



CENTRE FOR ENERGY POLICY

£20 million impulse for energy efficiency in Scotland: what's the impact?

Karen Turner, Antonios Katris, Gioele Figus and Fiona Riddoch Centre for Energy Policy, University of Strathclyde

All Energy Exhibition and Conference, 11th May 2017

Presentation based on EPSRC Impact Accelerator Project linked to the EPSRC EUED project "Energy saving innovations and economy wide rebound effects" (EPSRC Grant Ref. EP/M00760X/1)





Energy Efficiency as an economic stimulus

- In September 2016 First Minister of Scotland announces post-Brexit economic stimulus package
- £20 million earmarked for energy efficiency improvement measures
- £10 million targeted towards household energy efficiency improvements
- £10 million to improve the energy efficiency of public buildings





Our Research project

- We conducted macroeconomic analysis of the potential impact of the £20 million spend on energy efficiency improvements
- Small spend compared to planned overall £500 million spend on energy efficiency improvement
 - Results mainly indicative of direction of main performance indicators
- Used economy-wide Computable General Equilibrium (CGE) model for Scotland





£20 millions extra spending on Constructions: What is the impact?

Assuming spending and retrofit in 2017.... 2017 GDP +£3.9m, jobs +121, public budget -£1.8m

2020 GDP +£1.76m, Jobs +31, public budget +£0.42m

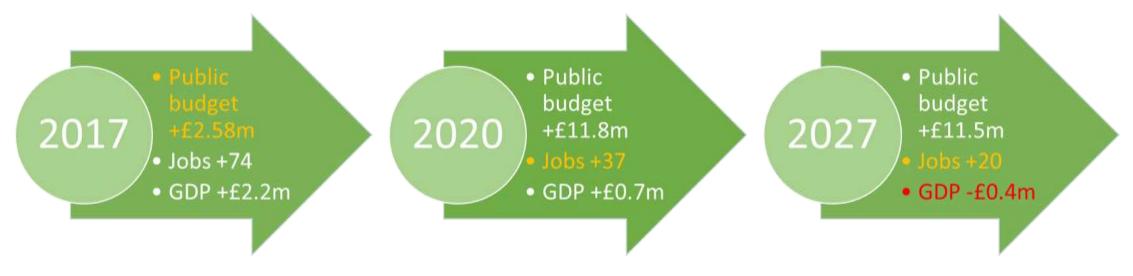
> 2027 GDP +£0.72m, Jobs +12, public budget +£0.2m





What if £10 million achieve a 2.5% reduction in physical energy requirements by public sector?

If even just a 2.5% reduction in physical energy requirements is achieved in the public sector...

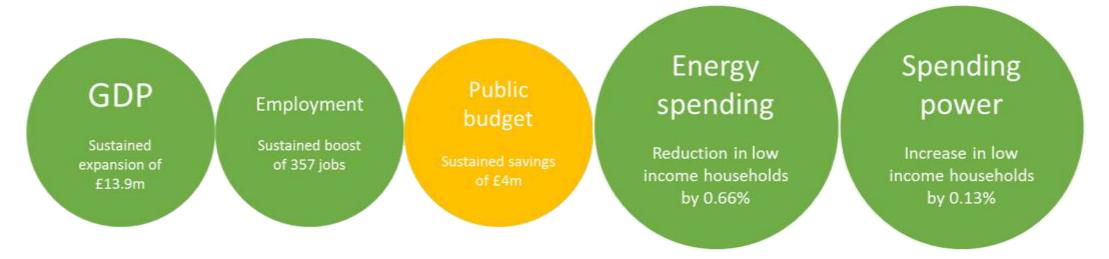






What if £10 million achieve a 2% reduction of energy required by lowest income households?

If a 2% reduction in energy required to provide heating, lighting and cooking in low income households is achieved...







Conclusions

- Increased construction activity delivers limited benefits
- Reduction of public sector energy requirement leads to sustained budget savings over £10 million and additional jobs
 - However, there is a relatively small contraction of GDP
- Reduced energy requirements of lowest income households deliver significant economy-wide benefits
 - Increased spending power of lowest income households
 - Sustained GDP expansion, budget savings and jobs





CENTRE FOR ENERGY POLICY

Thank you for your attention

For further information please contact: antonios.katris@strath.ac.uk

Centre for Energy Policy website: <u>http://www.strath.ac.uk/research/internationalpublicpolicyinstitute/centreforenergypolicy/</u> EPSRC project website: <u>http://www.cied.ac.uk/research/impacts/energysavinginnovations</u>