

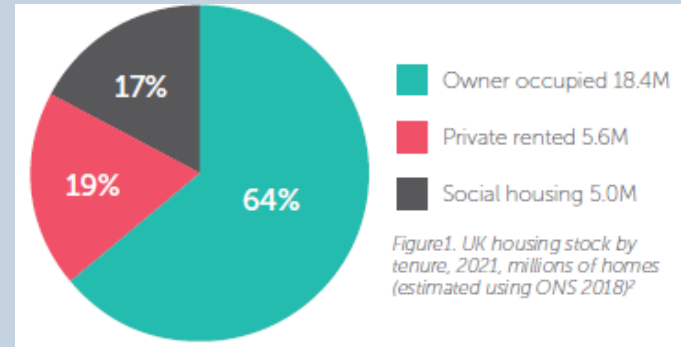
Market transformation to decarbonise UK housing

Gavin Killip



Why existing housing?

- UK has 29 million homes
- UK homes account for:
 - ~30% of energy demand
 - ~17% of UK emissions
- Energy efficiency potential is very large
- Need to replace all fossil heating (gas, oil, LPG)
- High-quality, integrated retrofit can increase service and reduce emissions by >50%
- Significant implications for peak demand
- Multiple benefits beyond energy/climate



Make homes more comfortable and attractive to live in



Improve the health and well-being of residents



Cut heating bills significantly



Support large numbers of jobs across all regions of the UK

Past policy failures

BBC Gavin Home News Sport Weather iPlayer Sounds

NEWS

Home | Coronavirus | Climate | UK | World | Business | Politics | Tech | Science | Health | Family & Education

Science & Environment

Green Homes Grant scheme to insulate houses axed

By Roger Harrabin
BBC environment analyst

© 27 March

Climate change



GETTY IMAGES

Green deal and energy companies obligation (ECO)

Adam Vaughan

@adamvaughan_uk

Thu 23 Jul 2015 16.04 BST

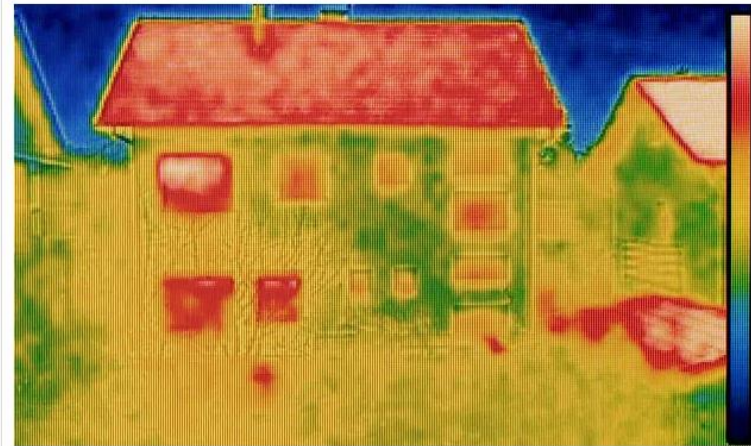


316

This article is more than 6 years old

Government kills off flagship green deal for home insulation

Flagship scheme to insulate homes to end as government blames low take-up and stops funding of company set up to issue home improvement loans



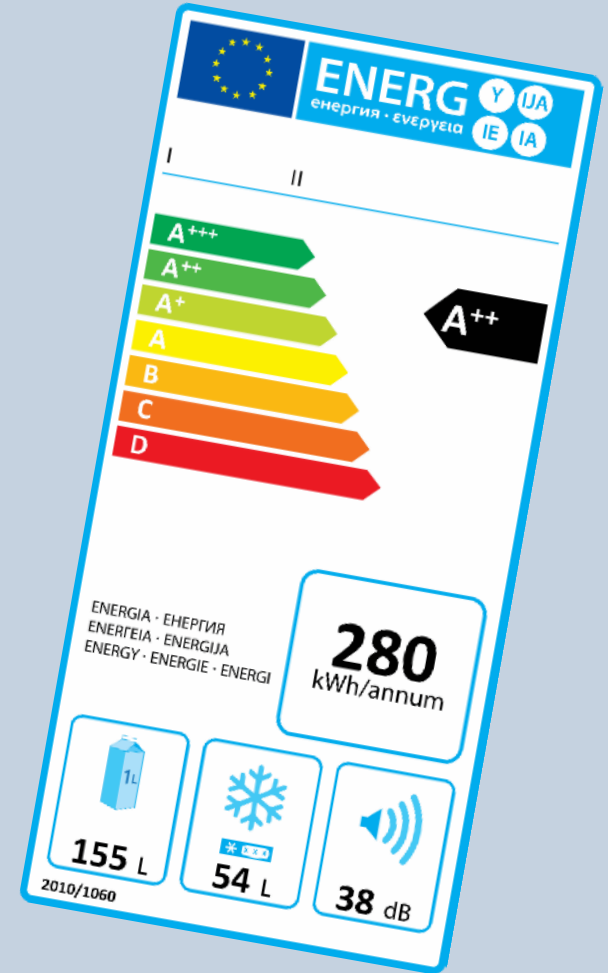
▲ A thermal image of a home. Green deal loans helped people to insulate homes to make them more energy efficient. Photograph: Alamy

How to stimulate the market for retrofit?



Market transformation

- A policy toolkit with a history of success in appliance markets – 3 pillars:
 - Minimum standards
 - Information
 - Financial incentives
- Introduced over time
- Based on technical and market analysis
- Achieved through long-term engagement with industry



Information on energy performance

Reforms needed

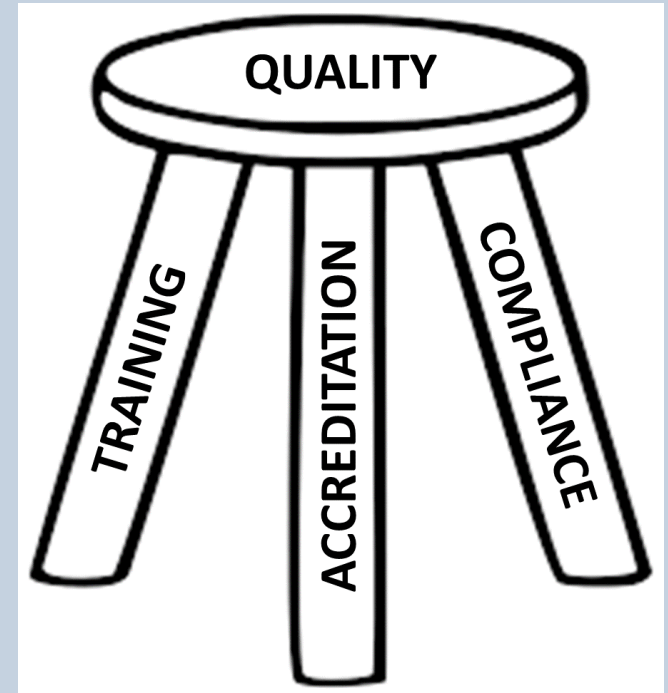
- Improve accuracy of Energy Performance Certificates (EPCs), based on quality building surveys
- Ban the sale or rental of property based on EPC ratings (without easy loopholes)
- Building logbooks (or 'passports') to record building works and EPC ratings
- Smart metering could help automate data collection?



Minimum standards

Reforms needed

- Energy standards AND occupational standards
- Building Regulations to be tightened regularly over time
- Building Control needs resources for compliance checks
- Introduce a 'licence to trade' for firms to set minimum standards for skills and knowledge
- Penalties for firms offering cash-in-hand deals outside the regulated system



Skills, education and training

Reforms needed

- Training needs to cover
 - technical aspects of retrofit
 - business management skills
 - communication skills/customer care
- More intermediate/ advanced qualifications (NVQ levels 3-5)
- New courses (eg PAS 2035/2030) integrated into FE system
- Labour market regulation to drive demand for skills
- Systemic support for apprenticeships & placements – not left to the individual



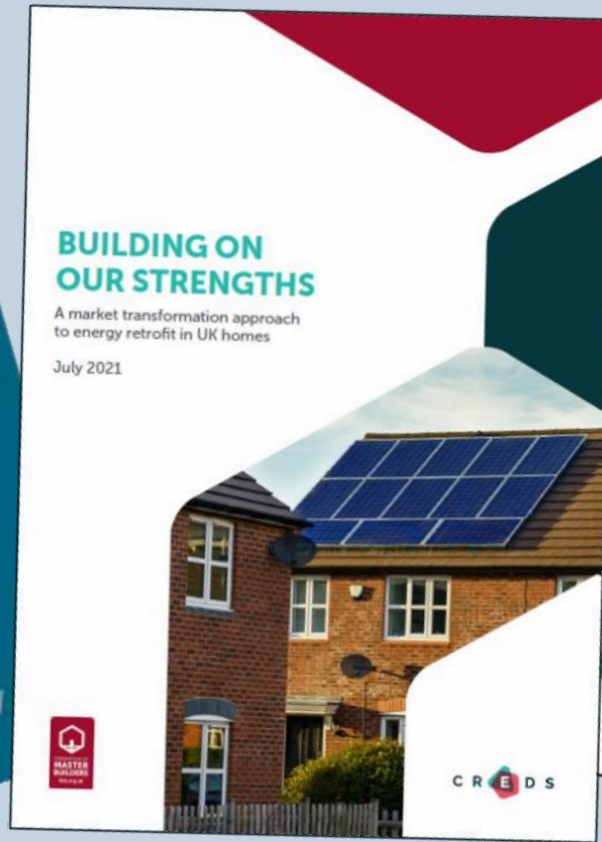
Costs and financing

Reforms needed

- Up-front capital needs to be:
 - Fair and affordable
 - Administratively straight-forward and efficient
 - Sufficient to pay for good quality retrofit
- Some combination of loans, grants and tax incentives?
- Public investment to prime the market for finance
- Banks need 2 systems to de-risk their investment:
 - building certification
 - installer accreditation
- A VAT cut to help squeeze out unlicensed work



Some recent reports



THANK YOU

Any questions or comments?

gavin.killip@eci.ox.ac.uk

