

Scottish Government Draft Budget 2016-17

Written submission to the Infrastructure and Capital investment Committee

Low Carbon Infrastructure Task Force

About the Low Carbon Infrastructure Task Force

The Low Carbon Infrastructure Task Force brings together key figures across the infrastructure lifecycle in Scotland, from construction and finance industries, public and private sectors, the engineering sector, and academia. The Task Force seeks to highlight the benefits for Scotland in increasing investment in low carbon infrastructure, gaining the value in terms of climate change, but also economic progress and social welfare for years to come. More information about the Task Force can be found at www.scotlandswayahead.org.uk

The Task Force's definition of low carbon infrastructure: *"infrastructure that will enable Scotland's people and businesses to thrive and prosper in a low carbon society for many generations, in line with the requirements of the Climate Change (Scotland) Act."*

Introduction

Scotland's infrastructure is essential to our quality of life. How we heat and bring water to our homes, dispose of waste, travel around and communicate today is determined by infrastructure investment decisions made in the past.

This paper to the Infrastructure and Capital Investment Committee restates the case for low carbon infrastructure, and illustrates how it can deliver real value for money – with economic, environmental and social benefits. New forms of energy capture and storage, public transport, energy efficiency, and digital networks are just a few of the opportunities for investment in a low carbon future.

Determining future infrastructure priorities requires strong leadership from government. Capital investment and a clear policy framework are vital ingredients in unlocking the necessary private funding.

Summary

Work commissioned by the Low Carbon Infrastructure Task Force¹ has produced a number of key findings:

1. That there are significant social and economic benefits to investing in low carbon infrastructure.
2. Low-carbon infrastructure investment decisions need to be taken now to avoid locking Scotland into an unsustainable and expensive high-carbon pathway.

¹ [Scotland's Way Ahead The Case for Low Carbon Infrastructure in Scotland](#) & [Forging Scotland's Way Ahead: Ten projects for a low carbon future](#)

3. Although most infrastructure is financed by the private sector, the public sector, and especially the Scottish Government, has a unique potential to act as an investor and direct infrastructure priorities.

4. Recent independent research found that, currently, only 52% of Scotland's current infrastructure investment pipeline could be described as 'Low Carbon'. This is despite welcome recent investments like the Borders Rail project and Scottish Futures Trust investment into LED street lighting.

5. The Scottish Government's next Spending Review needs to make a significant shift in Scotland's capital spending, away from high-carbon projects and towards low-carbon projects. The Scottish Budget for 2016-17 should begin this transition.

6. The Scotland's Way Ahead Project, led by an independent Low Carbon Infrastructure Task Force, has recently published a long-list of "Ten Projects for a Low Carbon Future" for Scotland. These ideas and others, are worthy of consideration and inclusion in Scotland's future Infrastructure Investment Plan.

7. The Scottish Government recently made the welcome commitment to making the improvement of building energy efficiency a National Infrastructure Priority. This infrastructure investment will have particularly strong social justice and economic benefits.

Scotland's low carbon future

The progress that has been made towards reducing Scotland's carbon emissions provides a good foundation and policy framework from which to build. However, a step change in the pace and scale of low carbon infrastructure development is required. The infrastructure that is built over the next five to ten years will be the infrastructure in use in 2050, and it is crucial that this infrastructure enables low carbon behaviours for all, rather than locking us into a high carbon trajectory.

Forging Scotland's Way Ahead: Ten projects for a low carbon future identified a long list of projects which could help drive the required step-change in coming years through the Infrastructure Investment Pipeline:

1. Major upgrades of existing rail network
2. New high speed rail between the central belt and Aberdeen
3. Re-engineering cities to favour non-motorised transport
4. Low carbon transport hubs
5. Programme of district heating schemes targeted at high rise domestic properties
6. Semi-rural district heating networks
7. Urban district heating network
8. Energy efficiency retrofit programme, addressing domestic, public sector and commercial buildings
9. Grow local energy economies with community scale energy storage
10. Energy from wastewater programme

There are several practical steps that the public sector can make to progress Low Carbon Infrastructure. The role of the public sector is often in funding the high risk or long return period initial capital investment phase of projects, to lever in private sector investment. Otherwise these projects may remain unviable, despite the societal benefits.

District heat networks are a classic example, where once the network infrastructure is constructed, the private sector can follow and heat markets can develop using a diverse range of sources. Therefore capital budgets should be reoriented towards these kind of low carbon investments to avoid continuation of this “chicken and egg” stalemate situation.

Scotland’s spending review and budget 2016/17

Failing to invest in low carbon infrastructure will lock in high emissions and vulnerability to the multiple impacts of climate change, leaving a legacy of buildings, roads, energy generation and more which will be expensive to adapt in the future. Instead, Scotland can seize the opportunity now to increase investment in low carbon infrastructure, gaining the benefits in terms of climate change, but also economic progress and social welfare for years to come.

Footnote

The membership of the Low Carbon Infrastructure Task Force is:

Sara Thiam (Chair), Director, Institution of Civil Engineers; Elizabeth Dirth, 2050 Climate Group; Sam Gardner, WWF Scotland; Alex Hilliam, Changeworks; Andy Kerr, Edinburgh Centre for Carbon Innovation; Ross Martin, Scottish Council for Development and Industry; Janice Pauwels, City of Edinburgh Council; Paul Steen, Romboll Energy; Gavin Templeton, UK Green Investment Bank; Katherine Trebeck, Oxfam; Kate Turner, Pinsent Masons; Brian Veitch, civil and structural engineer.

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