

Energy efficiency: 'Recalibrating the debate'

June 2016

Energy Saving Trust has written this paper to provide an overview of what we believe needs to happen next on the UK home energy efficiency agenda. It discusses UK government policies as they apply in England.

There is a large body of evidence on the available policy options: we now need to stop discussing options and start implementing. We believe that we need a UK energy transition – akin to Germany's "energiewende" – that sets out a clear vision and narrative 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. A plan for UK energy transition would include home energy efficiency as a national infrastructure priority across the United Kingdom.

The vote to leave the EU creates much uncertainty about the future of UK energy and environmental policy, but direction on sustainable energy policy cannot wait until after the EU renegotiation process is complete. Work now on a clear UK energy transition – linked to our world-leading national Climate Change Act and Carbon Budget system – will provide the framework for our energy and environment policy to replace EU directives and targets.

The current body of evidence

There have been a number of in-depth reports into energy efficiency recently, looking at policy, future schemes and reviewing past schemes. Some recent publications include Arup's 'Towards the delivery of a national residential energy efficiency programme', the Westminster Sustainable Business Forum report 'Warmer and Greener', the Energy and Climate Change Committee report on home energy efficiency and demand reduction and the NAO report on the Green Deal and the Energy Company Obligation. Other reports from Policy Exchange, Frontier Economics, Cambridge Econometrics, the IEA, IPPR, ACE, and others provide a comprehensive overview.

These reports, taken together, extensively cover the issues with current and past energy efficiency policy particularly in terms of the failure of the Green Deal (see especially the NAO report). They also reflect a widespread consensus between energy efficiency industries and the NGO sector as to the broad direction the Government should follow to reinvigorate the home energy efficiency market.

We have reached a point in time where there are already a lot of interesting and feasible policy ideas and models to make retrofit viable – see particularly the WSBF and Arup reports cited above. Most of the ideas are not new: policy instruments built around stamp duty, council tax and green mortgages have been promoted by organisations like the Energy Saving Trust and UKGBC for over a decade but have never been implemented on any scale.



Moving on from the Green Deal

As well as the reports listed above, new findings on the Green Deal will be published by the Public Accounts Committee following their recent evidence session¹¹. The pay-as-you-save model should not be discarded: although it has been argued that the Green Deal itself was a failure this does not translate into a failure of all elements of the scheme. Pay-as-you-save remains a valid delivery model and could be used in other schemes in the future. A similar concept is used through the Energiesprong^a scheme that has received a lot of coverage in terms of its potential for deep retrofit.

More broadly, we are concerned about the blow that the Green Deal's closure represented to the future of energy efficiency policy. The political appetite for investing taxpayer money into energy efficiency has undoubtedly been dampened (even though Green Deal was a market led programme). The only national funding programme for energy efficiency is now the supplier obligation (ECO) which has been cut in scale twice since 2013. From 2018 ECO will focus only on fuel poor households which poses two challenges: firstly that there is no financing for able-to-pay households and secondly that a supplier obligation is not the best policy instrument to reach the fuel poor, as the NAO pointed out.

The problem is not just a lack of interest in funding energy efficiency in existing homes. The Zero Carbon Homes new build policy has been scrapped, despite the fact that it would add only a very small additional cost for housebuilders and a negligible additional cost for house buyers. Looking beyond energy efficiency in homes, we have also seen cuts to subsidies for renewable energy, making it harder for householders and communities to develop their own renewable energy projects.

With the honourable exception of a commitment to continue the Renewable Heat Incentive, there seems to be a lack of ambition to design and implement an energy policy that matches up with our international commitments on climate change, our carbon budgets and England's Fuel Poverty strategy.

A new way forward

We need a more ambitious approach to transforming the energy system as a whole. What we need now is a clear vision and narrative, engaging citizens with the challenge of solving the energy trilemma; decarbonising, ensuring security of supply and keeping bills down.

Sir David Mackay, when he was DECC's chief scientist, led the development of the 2050 calculator – a tool to engage the public with our options for energy supply and energy efficiency to hit our decarbonisation targets. As Amber Rudd pointed out following Mackay's untimely death earlier this year, the 2050 calculator has been emulated around the world. A new policy package and narrative from DECC can build on this – creating a debate across society about how we generate and use energy differently.

Germany's 'Energiewende' is an example of the importance of tackling issues in a joined-up fashion and of building a narrative around transforming the energy system. The Energiewende involves a coherent presentation of the policy mechanisms as well as the models and forecasts that underpin the policy direction. Although the individual policies and

^a EnergieSprong is a Dutch retrofit model that brings homes to a net zero energy levels with the investment funded by the resulting energy savings. The model uses an industrialized off-site process so that the retrofit work can be done in 10 days or less.



their implementation can be criticised, the level of ambition and the importance attached to a joined-up and long term approach cannot. It is also worth noting that France has recently implemented new legislation for a wide-ranging energy transition¹², covering all aspects of the economy and framed strongly around "green growth".

We would also highlight an example closer to home: in Scotland a whole host of complementary policies covering renewables, community energy, fuel poverty and energy efficiency and district heating are in place. Again, whilst not all these policies are perfect they work together and provide a coherent and ambitious framework to make long term changes in the Scottish energy sector. The level of support for renewable energy and energy efficiency across all parties for the recent Scottish Parliamentary elections included for instance the following commitments:

- Increasing the energy efficiency budget to 10% of Scottish Government's capital budget allocations, increasing spending on energy efficiency from £80m this year to £340m by 2020/21 (Conservatives).^b
- Support the continued designation of energy efficiency as a National Infrastructure Priority (Conservatives, Greens and Liberal Democrats)
- Increase the energy efficiency of the Scottish housing stock so that all properties achieve an EPC C rating by 2030 (Conservatives) & 2025 (Greens)
- 50 per cent of all energy to come from renewables by 2030 (Labour & Greens, SNP to consider it)

Investment that pays for itself

A new narrative would highlight the economic and social benefits of investing in our housing stock and sustainable energy sources - fully integrating these into the policy making process. An Energy Saving Trust paper¹³ shows that the health benefits of energy efficiency (as a part of high quality housing retrofit) are increasingly referenced by government but do not make it fully into official final cost-benefit analyses in policy analyses. Similarly the jobs and growth benefits (energy efficiency delivers local jobs at all skills levels) could be much better accounted for and considered: the Verco & Cambridge Econometrics report, referenced above, finds that a national retrofit programme would result in £3.20 of increased GDP and £1.27 of tax revenue for every £1 invested in energy efficiency. In this way the proposed investment programme pays for itself in less than 10 years and yields net revenue for the government after that.

Above and beyond the steps we feel are necessary to deliver on retrofitting the able-to-pay sector we would like to see any policies fit within a much wider government programme that makes best use of different departmental resources and that fits with our European, international and national commitments and legislation.

¹ 'Towards the delivery of a national residential energy efficiency programme' Arup, May 2016: http://publications.arup.com/publications/t/towards_the_delivery_of_a_national_residential_energy_efficiency_program_me_

^b If this were implemented on a per capita basis in England it would mean spending of over £3bn a year on energy efficiency (the population of England being approximately 10 times that of Scotland – source: ONS). This compares to the planned spending under the next phase of ECO of £640m/year.



² 'Warmer & Greener: A guide to the future of domestic energy efficiency policy' Westminster Sustainable Business Forum, April 2016: http://www.policyconnect.org.uk/wsbf/research/warmer-greener-guide-future-domestic-energy-efficiency-

policy
³ 'Report: Home energy efficiency and demand reduction' Energy and Climate Change Select Committee, March 2016: http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-changecommittee/inquiries/parliament-2015/home-energy-efficiency/

'Green Deal and Energy Company Obligation' National Audit Office, April 2016: https://www.nao.org.uk/report/greendeal-and-energy-company-obligation/

⁵ 'Efficient Energy Policy' Policy Exchange, March 2016: http://www.policyexchange.org.uk/publications/item/efficient-

energy-policy?category_id=24

'Energy efficiency: An infrastructure priority' Frontier Economics, September 2015: http://www.frontiereconomics.com/publications/energy-efficiency-an-infrastructure-priority/

'Building the Future: The economic and fiscal impacts of making homes energy efficient' October 2014, Verco and Cambridge Econometrics: http://www.energybillrevolution.org/media/big-boost-in-energy-efficiency-investment-to-saveuk-households-4-95-billion-a-year/

⁸ 'Capturing the Multiple Benefits of Energy Efficiency' the International Energy Association, 2015: http://www.iea.org/publications/freepublications/publication/capturing-the-multiple-benefits-of-energy-efficiency.html ⁹ 'When the levy breaks: Energy bills, green levies and a fairer low-carbon transition' IPPR, June 2015

http://www.ippr.org/publications/when-the-levy-breaks-energy-bills-green-levies-and-a-fairer-low-carbon-transition 'Home energy efficiency 2010-2020' Association for the Conservation of Energy, March 2016: http://www.ukace.org/wp-

content/uploads/2016/03/ACE-briefing-note-2016-03-Home-energy-efficiency-delivery-2010-to-2020.pdf

11 http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accountscommittee/inquiries/parliament-2015/household-energy-efficieny-schemes-15-16/ http://www.developpement-durable.gouv.fr/-France-launches-its-energy-

'Capturing the "multiple benefits" of energy efficiency in practice: the UK example' Energy Saving Trust, 2015: http://www.energysavingtrust.org.uk/sites/default/files/reports/1-424-15 Payne.pdf