

## Scottish Government Draft Budget 2016-17

### Written submission to the Infrastructure and Capital investment Committee

#### Institution of Civil Engineers (ICE) Scotland

The following information is supplied in addition to written and oral evidence to be given by the Low Carbon Infrastructure Taskforce, of which ICE Scotland is a member.

In its 2015/16 draft budget report the Infrastructure and Capital Investment Committee called for a systematic review of the Scottish Government's infrastructure funding priorities to help tackle climate change in light of the failure to meet annual targets to reduce greenhouse gas emissions. ICE Scotland supports the Committee's decision to focus further on identifying what action is necessary going forward to help meet the climate change targets.

#### Infrastructure for the future

Our recent *State of the Nation Scotland: Infrastructure 2015* report<sup>1</sup> highlighted a number of low-carbon infrastructure interventions required to help meet Scotland's emissions and decarbonisation targets, which align with many of those identified by the Low Carbon Infrastructure Taskforce:

- Electricity storage as a means of easing tightening capacity margins, managing peak demand and intermittency of renewables;<sup>2</sup>
- Energy demand reduction should be a core aspect of a long-term energy strategy, and the energy efficiency National Infrastructure Priority is to be welcomed;
- Enhancing Scotland's rail network, including improving route between cities in the north of Scotland and the central belt to encourage modal shift from cars to rail;
- Development of high speed rail between Scotland and London to reduce dependency on short-haul air journeys;
- Increased provision of off-road and segregated cycling infrastructure in urban areas
- Improved modal connections and through-ticketing to improve uptake of public and active transport;

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<sup>1</sup> <https://www.ice.org.uk/media-and-policy/policy/state-of-the-nation-scotland-infrastructure-2015>

<sup>2</sup> For more information please see ICE's recent paper on Electricity Storage:  
<https://www.ice.org.uk/media-and-policy/policy/electricity-storage-realising-the-potential>

- Continuing to improve water infrastructure will help reduce leakage, which in turn reduces the carbon impact of treating water which would otherwise be lost;
- Mandatory reporting of commercial and industrial waste via the electronic duty of care (edoc) system will help deliver the circular economy by creating greater market certainty and reducing dependence on high-carbon virgin materials.

## **Policy interventions**

To enable and support the effective delivery of these interventions, ICE Scotland has highlighted several strategic interventions which may be required:

- A national infrastructure needs assessment to inform a long-term strategic vision for Scotland's infrastructure, building cross-party consensus, and taking account of interdependencies between infrastructure sectors;
- Recognition of the interdependencies of electricity generation, heat and transport as part of a single energy system to inform future energy and transport policy decisions and the supporting infrastructure;
- Need to ensure that we have the skills base to underpin infrastructure delivery;
- City region approach to local transport planning, and greater alignment of local and national planning (transport, housing, infrastructure, environmental, waste) which acknowledges interdependencies between sectors.

## **Infrastructure resilience**

In addition to identifying actions to help Scotland meet its climate change targets, it is also important to ensure that existing and future infrastructure is resilient to the potential impacts of continued climate change, as well as population growth and increased urbanisation. This will require a mixture of mitigating and adaptive strategies across different infrastructure areas to ensure Scotland's continued economic competitiveness and a good quality of life for people living here.

## **About the Institution of Civil Engineers**

Founded in 1818, the Institution of Civil Engineers is one of the oldest engineering institutions in the world with a global membership of 80,000. Our 8,000 Scottish members design, build and maintain Scotland's water, waste, transport energy and flooding infrastructure.

ICE is a professional qualification body promoting excellence and innovation in the industry, inspiring the next generation into the profession and providing expert advice to government on infrastructure. Our Royal Charter binds us to act in the public interest. ICE Scotland is a registered charity.

The Institution of Civil Engineers is a UK-based international organisation with over 75,000 members ranging from professional civil engineers to students. It is an educational and qualifying body and has charitable status under UK law. Founded in 1818, ICE has become recognised worldwide for its excellence as a centre of learning, as a qualifying body and as a public voice for the profession.

ICE would like to thank the Infrastructure and Capital Investment Committee for the invitation to take part in the consultation.

**ICE Scotland**  
**19 November 2015**