

# Low-carbon infrastructure: request for evidence



The Institution of Civil Engineers has had remarkable success in recent years in highlighting issues to Government and the media through their State of the Nation Reports. In 2009 the State of the Nation projects are being carried out using an Inquiry Format. The inquiry will examine the policy changes needed to facilitate the delivery of infrastructure for the transition to a low-carbon economy, and consider the changes to engineering practices required to deliver this vision.

The background to the project is that a significant amount of new infrastructure is being constructed in the UK to support existing towns and cities. These infrastructure networks support the provision of services that underpin civilised life and the efficient functioning of the economy.

The design, construction, maintenance and operation of this infrastructure will have a significant impact on the UK's levels of greenhouse gas emissions and the government's ability to meet its ambitious carbon reduction targets of at least 80% below 1990 levels by 2050. More crucially, these networks will influence personal behaviour and business decisions for decades to come, further affecting the UK's ability to meet those targets.

Furthermore, the carbon performance of the UK built environment will come under increased scrutiny in the lead up to the Copenhagen Summit in December this year, at which a successor to the Kyoto protocol is due to be signed.

The inquiry findings will be used as the basis for a major ICE report to be issued in autumn 2009, which will identify where changes to the design, construction, maintenance and operation of infrastructure can lead to large reductions in UK emitted CO<sub>2</sub>. This in turn will provide a low-carbon vision

for the future including priority actions for the next 40 years.

The ICE report will offer an apolitical, authoritative and objective comment on the current environmental impact infrastructure has on society, and promote leading edge thinking on how to significantly reduce infrastructure related emissions and change individual behaviour. It will focus on the UK but where possible draw conclusions that can be applied globally. The ICE also intends to use case studies from other countries to illustrate best practice.

The inquiry will address the following questions.

- Which low-carbon engineering solutions have the potential to deliver the greatest reductions in emissions over the next 50 years?
- Which available low-carbon engineering solutions are being effectively implemented?
- How can standardised low-carbon practices be rolled-out across infrastructure sectors?
- How can government and industry move to low-carbon procurement practices?
- How can low-carbon infrastructure create behaviour change?
- What legislation, regulation and/or market incentives are needed to deliver wholesale change?
- What are the barriers (political, social, economic and institutional) to the delivery of low-carbon infrastructure and, in turn, a low-carbon economy?

ICE would also like to promote the use of examples to illustrate any points, particularly examples of past events that highlight current flaws and/or create obvious security concerns, as well as examples of good practice in managing those events. ICE would also be very interested in existing reports or studies that you feel should be considered as part of this project. Please mark any sensitive material 'Confidential'.

The ICE is inviting written submissions of no more than 3,000 words from interested parties. Organisations and individuals interested in making written submissions are invited to do so by Wednesday 20th May 2009. Oral evidence sessions will be held in the first two weeks in June.

Submissions should be sent by e-mail to [evidence@ice.org.uk](mailto:evidence@ice.org.uk) and marked 'Low-Carbon Infrastructure Inquiry'.

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