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Home Energy Efficiency

SUBMISSION TO BRIGHT BLUE'S CALL FOR EVIDENCE

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SUMMARY

Approximately 17% of the UK's greenhouse gas emissions currently come from heating our buildings, and emissions from this sector must fall to zero by 2050 to meet the UK's climate targets. This means improving the energy efficiency of new and existing buildings and switching from fossil fuels to renewable heat sources.

Retrofit energy efficiency is one of the lowest-cost ways to reduce emissions, as many measures such as loft and cavity wall insulation are cheap to install and will pay for themselves in energy savings after a few years. Research consistently suggests that reducing energy demand from our homes by at least 20% to 30% is one of the most cost-effective ways to meet the UK's 2050 carbon target. Energy efficiency measures should be viewed as an investment rather than a cost, because of the co-benefits created; such as keeping bills consistently low for consumers and improvements to people's health and well-being. Research suggests that for every £1 invested by government, the return will be around £3.20 in savings and secondary benefits[1]. However, current policies fall far short of delivering the improvement to our existing housing stock required to meet near and long-term climate targets.

WWF is calling for:

• a new policy for existing homes: introduce minimum standards on efficiency in homes, enforced at the point of sale, accompanied by subsidies and zero interest loans to reduce any financial burden on households that are unable to pay for measures;
• energy efficiency to be made an infrastructure priority and for this designation to be accompanied by a target to improve all homes to an energy performance rating of C or above by 2030;
• all new buildings to be 'nearly zero energy' by 2020;
• establishment of a clear, long-term plan for decarbonising heat for buildings.

Ahead of the 2016 Scottish Parliamentary elections, the Scottish Conservatives welcomed the designation of energy efficiency as a National Infrastructure Priority in Scotland, and made energy efficiency a centrepiece of their election manifesto. The party committed to increase

[1] 1 Verco (2013) Building the Future: The economic and fiscal impacts of making homes energy efficient

the overall spending on energy efficiency to 10% of the Scottish Government's capital budget allocations, to bring all homes up to an Energy Performance Certificate (EPC) 'C' by 2030. It is encouraging that there is growing cross-party support for designating energy efficiency as an infrastructure priority and we hope that this approach will be adopted by the UK Government in the near future. The National Infrastructure Commission (NIC) could oversee a strategic, cross-Government approach to retrofitting homes and to freeing up capital funding to drive a programme of investment in the UK's housing stock.

WHY DID THE GREEN DEAL FAIL? IN PARTICULAR, WHAT MISTAKES WERE MADE IN THE DESIGN OF THE FINANCE MECHANISM AND THE COMMUNICATION OF THE SCHEME?

The failure of the Green Deal is responsible for a large part of the gap between current delivery and what is needed to meet carbon targets. With support for low cost measures limited to low income households under the Energy Companies Obligation (ECO), the Green Deal was intended to stimulate uptake of these measures, and more, in the 21 million UK homes that do not qualify for fuel poverty schemes. It was initially hoped that around 1 million plans would have been taken out under the scheme by 2020. In this regard, the Green Deal finance offering has fallen well short of what was hoped for, with only 16,000 finance packages taken up between its launch in late 2012 and its closure in July last year.

WWF believe there are a number of reasons for this:

- High interest rates: the interest rate on Green Deal finance plans compared unfavourably with alternative sources of finance such as re-mortgaging and some personal loans. The finance mechanism will not have acted as an incentive to action for those with cheaper access to capital. A high interest rate also adds to costs, reducing the number of measures than can be financed under the scheme and further reducing the attractiveness of the offering.

- Lack of supporting incentives: experience in other countries such as France and Germany has shown that low-interest rates (below 2%) are not enough in themselves to overcome the many barriers holding back household investment in efficiency. In these countries, low interest loans have been accompanied by incentives (such as tax reductions) for efficient homes and efficiency investments.

- Lack of marketing: for a scheme aimed at mass market adoption, the Green Deal was poorly marketed. The Government had hoped that large firms would market the scheme widely. This included energy suppliers, who it was hoped would push the Green Deal alongside meeting their obligations under ECO. In the event what little marketing was carried out was done by the smaller installer supply chain, rather than large firms with a national reach.

Ultimately, the policy was not suited to being a tool for mass market adoption. In the absence of low interest rates and accompanying incentives, the policy would only have been attractive to landlords and households lacking access to capital, a much smaller proportion of the household market. To achieve the levels of uptake envisaged by the Government, the scheme should have offered lower interest rates and been supported by smart regulations (for example, on minimum standards) and revenue-neutral incentives such as council tax or stamp duty discounts.

WHAT ASPECTS OF THE GREEN DEAL SCHEME SHOULD BE RETAINED IN A FUTURE POLICY?

The Green Deal was well suited to some, but not all, situations. A pay-as-you-save mechanism attached to a property rather than the homeowner is the most appropriate policy tool to address rented accommodation, as well as those without access to capital. An appropriate ambition for the scheme would have been to treat these sectors, rather than the entire housing market.

Sticks and carrots are needed to drive uptake in able-to-pay households. The most important lesson to be drawn from the last few years is that policy must tackle *all* of the barriers holding back household investment in energy efficiency. The Green Deal failed as a scheme to drive mass-market adoption because it addressed some (mainly financial) barriers, but not all of them; information, finance, hassle factor and landlord/tenant split being among the most important. This was a lesson learned under previous schemes: even when loft insulation was given out almost free under CERT (the Carbon Emissions Reduction Target (2008-12)), many households were reluctant to carry out installations. As a minimum, the Green Deal needed to be accompanied by incentives such as zero or low interest loans alongside stamp duty and council tax exemptions.

WWF believes that, ultimately, only sensible regulation will drive consumer demand for retrofit efficiency on the scale required to meet climate and fuel poverty targets. Many of the measures that households would be required to install are cost-effective, and there is significant evidence that these investments would yield substantial direct and indirect benefits to the economy. The mandating of condensing boilers (through regulation) in 2005 remains the single most successful policy in terms of driving down domestic energy consumption in the UK.

HOW CAN THE GOVERNMENT INCENTIVISE THE TAKE-UP OF RENEWABLE HEAT TECHNOLOGIES WITHIN A GREEN DEAL SUCCESSOR SCHEME?

WWF-UK advocates energy efficiency as the first step to reducing emissions from buildings due to its strong carbon reduction potential and significant additional economic and social benefits. However, demand for heat in buildings often cannot be eliminated entirely, and therefore it is also important to reduce the emissions that arise from heat generation. For example, direct emissions from existing homes could be reduced by up to 65% if all energy efficiency measures were installed[2], with the remaining emissions eliminated by switching to renewable heat. At present, less than 5 per cent of heat is generated from renewable sources[3].

We believe that well designed policy for heat must combine approaches to both energy efficiency and renewable heat. Ideally, any successor scheme aimed at able to pay households should ensure that energy efficiency and renewable heat technologies are advised on and accessible through the scheme.

Any coordination of efficiency and renewable heat schemes should take place as part of an updated Government strategy to tackle emissions from buildings. In order to understand this transition, in 2015 WWF commissioned Verco (an energy and sustainability advisory service) to determine the barriers to low carbon heat and allow us to develop solutions[4]. Using this report, we have highlighted a number of priority actions and high level policy recommendations to form a vision of what is required to deliver low carbon heat in our homes and businesses.

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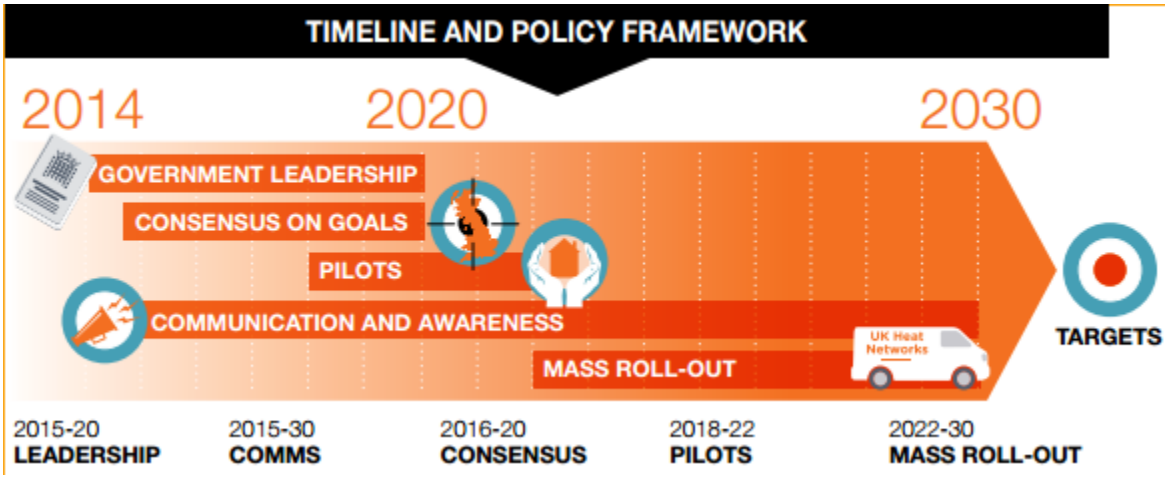
[2] *Energy Saving Trust (2013) Review of potential carbon savings from residential energy efficiency*
[3] *DECC (2014) Energy Consumption in the UK*
[4] Report summary can be accessed here http://assets.wwf.org.uk/downloads/wwf_heat_report_summary_web.pdf

Creating a UK roadmap to a low carbon heat system
In order to reach our 2030 targets it is vital that the Government demonstrates leadership, vision and clarity in its policies for a low carbon heat future. Stakeholders and government should work together in communicating an information and awareness campaign that highlights the many benefits of a 'Great British heat refurbishment'. All stakeholders should work together to agree a policy framework and define long-term targets before a mass roll-out post-2020.



The policy framework
A policy framework for a UK-wide low carbon heat system should consist of policies that incentivise, enable and regulate. **Incentivise:** The Government should introduce policy to assist building owners in improving standards though fiscal support and reduced implementation costs. **Enable:** There should be supply side communication support to ensure all stakeholders are aware of the UK's planned transition to low carbon heat and have the means to get there. **Regulate**: Regulation should be incrementally introduced to ensure a consistently improving minimum standard for low carbon heating systems.

1. Historically, energy policy has been geared towards the electricity sector and environmental regulation of heating technologies has lagged behind. The Government must address this by ensuring that the transition to energy-efficient low carbon technologies is a policy priority.
2. There is an absence of consumer demand for energy efficient and low carbon technologies, driven primarily by a lack of awareness and knowledge of low carbon heat systems. Builders and home owners lack confidence in requesting new and unfamiliar technologies, so more communication and guidance is needed to drive the public demand for low carbon heating systems.
3. There is insufficient governance and planning support for the deployment of low carbon heat networks. Heat networks require long-term infrastructure and investments in order to compete with the existing energy networks.

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