

# Retrofitting UK homes to net zero: A cunning plan

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## British Energy Efficiency Federation chair Andrew Warren sets out his vision for building a thriving market for domestic green homes upgrades

It is universally acknowledged that Britain needs urgently to improve the energy efficiency of its housing stock, long deemed amongst the worst in western Europe. This needs to be done for ecological reasons. For health reasons. For levelling up reasons. For climate proofing reasons. For infrastructure reasons. For comfort and well-being reasons.

After the debacle of the Green Homes Grant scheme, and the earlier Green Deal scheme, the question remains: precisely how? Here is how.

First, we need a truly Cunning Plan. A long-term, ambitious and transformational plan for energy efficiency action in buildings needs to be set in place, to provide much needed certainty for the energy efficiency industry.

Reducing energy demand at scale is an absolute prerequisite to support the government's ambitions on electrifying heating and transport. A failure to secure demand reduction through energy efficiency action in the first instance will place unaffordable demands on future infrastructure for electrification.

Building on the long overdue - but ever imminent - Heat and Building Strategy (HABS), the government must publish a UK buildings retrofit plan, with policies and programmes running to at least 2030. It requires realistic timescales for implementation at the heart of policy design, placing energy efficiency as the first priority of the UK's net zero target.

The government has successfully achieved close collaboration with industry to secure transformational change in the energy supply sector - most notably for offshore wind power. A similar plan is now needed to retrofit our buildings.

In the run up to COP26 in November, we need to be creating a new 'Buildings and Energy Efficiency Retrofit Programme Board'. This will work with the government to build a competitive and innovative UK building retrofit sector that delivers at scale.

## £9.3bn manifesto pledge

The government has made a significant £9.3bn pledge to fund energy efficiency retrofitting of buildings in England alone by 2024. To date, some £2bn of this funding has been allocated. The Climate Change Committee (CCC) reckons achieving net zero requires £55bn of investment in home energy efficiency alone. BEIS's own published estimate of £35-65bn to achieve the energy performance certificate (EPC) C standard implies a broadly consistent level of ambition.

Funding needs to be focused on those in fuel poverty, but with grant subsidy for householders installing certain energy saving products as an initial catalyst to the market. Some financial incentives are required to stimulate action in the able-to-pay sector, creating a more sustainable market for energy efficiency and so reducing the overall subsidy required.

Above all, government needs to ensure that all future energy efficiency initiatives are based upon a whole house approach to retrofit, followed by an EPC to confirm and demonstrate real, in-use performance improvement.

Future retrofit programmes need suitable lead-in times so participants can prepare, train and resource effectively. The timeline must be long enough to provide confidence to invest as schemes grow. Programmes need to ensure that contractors are confident of funding, and getting paid in a timely way, especially where multi-measures from different installers are involved.

Each scheme should focus on delivering renewable and zero carbon technologies for heating and reducing energy use and heat loss via fabric improvements. But with far more realism than the Green Homes Grant scheme about what the consumer considers important when seeking to improve the comfort and energy efficiency of their homes. As such, incentives to drive action in more conventional areas such as glazing and lighting improvements, and older boiler replacements should be allowed - but with a clear signal that such initiatives will be phased out over time. Instead of an arbitrary range of primary/secondary measures, households must be able to use the full set of recommendations set out in their EPC.

At application, participants will require an up-to-date EPC (maximum two years old) and require a follow up EPC to show compliance. This will demonstrate the energy efficiency improvement in terms of EPC rating and carbon emission reduction. This data will measure the success of each scheme in reducing energy usage and carbon emission.

We must improve skills and installer competence. Greater industry engagement is needed in the development of programmes to help ensure an adequate installation base and levels of competency, allowing sufficient time for all participants to prepare themselves. So, government needs to set out a clear and viable long-term timeline on the certification and competency required to install energy efficient measures into homes. Installers/companies will require financial support and accredited training to achieve set levels of competence, with grants payable to trainees (along the lines of current grants to trainee teachers).

## **Competent Persons Scheme**

Use of proven Competent Person Schemes where applicable should be included as part of the delivery option. Installations should be inspected by a company that already operates within the Competent Person Schemes' structure. Career pathways need to be established that will encourage school and college leavers into the RMI sector. Retrofitting standards must be PAS 2035 and PAS 2030 (2019), to ensure that a holistic approach to each property, quality installations, consumer protection and monitoring and evaluation of the outcomes - which in turn can be used to help modify and improve EPC methodologies.

All future retrofit schemes must include a strong programme of public engagement built in. There need to be trusted, effective mechanisms in place to advise households. It is notable that Scotland and Wales have independent and joined-up energy efficiency advice facilities in place, yet England does not.

Some households will face much higher costs than others - rural off gas grid homes being a prime example - and they will need appropriate solutions instilling confidence that options available are cost effective.

Crucially, the government must ensure much closer collaboration with local authorities to explore routes for area-wide retrofit. Approaches need to reflect differences in housing stock, climatic conditions, local income levels. Because local authorities are closer to the point of delivery, they have a greater understanding of a locality's particular needs. This summer's initiative to provide funding to develop capacity to ensure compliance with private sector MEES regulations is very welcome and should be monitored closely to enable further developments.

The 'contagion effect' of local projects should not be underestimated. Property owners and residents will learn of local campaigns and aspire for the same benefits of comfort and warmth. A new social norm for building energy efficiency will be driven by seeing and hearing real life examples of the benefits. The Cuning Plan will be working.

*Andrew Warren chairs the British Energy Efficiency Federation (which prepared the 'Cuning Plan' above).*