

## New ministry, same questions? POST-BREXIT ISSUES IN CLIMATE CHANGE POLICY



*Britain's vote to leave the European Union was bound to increase the cloud of concerns over energy policy, made cloudier still by the demise of the Department for Energy and Climate Change (DECC). Neither, however, change the basic framework for climate change policy, fully embedded in UK law, or fundamentally alter the policy choices to be made within it. A push on energy efficiency might help steady nerves, and provide a solution to a number of issues facing the new Secretary of State – if he can find a way to deliver it effectively.*

The announcement, on 14<sup>th</sup> July 2016, that DECC's responsibilities would be transferred to the rebadged Department for Business, Energy and Industrial Strategy (BEIS) added to the post-Brexit policy vibrations – not least because “Climate Change” did not feature in the new department's title. However, while other sectors face uncertainty about fundamental legislative changes that will be needed following Brexit, the key piece of climate change legislation is fully embedded in UK law: the 2008 Climate Change Act. Moreover, by requiring a reduction of at least 80% in the 1990 level of emissions by 2050, UK legislation already goes further than the EU framework requires.

Given that the House of Commons passed this legislation by 463 votes to 3, it is unlikely to be overturned any time soon. Further, to reinforce its intent to meet these targets, the Government chose to pass the Fifth Carbon Budget on 30<sup>th</sup> June 2016, limiting the UK's net carbon account over the five years between 2028 and 2032. And even if this wasn't enough to keep the UK on track, it would be politically very difficult to resile from the Paris Agreement, which binds every country to an even more ambitious limit of keeping the global average temperature rise to well below 2°C. The UK currently participates in the Paris negotiations as part of the EU, which has agreed a joint Intended Nationally Determined Contribution (INDC) for emissions reduction. Post-Brexit, the U.K. will have to put forward a unilateral INDC, as Norway and Switzerland have done.

Of course there are still some more debatable post-Brexit questions. Take, for example, the framework for emissions trading. The carbon floor price is likely to be too good a revenue earner for the Government to abandon it, but there is still uncertainty about whether the UK will try to join the EU Emissions Trading Scheme (ETS), or establish its own scheme, albeit with direct links to the ETS.

Moreover, much air quality legislation is currently set at the EU level - including the Air Quality Policy Framework and the Industrial Emissions Directive, which particularly affects future coal use. Post-Brexit, the UK will no longer face the threat of infraction proceedings (and therefore fines) for non-compliance. So might the Government want to change the deadlines for meeting the current targets? Given that local air quality levels remain high-profile politically, that wouldn't be easy. And



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before the 2015 general election, there was consensus across the political parties on the phasing-out of unabated coal power. Nonetheless, there may be some options to rebalance policy here.

Perhaps most questions have been raised about whether the UK might backtrack from renewable targets (see box). It was EU policy, after all, that helped to drive these, although DECC's national Carbon Plan pointed in the same direction. If the UK were to end up with a Norway-style Brexit model, this would still require targets to be set for renewable energy and energy efficiency. However, there are other Brexit models where such targets wouldn't be a requirement (see Frontier's [earlier bulletin](#) on trade policy).

#### Missing the target?

Renewables' share of the electricity generation mix has already reached 25.1% in 2016 Q1 and is expected to exceed the 2020 30% target. But the heating and transport sectors are lagging behind. To meet the 2020 target, renewable heat would have to grow from 35 to 95TWh – an annual increase of 15TWh, compared with about 2.5TW a year over the last four years). Renewable transport would have to rise by 24TWh from its current level of 14.5TWh, an increase of 6TWh a year (compared with about 1TWh a year over the past four years). These trends have already been flagged by the Climate Change Commission (among others) as being of concern.

### Pre-Brexit problems

So if climate change is an area of policy less affected than others by Brexit, why the unease? This probably reflects concerns that have been surfacing during the current UK Parliament that "climate change" was becoming the poor relation of the energy "trilemma", with attention shifting to "security of supply" and "affordability". At the very least, there are some notable policy gaps that need to be filled for climate change targets to be met. In its 2016 Progress Report to Parliament, the CCC highlighted its disquiet regarding priority areas where there had been no progress or things had moved backwards. These included the much-criticised cancellation of the Commercialisation Programme for carbon capture and storage (CCS), which in July the CCC warned was "of critical importance to meet the UK's carbon targets at least cost and to fulfil the ambition of the Paris Agreement".

The Government has itself accepted that current policies are not sufficient to meet the targets. Indeed it has committed to publish its plans to meet the Fourth and Fifth Carbon Budget by the end of this year. However, there is a lot to do at a time when much of Government will be tied up dealing with the complexity of European exit, and there is already an expectation that the plans might be pushed out into 2017, leaving little time for implementation ahead of the next election. And the disappearance of DECC into BEIS has increased concern.

### RIP DECC, long live BEIS

DECC was created in October 2008, bringing together the energy portfolio, which had been in the old Department for Trade and Industry, with responsibility for climate change, which had sat within the Department for the Environment, Food and Rural Affairs. The stated aim of this merger was to reflect the importance of the energy sector and the challenges posed by climate change for the UK economy. DECC has clearly done much to shape the sector over its eight-year life, although its weight in Whitehall debates, relative to the Treasury, was often in question.

DECC's absorption into BEIS, and the disappearance of "climate change" from the roll-call of departmental titles, have inevitably heightened fears that climate policy has been side-lined. An alternative view is that by moving climate policy from environment, via energy, to a combined business/energy department, it is now finally in the right place for a joined-up approach to decarbonisation. After all, some of the bigger challenges for decarbonisation lie outside of the power sector (see box). And - potentially at least - the combined department (which covers industries and research) can use its weight to deliver innovation more effectively.

## Cometh the hour...cometh energy efficiency?

So where might the new ministerial team at BEIS look for policy options? Perhaps the place to start is with energy efficiency: its characteristics make it particularly well-placed to provide a “least regrets” contribution to climate change targets. This bulletin focuses on residential efficiency: the non-residential area also merits attention, but needs different forms of intervention.

- As well as meeting environmental objectives, increasing domestic energy efficiency also has the potential to help with affordability, at least in the longer-term (most measures have up-front costs). In "ECO: Help to Heat" (published in June 2016), DECC made the point that the best long-term way to tackle fuel poverty is to make it easier for people to heat their homes efficiently. And the benefits aren't purely financial: improvements in health and well-being also come from better heated homes.
- Energy efficiency fits well within the remit of the new department. On its creation, the Government stated that one of the most important rationales for moving DECC back into BIS was to “create a single department committed to ensuring that this investment and innovation fully utilises the UK science base and translates into supply chain benefits and opportunities in the UK.”
- As noted above, Brexit may allow the UK to move away from EU renewable targets to more efficient decarbonising options. This could permit an increased focus on energy efficiency in the run-up to 2020, perhaps at the expense of renewable heat targets. For example, there is scope within the Fifth Carbon Budget for further emissions reductions to be achieved from domestic energy efficiency, rather than those assumed to come from biomass boilers.
- Brexit may also permit the UK to reframe building standards to encourage domestic energy efficiency. While EU product standards are likely to continue to apply in most of manufacturing, given the importance of exports to the rest of the EU, there may also be more scope to “go it alone” with respect to construction.
- Energy efficiency is also a policy objective that fits well with the need to deliver emissions reduction without adversely affecting UK competitiveness, something that is likely to become still more important in a post-Brexit world.




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Energy efficiency measures are well-placed to provide a “least regrets” contribution to climate change targets.

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The CCC's central projection for improvements in residential energy efficiency shows them providing a reduction amounting to 6MtCO<sub>2</sub>e by 2030. Even a strong further push in this direction, therefore, would not provide all the answers to the question of how the climate change targets can be met. But would show commitment to their pursuit, and be of more than symbolic importance.

## Any ideas how?

There are, of course, already energy efficiency policies in place, not least the Energy Company Obligation (ECO), which requires larger energy suppliers to deliver energy efficiency measures in homes. This was launched in January 2013 and is currently in its second obligation period, due to end on 31 May 2017. As part of the 2015 Spending Review it was announced that this scheme would run for an additional five years from April 2017, at an estimated level of £640 million per year (a lower level than in previous years), and place a greater focus on fuel poverty. In addition to this, the Government has introduced legislation to require landlords to get their leakiest properties to an energy efficiency rating of at least Band “E” from April 2018.

However, there is much more to do. Without further policy commitments, the market alone will not deliver the improvement in energy efficiency that is needed to meet the Fifth Carbon Budget targets.

A report published in July 2016 by the Commons Public Accounts Committee (PAC), "Household Energy Efficiency Measures", was damning about progress to date, not least about the "Green Deal". DECC implemented this policy in 2013 in an effort to persuade homeowners that energy efficiency measures were worth paying for. However, the department's forecast that homeowners would take

up loans from the Green Deal Finance Company of more than £1.1 billion by the end of 2015 proved wildly optimistic – the actual figure was £50 million. The PAC called this outcome “abysmal”.

The PAC proposed a number of sensible reforms to ensure that policies are more thoroughly tested, and based on better evidence (including a robust evaluation of stakeholders’ views). But it was less forthcoming with ideas as to what should replace the Green Deal. The department seems to have been struggling, too. When quizzed on the subject by the Energy and Climate Change Select Committee in March this year, Lord Bourne (Parliamentary Under-Secretary of State at DECC) told MPs: “I don’t want to mislead you by suggesting that we’ve done masses of work on this at the moment.”

There is, indeed, no simple solution. Multiple difficulties must be overcome; for example, the fact that energy efficiency installations typically have a long asset life, while private-sector businesses making and selling them typically look for a shorter payback. Pricing in the carbon benefits appropriately is not easy. Different approaches are needed for different types of customers – the able-to-pay and the fuel-poor, homeowners and home-renters, those in new builds and those in existing building stock. And for those not able to pay, more funding will be needed than is available through the ECO.

However, there are some ways forward. Based on our recent work in this area, we set out some of the leading options:

- **Make home energy efficiency an infrastructure investment priority** and develop a programme to deliver it. This is the approach announced in Scotland last year, with the aim of providing the certainty of multi-year funding to encourage energy projects. Co-ordinated area-based schemes can more easily identify the homes to treat, and then more cost-effectively implement the necessary interventions. This approach also allows policy to be more joined-up between investments that increase energy capacity, and those that reduce energy demand.

The latest National Infrastructure Delivery Plan<sup>1</sup>, published earlier this year, sets out how government will support the delivery of key infrastructure projects and programmes to 2021. It included energy efficiency for the first time. The next step would be to provide an alternative source of funding to ECO (which comes through energy bills, and can be regressive). Analysis that Frontier Economics undertook for E3G of Government Impact Assessments estimated that a nationwide programme to make British buildings more energy efficient would generate £8.7 billion of net benefits<sup>2</sup>. This is comparable to benefits from other infrastructure projects (see Figure 1 below), even without quantifying many of the social benefits (e.g., on health).

- **State-of-the-art whole-house retrofits**, along the lines of the “Energiesprong” model developed in the Netherlands, are another option. These combine industrialised techniques, designed to reduce net energy consumption to zero, with novel contractual structures for delivery and cost recovery. Although successfully implemented in 800 Dutch homes, Energiesprong has not yet been scaled up. Nor has it been tested within the UK, where the housing market may present different challenges. However, it shows the potential to solve issues associated with extensive retrofits such as upfront costs and hassle.
- **A robust quality and standards framework** is expected to be one of the recommendations coming from the review of customer advice, protection, standards and enforcement with respect to energy efficiency and renewables being led by Sir Peter Bonfield. This is intended to help support a shift of policy from subsidy to market-led solutions.
- **Minimum standards**, along the lines of the requirements being placed on landlords to ensure their properties achieve an energy efficiency rating of at least Band “E”, could be used more



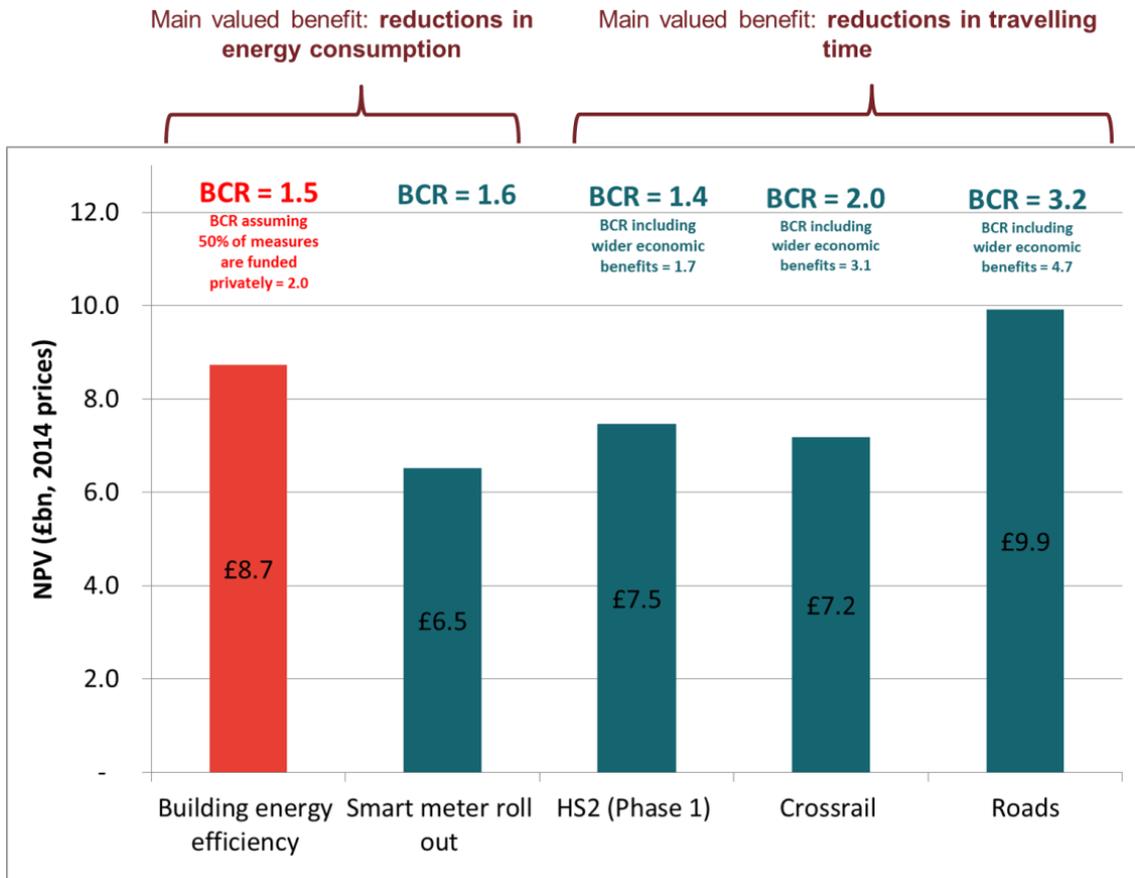
A programme to make British buildings more energy efficient would generate £8.7 billion of net benefits.

<sup>1</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/520086/2904569\\_nidp\\_deliveryplan.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/520086/2904569_nidp_deliveryplan.pdf)

<sup>2</sup> “Energy efficiency: An infrastructure priority”, Frontier Economics (September 2015).

broadly. The regulation of new-build properties would be relatively straightforward. In the absence of the zero-carbon home standard (which was cancelled in 2015), there is an obvious policy gap here to be filled.

**Figure 1. Infrastructure scheme assessments**



Source: “Energy efficiency: An infrastructure priority”, Frontier Economics (September 2015).  
 Notes: BCR = benefit-cost ratio; NPV = net present value.

Whatever options are chosen (and, given the variety of different issues with respect to different consumers, a variety of policies will be needed), we wholeheartedly support the PAC’s recommendation that the proposals should be properly trialled and tested before they are implemented at scale. Any repeat of the “abysmal” failure of the Green Deal would be seriously damaging - to the energy efficiency sector as much as to the Government’s reputation.



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