

5 August 2016

Energy Saving Trust submission: National Infrastructure Assessment

Introduction

Energy Saving Trust is pleased to respond to the National Infrastructure Commission's (NIC) consultation on the National Infrastructure Assessment (NIA).

Energy Saving Trust is the leading, impartial sustainable energy organisation. We work on behalf of governments and businesses across the UK providing services in the area of data, assurance, consumer engagement, advice and grant administration.

For the Department for Business, Energy and Industrial Strategy (DBEIS) the Energy Saving Trust delivers the telephone-based Energy Saving Advice Service in England and Wales. We also undertake other research and awareness-raising work for the department on a project-by-project basis. Prior to the coalition government, for over 15 years, EST ran national energy advice services for DECC and predecessor departments as a grant-funded organisation.

In Scotland the Energy Saving Trust is the principal delivery partner of the Scottish Government for home energy efficiency. We run comprehensive local and national advice and grants programmes.

Public engagement on energy is at the heart of our work. In total each year the Energy Saving Trust handles just under half a million energy efficiency advice calls on behalf of UK and Scottish governments. Energy Saving Trust has a unique relationship with the public around energy saving and renewable energy and our response reflects that. We welcome the fact that the NIC is accepting general responses relating to the NIA and we have adopted to take this approach for our submission.

Objectives of the NIA and energy efficiency

We welcome the NIC's stated objectives for the NIA to "*Foster long-term and sustainable economic growth across all regions of the UK; improve the UK's international competitiveness; improve the quality of life for those living in the UK*".

We believe that increasing investment in domestic energy efficiency is central to meeting these goals and would therefore urge the NIC to include energy efficiency in the National Infrastructure Assessment (NIA) as vital and cost effective investment into the UK's energy infrastructure. There is a significant and growing body of evidence demonstrating the significant macroeconomic benefits of investing in energy efficiency; we would refer the Commission to reports from Frontier Economics¹ and Verco and Cambridge Econometrics², for instance. The 'multiple benefits' of energy efficiency as put forward by the International Energy Agency³ makes a strong case for large scale public investment in energy efficiency. In a recent Energy and Climate Change (ECC) Committee report⁴, and in others referred to above, it has been acknowledged that "[...] *improving home energy*

5 August 2016

efficiency is a 'win win' for households and the UK as a whole. It enhances the UK's energy security, cuts the carbon emissions from our building stock, and reduces costs—the cheapest energy is the energy that we don't use. From the consumer perspective, the benefits include lower energy bills, warmer homes that are more comfortable to live in, and improved wellbeing”

Government, Select Committees, the Climate Change Committee and industry players have recognised the importance of energy efficiency but this has not yet translated into government policy with the ECC Committee having to call for “*a renewed commitment to tackling energy efficiency by establishing adequate policies with long-term, ambitious objectives, which restore confidence to the industry*”. A paper published by the Energy Saving Trust⁵ found that the multiple benefits of energy efficiency are not well incorporated into UK policy making at the moment. We believe that the NIA is the perfect opportunity to remedy this.

We were very encouraged by the statements on the energy sector focus, that the NIC notes “*the importance of looking at the future of heating and the shift to low carbon solutions in the context of the UK's carbon targets, and the important role that increasing energy efficiency could potentially play.*” There is widespread agreement across the energy industry that energy efficiency has a crucially important role to play in the energy system and there is ample evidence that it will help us to meet our carbon targets at lowest cost whilst delivering multiple other benefits. It is also useful to note the interaction between energy efficiency and low carbon heat; many low carbon and renewable heating technologies only perform efficiently if installed in well insulated homes, for instance.

Long term plan for energy efficiency

Energy efficiency should be included firmly within the NIA as part of a whole energy system approach to meeting the UK's demand for energy services in a cost-effective way whilst meeting our climate change targets. We would point the Committee to a short position piece that the Energy Saving Trust recently published ‘Energy efficiency: recalibrating the debate’⁶. In the paper we argue for a clear, coherent long term plan to transform the UK energy system: the economic and social benefits of investing in our housing stock would place home energy efficiency at the heart of this. The challenges of the energy ‘trilemma’ require solutions that take a long term, whole energy system approach and the NIA, with an “[...] *in-depth assessment of the UK's major infrastructure needs on a 30-year time horizon*”, is therefore a fitting mechanism to help deliver this.

In its latest progress report the CCC⁷ highlights the lack of action plan for energy efficiency and low carbon heating. The report states that new policies and stronger implementation are required as part of a “[...] *stronger policy framework to drive residential energy efficiency improvement by addressing gaps and strengthening existing policies.*” There is significant untapped economic potential for energy efficiency and we believe the NIA is the perfect opportunity to address this and provide the long term stability that is required in residential energy efficiency. This ties in perfectly with the statement that the NIA will “[...] *determine a 'vision' of the UK up to 2050, to identify long-term infrastructure need in light of that vision and to highlight priority areas for action over the medium-term.*” This is vital for investment in energy infrastructure where long lead times are

5 August 2016

required to provide certainty for industry and establish a clear policy framework. Energy efficiency policy to date has been intermittent and inconsistent which is understandably damaging for the supply chain but also for householders. There is currently no offer for the vast majority of householders with the abrupt end of the Green Deal. We need a stable offer for all households to allow time for awareness of schemes to spread and to provide confidence that it is worth committing time, effort and money into a long term government priority. Energy efficiency has been neglected to date with the vast majority of attention (both from policy makers and the general public) going to supply side issues. This is a significant oversight and we strongly believe that energy efficiency should be seen as the first fuel: the cheapest energy being the one that is not used. This is in line with a growing recognition at an EU level for (energy) efficiency first⁸.

We have long argued for a significant increase in energy efficiency funding and we believe that the infrastructure designation can be an important catalyst to do that. We would point the Commission to the activity in Scotland where energy efficiency was set as a national infrastructure priority last year. This was a significant development and we feel it has been vital in garnering cross-party support for energy efficiency.

Future-proofing the energy system

We agree with the statement that changing technology makes it difficult – and arguably unwise – to try and predict trends. This is especially true for the energy sector where smart meters, decentralised energy, energy storage and a variety of new renewable technologies make it difficult to model the future. With this in mind we think the case for infrastructure investment in energy efficiency is even stronger: demand reduction is beneficial regardless of the technologies deployed or how the system develops. A well-insulated housing stock achieves a number of strategic priorities and would mean the UK is best placed to incorporate any changing technologies as they develop over the coming decades.

Another important consideration we would point to is the cost of inaction vs. the cost of early action. Criticism has been levelled at government on a number of areas in energy that it is not taking an approach that takes into account the long term costs/benefits, especially as they relate to important technologies for the UK to meet its climate change targets. We would urge the Commission to incorporate this into its modelling.

¹ <http://www.frontier-economics.com/publications/energy-efficiency-an-infrastructure-priority/>

² <http://www.energybillrevolution.org/wp-content/uploads/2014/10/Building-the-Future-The-Economic-and-Fiscal-impacts-of-making-homes-energy-efficient.pdf>

³ <http://www.iea.org/topics/energyefficiency/energyefficiencyiea/multiplebenefitsofenergyefficiency/>

⁴ <http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/inquiries/parliament-2015/home-energy-efficiency/>

⁵ http://www.energysavingtrust.org.uk/sites/default/files/reports/1-424-15_Payne.pdf

⁶ http://www.energysavingtrust.org.uk/sites/default/files/reports/Energy%20Efficiency_recalibrating%20the%20debate.pdf

⁷ <https://www.theccc.org.uk/publication/meeting-carbon-budgets-2016-progress-report-to-parliament/>

⁸ http://europa.eu/rapid/press-release_SPEECH-15-4439_en.htm