the 'dramatic and exceptional' decline in the diversity of its manufacturing strengths. However, Britain still has the eighth-largest manufacturing sector in the world in value-added terms. In infrastructure terms, analysis by the IPPR suggests the UK already has a comparative advantage in one in three 'green products' vital to the net zero transition, including equipment needed to control and analyse activity in the electricity grid, heat pump components and turbines used for geothermal or hydroelectric energy generation.

However, the UK still needs to build new strengths in green products as global manufacturing capacity, while rapidly expanding, is still well below the level required. Scarcity of components is already pushing up lead times and prices in the electricity grid space.

The government's industrial strategy sets out plans to boost domestic manufacturing in advanced and green technologies, such as by reducing the cost of electricity or supporting companies to adopt new technologies. Where this is not possible, 'friendshoring' can add resilience by rerouting supply chains to regions with lower geopolitical or economic risk.

The ICE is currently undertaking a policy project on what these 'pinch points' to delivery are and we will share the findings with HM Treasury later in the year.

Delivering net zero and climate resilience

Delays, reversals and inconsistent plans have held back the UK's decarbonisation progress. Decarbonisation is key to deliver the government's central mission of economic growth. If the right choices are made, decarbonisation can lead directly to new high-quality jobs and markets, revitalised and high-value supply chains, new economic models, successful new technologies and a range of co-benefits, including improved health outcomes and greater economic and infrastructure resilience.

Delivering infrastructure and meeting the country's climate objectives shouldn't be seen as an either/or choice. Planning and delivering the right infrastructure can go hand in hand with achieving the country's net zero and environmental ambitions.

However, the Climate Change Committee (CCC) has emphasised that the positive trends speeding up decarbonisation could reverse without strong policies to build on them.⁷ Recent splintering of the political consensus on Climate Change Act puts long-term policy stability to attract green investment at risk.

Decarbonisation progress is fragile. Whilst the UK is on track to meet the fourth and fifth carbon budgets (2023-27 and 2028-32), it is slightly off track for meeting its legally binding sixth carbon budget (2033-2038). More detail is needed on how the government will support growth and meet its net zero ambitions through an updated carbon budget delivery plan.

The previous government's decisions to delay, water down or scrap several targets on electric vehicles, phasing out gas boilers and energy efficiency make it harder to see how those targets will be met. Delaying action will also likely cost the economy more in the long term.

⁵ HM Treasury and Infrastructure UK (2010) [Infrastructure Cost Review: Main Report](#)

⁶ IPPR (2024) [Manufacturing Matters: The Cornerstone of a Competitive Green Economy](#)

⁷ CCC (2024) [Progress in reducing emissions 2024 Report to Parliament](#)

To ensure the UK stays on track to achieve net zero, the following risks to delivery need to be addressed, and funded adequately by this budget:

- High-level targets urgently need to be translated into stable policy frameworks and detailed delivery plans supported by long-term funding certainty to achieve the scale and pace of change required.
- More focus is needed on public engagement and the role of behavioural change in reducing emissions.⁸ The public needs the right infrastructure in place before they can change their behaviour. Public engagement must be included within a wider programme of infrastructure upgrades to accelerate the net zero transition.

Public support is integral in meeting the UK's net zero ambitions. The reality is that the public will need to make changes and will need government support to do so. The government's upcoming Public Participation Strategy is an opportunity to address some of the barriers to public behaviour change and something the ICE has long called for.

The ICE and the All-Party Parliamentary Group on Infrastructure (APPGI) has recommended that the government:

- Develop a national information portal or hub to demystify net zero choices.
- Address structural issues with the market by ensuring energy and electric vehicle companies provide a market response to encourage public take-up. For heat pumps, this should involve minimising upfront installation costs to incentivise uptake and reduce consumer barriers, as well as extending the existing Green Home Finance Accelerator pilots. Stamp duty incentives could facilitate uptake by encouraging homeowners to invest in heat pump technology when purchasing a property. For Electric Vehicles, this should involve introducing a tax system (based on the previous CO2-based vehicle tax system) for efficiency based on miles/kWh.
- Develop a consistent policy framework outlining a long-term plan for an approved pipeline of infrastructure upgrades designed to support change in public behaviours.

The ICE also supported the National Engineering Policy Centre's report on *Rapid decarbonisation of the GB electricity system*, which sets out what a radical systems approach to electricity system decarbonisation would look like.⁹

Decarbonising the electricity system needs to be understood as a major infrastructure programme, a whole-systems challenge touching every part of society, and a different proposition from business as-usual policy implementation.

The NEPC report's recommendations include strong central leadership and governance with engineering at the forefront, a more proactive approach to ensure procurement and regulation act as enablers of the transition and urgently implementing the recommendations in Electricity Networks Commissioner's Report of 2023 to reduce planning & consenting and connection delays while building and maintaining public support.

On climate resilience, the UK's infrastructure is facing pressures that, for the most part, it was not designed to withstand. It is imperative that climate resilience is prioritised across the budget process.

Failing to invest in adapting and maintaining the UK's infrastructure now means kicking the can down the road for future generations to deal with and will cost much more in the long-run.

Investing in resilient infrastructure is required not only to respond to the impacts of climate change but also to protect economic interests alongside people and the planet. Without adaptation and improved emergency response to build in

⁸ ICE, APPGI (2024) [What are the public behavioural changes required to meet net zero?](#)

⁹ NEPC (2024) [Rapid Decarbonisation of the GB Electricity System](#)

greater resilience, our infrastructure will lose its value, repairing damage will be costlier and more frequent, and infrastructure users will face higher levels of disruption.

The ICE continues to recommend that the UK Government undertake a national review of the economics of adaptation.

In order to incentivise investment in infrastructure climate resilience and adaptation, there is a need to first understand the value it provides. 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. This requires an economic review of resilience and adaptation, led by HM Treasury – this can then feed into developing resilience standards. A clear understanding of the economics of adaptation and the reality of a counterfactual where nothing is done, would support improved community engagement and strengthen the narrative around climate investment.

Alongside this will need to come greater coordination on adaptation policy. Defra has failed to make adaptation a top priority within the department or in other central government departments. It is still not sufficiently resourced, particularly in local government. The present approach coordinating climate adaptation via Defra is not working. Effective cross-government collaboration is needed to ensure all departments are engaged with adaptation and recognise the challenges that climate impacts can have across multiple sectors at any one time.

Tracking climate resilience across all government infrastructure spending would be a useful initial step in the right direction.