

Response to the Scottish Government consultation on the draft Infrastructure Strategy 2027 – 2037

1. Introduction

The Institution of Civil Engineers (ICE) is a 95,000-strong global membership organisation with more than 200 years of history. It is a centre of engineering excellence, qualifying engineers and helping them maintain lifelong competence. Our 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.

The Institution of Civil Engineers (ICE) Scotland welcomes the opportunity to respond to the Scottish Government's consultation on the draft Infrastructure Strategy 2027–2037.

As a professional body representing over 95,000 civil engineers worldwide, with around 8,500 in Scotland drawn from across the public, private and academic sectors, the ICE provides impartial, evidence-based advice on infrastructure planning, policy and delivery. We are not a trade body. Our Royal Charter requires that we act in the public interest, and the following comments have been developed in this way in conjunction with our members who have extensive experience across the planning, financing, delivery and operation of infrastructure, including contributing to the development and implementation of Scotland's Infrastructure Strategy and long-term investment planning frameworks.

For more information, please contact Matt Lancashire, ICE Scotland regional director.

2. Overall Infrastructure Strategy

Infrastructure is fundamental to Scotland's long-term economic prosperity, environmental sustainability and social wellbeing. The proposed strategy represents an important step forward in establishing a more strategic, place-based and outcomes-driven approach to infrastructure investment and delivery.

ICE Scotland support the ambition to align the 30-year Infrastructure Needs Assessment, 10-year Strategy, Spending Reviews and annual budgets into a coherent system. This is essential to move from short-term decision-making towards long-term, mission-led infrastructure planning.

However, successful delivery will depend on institutional capacity, clear prioritisation, and robust governance frameworks.

ICE Scotland is supportive of:

- A long-term, evidence-based approach informed by the Needs Assessment
- Recognition of infrastructure as a system of systems, spanning economic, social and natural infrastructure
- A focus on place-based decision-making and regional equity
- Commitment to improving asset management and whole-life value

The strategy correctly identifies key pressures including fiscal constraints, climate adaptation, ageing assets and demographic change. However, the strategy would benefit from a greater clarity on delivery prioritisation and trade-offs and a stronger articulation of decision-making in constrained fiscal environments. Likewise making a clearer link between strategy and pipeline-level delivery outcomes is critical for the success of the strategy, as well as greater emphasis on the benefits of long-term infrastructure investment to Scotland.

3. Strategic Planning & Investment Framework

ICE Scotland supports the proposed framework linking the 30-year Infrastructure Needs Assessment, 10-year Strategy, medium-term spending reviews and annual budgets. This integrated approach has the potential to significantly strengthen long-term planning, improve alignment between strategy and investment decisions, and enhance confidence among investors and the supply chain by providing greater certainty and consistency.

ICE Scotland recommends establishing a clear, published prioritisation framework aligned to net zero, economic growth, resilience and social outcomes and introducing multi-year capital certainty to enable effective project planning and supply chain confidence to strengthen alignment with national economic and net zero strategies.

There is also an opportunity to further embed a mission-led approach, positioning infrastructure as a driver of:

- Net zero transition
- Regional economic growth
- Public service reform
- Community resilience

4. Enabling Better Infrastructure (EBI) – Strengthening Decision-Making

ICE Scotland recommends that the Scottish Government adopts principles from the **Institution of Civil Engineers Enabling Better Infrastructure (EBI) programme**¹ as a core framework to strengthen infrastructure decision-making and delivery.

The Enabling Better Infrastructure framework is internationally recognised and has been applied by governments and institutions across several countries to strengthen infrastructure decision-making and delivery. EBI has been used to benchmark national infrastructure systems, identify gaps in governance and capability, and support reforms that improve long-term planning, prioritisation and delivery outcomes. Its application demonstrates how a structured, principles-based approach can enhance transparency, consistency and effectiveness in infrastructure investment, providing a strong evidence base for Scotland to adopt a similar framework to support implementation of its Infrastructure Strategy.

¹ ICE (2025) <https://www.ice.org.uk/news-views-insights/policy-and-advocacy/enabling-better-infrastructure>

EBI is structured around three interrelated pillars:

- **Strategic Context:** aligning infrastructure with national missions such as net zero, economic growth and social outcomes
- **Governance:** ensuring clear roles, accountability and transparent decision-making
- **Delivery:** enabling effective project planning, procurement and execution

Application in the Scottish Context

ICE Scotland believes the EBI framework could significantly strengthen implementation of the strategy by:

- Supporting clearer prioritisation of investments in a constrained fiscal environment
- Providing a structured approach to balancing economic, social and environmental outcomes
- Enhancing consistency in decision-making across national and local levels
- Strengthening governance and assurance of major programmes and projects
- Improving alignment between strategy, pipeline and delivery capability

ICE Scotland recommends that the Scottish Government adopts the Enabling Better Infrastructure framework to benchmark and continuously strengthen infrastructure decision-making. This should include applying EBI principles across the infrastructure investment pipeline and business case development, embedding the framework within guidance for public bodies and delivery agencies, and working in partnership with the ICE and others to build capability and capacity across the public sector.

5. Governance & Institutional Capacity

ICE Scotland welcomes the emphasis on governance principles within the strategy. However, delivery risk will remain significant without a corresponding strengthening of institutional capability. While the strategic direction is clear, successful implementation will depend on the capacity of public bodies to act as intelligent clients, manage complexity and provide consistent leadership across programmes and projects.

In this context, the strategy should more explicitly address client-side capability within the public sector, the capacity to manage major and complex programmes, and the clarity of roles and responsibilities across the Scottish Government, its agencies, local authorities and delivery partners. Strengthening these areas will be critical to improving accountability, reducing delivery risk and ensuring more effective coordination across the infrastructure system.

ICE Scotland therefore recommends a strengthened, system-wide approach to infrastructure delivery capability. This should include the development of a national infrastructure delivery capability plan, expansion of the role of expert bodies in programme assurance and delivery support, and the embedding of independent assurance mechanisms for major projects. In parallel, a pipeline-linked skills strategy should be established to address workforce gaps and ensure the capacity required to deliver Scotland's long-term infrastructure ambitions.

6. Funding, Financing & Private Investment

ICE Scotland recognises the fiscal constraints facing Scotland and supports exploration of:

- Alternative financing models
- Increased private sector investment
- Revenue-financed mechanisms where appropriate

However, greater clarity is required on the application of financing approaches across the infrastructure portfolio. In particular, the strategy would benefit from clearer articulation of when and how different financing models will be deployed, alongside a transparent framework for assessing risk allocation and demonstrating value for money. Providing this clarity will be critical to building market confidence, enabling informed investment decisions, and ensuring consistency across projects and sectors.

ICE Scotland therefore recommends that the Scottish Government publishes a clear and comprehensive infrastructure financing framework, supported by early visibility of delivery models at project level. This should be complemented by the development of publicly backed delivery vehicles where appropriate, and by drawing on international best practice to inform model selection, risk sharing and long-term value optimisation.

7. Infrastructure Delivery Pipeline

ICE Scotland welcomes the publication of the infrastructure delivery pipeline as a positive step towards transparency and market engagement.

However, the current infrastructure delivery pipeline would benefit from greater detail to support effective planning and market engagement. There is limited clarity on delivery models and sequencing, and ongoing uncertainty regarding project timing and progression. This lack of visibility can constrain industry readiness, hinder investment decisions and reduce confidence across the supply chain.

ICE Scotland therefore recommends that the pipeline is enhanced to include clear information on delivery models, indicative timelines and proposed procurement approaches. This should be supported by regular, standardised updates to provide greater certainty and improve industry confidence.

In addition, pipeline visibility should be more closely aligned with skills planning and supply chain capacity to ensure the market is equipped to deliver Scotland's infrastructure ambitions.

8. Place-Based Approach

ICE Scotland strongly supports the place-based approach set out in the strategy, recognising that infrastructure investment must respond to the distinct needs of urban, rural and island communities. A place-based model provides an opportunity to better align infrastructure with local economic priorities, demographic trends and environmental considerations, ensuring that investment delivers meaningful outcomes for communities across Scotland.

However, successful delivery of this approach will require stronger integration between national strategy and local infrastructure planning. Greater clarity is needed on how regional priorities will be determined, how funding will be allocated, and how national objectives will be translated into locally deliverable programmes. Without this alignment, there is a risk of fragmentation and inconsistency in delivery.

ICE Scotland therefore recommends strengthening links between the Infrastructure Strategy and regional economic partnerships, including city region and growth deals. This should be supported by ensuring local authorities are adequately resourced and equipped to plan and deliver infrastructure, alongside promoting more integrated spatial planning across transport, housing, energy and digital systems. Such an approach will help ensure that place-based investment is both coherent and deliverable.

9. Net Zero, Resilience & Adaptation

ICE Scotland welcomes the central role of infrastructure in delivering Scotland's net zero ambitions, enhancing climate resilience and supporting the expansion of nature-based solutions. Embedding these priorities within the Infrastructure Strategy is essential to ensuring that investment decisions contribute to long-term environmental sustainability while supporting economic growth and community wellbeing.

However, further emphasis is required to ensure these ambitions are fully realised in practice. Greater focus is needed on whole-life carbon assessment across projects, as well as the maintenance, adaptation and optimisation of existing assets. There is also an opportunity to more systematically integrate nature-based and hybrid solutions into infrastructure planning and delivery, ensuring that natural systems are considered alongside traditional engineered approaches.

ICE Scotland therefore recommends mandating whole-life carbon and resilience assessments for major projects, prioritising maintenance and retrofit of existing infrastructure where this delivers best value and strengthening the integration of natural infrastructure within investment decisions. This will support a more sustainable, resilient and cost-effective approach to infrastructure delivery over the long term.

10. Data, Digital & Innovation

The strategy would benefit from a stronger emphasis on the role of digital infrastructure and technology as a cross-cutting enabler of more efficient, resilient and responsive infrastructure systems. Digital connectivity, data and emerging technologies are increasingly fundamental to how infrastructure is planned, delivered and operated, and should be recognised as integral to achieving wider economic, environmental and social outcomes.

There is an opportunity to strengthen the use of data-driven decision-making across the infrastructure lifecycle, alongside wider adoption of modern methods of construction and digital technologies. These approaches can improve productivity, reduce costs and carbon, and enhance asset performance, but require more consistent integration within policy, planning and delivery frameworks.

ICE Scotland therefore recommends the development of a national infrastructure data framework to support more consistent and informed decision-making. This should be complemented by support for innovation through procurement reform and targeted pilot programmes, alongside embedding digital capability across infrastructure delivery bodies to ensure Scotland is equipped to fully realise the benefits of digital transformation.

11. Role of ICE Scotland in Supporting Delivery

ICE Scotland is well placed to support the successful implementation and delivery of the Infrastructure Strategy through the depth and breadth of expertise across its membership.

With around 8,500 members spanning the full infrastructure lifecycle - including planning, design, financing, delivery and operation - ICE Scotland represents a significant concentration of professional knowledge and practical experience. This provides a strong platform to support government and delivery bodies in addressing complex challenges, improving project outcomes and strengthening capability across the infrastructure system.

Through its convening power, the ICE can bring together industry, government and academia to support more effective collaboration and knowledge sharing. This includes facilitating expert input into policy development, supporting independent advice on major projects and programmes, and providing a neutral platform for dialogue on delivery challenges and opportunities. ICE Scotland can also play a role in supporting skills development and professional standards, helping to ensure that the workforce is equipped to meet Scotland's long-term infrastructure ambitions.

In addition, ICE Scotland can support implementation through the application of the Enabling Better Infrastructure (EBI) framework developed by the Institution of Civil Engineers in partnership with international organisations. By working with the Scottish Government and its partners, ICE Scotland can help embed EBI principles within decision-making processes, provide benchmarking and diagnostic support, and contribute to capacity building across the public sector.

This combined offer, leveraging both professional expertise and internationally recognised frameworks, positions ICE Scotland as a valuable partner in delivering a more effective, transparent and outcomes-focused infrastructure system.

12. Conclusion

ICE Scotland strongly supports the ambition and direction of the draft Infrastructure Strategy 2027–2037, particularly its focus on long-term, outcomes-based planning and a more integrated approach to infrastructure investment.

The strategy provides a solid foundation for aligning infrastructure with Scotland's wider economic, environmental and social objectives, and represents a positive step towards a more coherent and strategic system.

To realise this ambition, the focus must now shift to delivery. This will require clear prioritisation and decision-making frameworks, strengthened institutional capability and governance, greater certainty in funding and financing approaches, and enhanced transparency across the Infrastructure Delivery Pipeline.

Embedding consistent, evidence-based decision-making supported by frameworks such as Enabling Better Infrastructure will be critical to ensuring that strategic intent translates into effective, deliverable outcomes.

ICE Scotland stands ready to work in partnership with the Scottish Government and its partners to support implementation of the Strategy. By drawing on the expertise of its membership and contributing to capacity building, governance and delivery improvements, ICE Scotland can play a constructive role in helping to deliver a more resilient, sustainable and productive infrastructure system for Scotland.