

Warmer Homes



Improving fuel poverty and energy efficiency policy in the UK

Richard Howard



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About the Author

Richard Howard joined Policy Exchange in December 2014 as Head of the Environment and Energy Unit. Prior to joining Policy Exchange, Richard was Chief Economist at The Crown Estate, and prior to that he worked in consultancy. Richard has a wide range of research interests, in particular energy economics and policy, infrastructure, resource efficiency, environmental policy, and corporate sustainability. He has a BSc Economics from the University of Bristol and a Masters in Sustainability, Planning and Environmental Policy from Cardiff University.

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The views expressed in this report are the author's own.

Executive Summary

Successive governments have failed to get to grips with fuel poverty and household energy efficiency in the UK. According to the latest government definition, there are **2.3 million fuel poor households in England alone**.¹

Fuel poverty is essentially a **cost of living** problem – the inability to afford to heat your home adequately. It has been an increasing problem in recent years due to the **sharp increase in consumer energy prices** (for example retail gas prices rose by 128% in real terms between 2003 and 2013)² combined with **stagnant wages** driven by the economic downturn. It also reflects the **inefficiency of the UK's housing stock** – which remains woefully poor compared to other European countries.³

Fuel poverty can **severely affect people's health** – as those affected often under-heat their homes. Cold housing places a burden on the NHS (an estimated cost of £1.36bn per annum),⁴ and is also a known contributor to the 25,000 'excess winter deaths' per year in England and Wales.⁵ Fuel poverty also has implications in terms of **decarbonisation** – fuel poor households typically live in very inefficient, older dwellings, meaning they are needlessly wasting energy and **increasing carbon emissions**.

Defining Fuel Poverty

The current definition of a fuel poor household (used in England only) is one which:

- *Has required fuel costs that are above the median level, and*
- *Were they to spend that amount they would be left with a residual income below the official poverty line (defined as 60% of median income after housing costs).*

The Devolved Administrations use an alternative definition: *'a fuel poor household is one which needs to spend more than 10% of its income on all fuel use to heat its home to an adequate standard of warmth.'*

Fuel poverty is often associated with older people, but in actual fact it affects a **broad spectrum of households**.⁶ Fuel poverty is concentrated in lower income groups, but one in two fuel poor households is in work. 60% of fuel poor households live in very inefficient properties (Energy Performance Certificate Band 'E', 'F', or 'G'), many of which are older properties. It occurs across urban and rural neighbourhoods, although the deepest levels of fuel poverty are generally in rural areas (off gas grid).

1 DECC (2014) *Fuel Poverty Statistics 2012*.

2 DECC (2014) *Domestic energy price indices*.

3 ACE / EBR (2013) *Fact-file: The Cold Man of Europe*.

4 Age UK (2014) *Reducing fuel poverty – a scourge for older people*.

5 Analysis by National Energy Action; average number of 'excess winter deaths' over the 5-year period to 2013/14.

6 See DECC (2014) *Annual Fuel Poverty Statistics Report*.

The fuel poverty strategy

The government recently consulted on a **new Fuel Poverty Strategy for England**. This proposed a new headline target for fuel poverty: ‘to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency standard of Band C, by 2030’.⁷ The 2030 target is quite ambitious, implying substantial upgrades to the energy efficiency of the 2.3 million fuel poor homes in England, although it is also somewhat vague (‘as is reasonably practicable’). The strategy itself does not provide an estimate of the cost of achieving the target, nor is it conclusive on whether current policies will deliver the desired outcome. The 2030 target is supplemented with a set of interim milestones for 2020 and 2025 – but these seem to defer the bulk of activity required to the late 2020s.

“There is currently a lack of spending directed at improving the energy efficiency of fuel poor homes”

Analysis by the Committee on Climate Change (the government’s advisory body on climate change) suggests that hitting the target would cost **£18bn, or £1.2bn per annum to 2030**.⁸ Current annual spending on energy efficiency

improvements in fuel poor homes in England amounts to less than half that – the c.**£490m** portion of the Energy Company Obligation (ECO) scheme directed at the fuel poor. ECO is only committed until 2017, so will only be the start of the policy response.

There is an apparent disconnect between the government’s ambition to reduce fuel poverty and the current package of policies and funding commitments – a ‘funding gap’ of around £700m per annum.

It is difficult to see how the overall budget for fuel poverty interventions (which comes from general taxation and to a lesser extent levies on consumer bills) could be increased. In the current economic and budgetary climate it is unlikely that additional exchequer funding could be made available to spend on fuel poverty. Equally it is difficult to see how consumer bill levies could be increased to fund fuel policy interventions, since they are a particularly regressive way of funding energy policies.

However, our analysis shows that it is possible to bridge the funding gap within the current spending envelope, simply by reprioritising existing government spending towards energy efficiency investment in fuel poor homes.

Reprioritising fuel poverty interventions

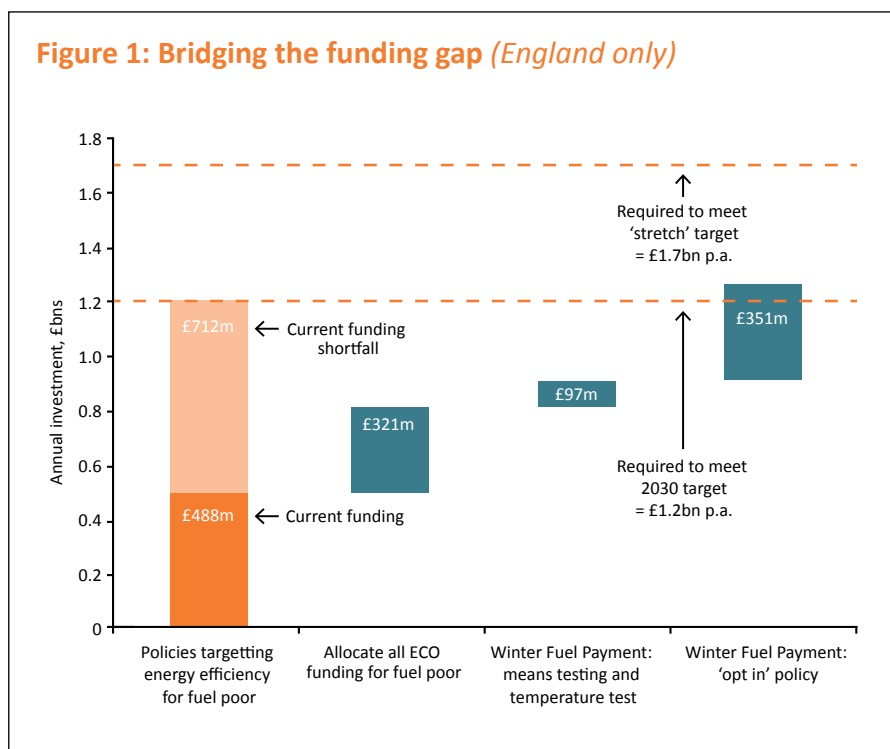
There is currently a **lack of spending directed at improving the energy efficiency of fuel poor homes** – despite the fact that improving energy efficiency has been identified as the most cost effective way to permanently reduce fuel poverty,⁹ the clear macro-economic arguments for investing in energy efficiency,¹⁰ and the fact that the government’s fuel poverty target is couched in terms of energy efficiency. Investment in energy efficiency in fuel poor homes can be increased in a number of ways – as shown in the following chart and described below:

7 Note: Energy Performance Certificates (or EPCs) provide a rating for the energy efficiency of a dwelling on a scale of A to G (where A is the highest rating). The average rating across all homes in the UK is ‘D’, but for fuel poor homes it is an ‘E’.

8 CCC (2014) *Fuel Poverty Strategy Consultation Response and Annex*.

9 Hills, J (2012) *Getting the Measure of Fuel Poverty*.

10 Cambridge Econometrics / Verco (2014) *Building the Future: The economic and fiscal impacts of making homes energy efficient*.



Firstly, the government should **reprioritise existing energy efficiency schemes towards fuel poor households**. Spending on energy efficiency has historically combined alleviating fuel poverty and reducing carbon. These objectives need not be in conflict: analysis from the Committee on Climate Change¹¹ shows that **it is possible to tackle fuel poverty and carbon emissions at the same time, provided that energy efficiency programmes are explicitly targeted at the fuel poor**. The current flagship energy efficiency programmes are the Green Deal (which targets carbon reduction mainly in 'able to pay' households), and the Energy Company Obligation (which allocates a proportion of funding to fuel poor homes, and a portion to carbon reduction across all households).

In our view, the ECO scheme should focus exclusively on fuel poor homes. The funding currently allocated to the Carbon Emissions Reduction Obligation (which is available to all households) should be reallocated to fuel poor households.

Secondly, government should **reprioritise fuel poverty schemes towards investment in energy efficiency**. At present the vast majority of fuel poverty spending is spent on **income and price support schemes** such as the Winter Fuel Payment, Cold Weather Payment, and Warm Homes Discount; which provide financial relief in the form of cash payments or energy bill rebates. They are very expensive policies (£2.6bn per annum collectively), and yet do next to nothing to address long term fuel poverty as their effect is purely temporary. Moreover, they are extremely poorly targeted at the fuel poor (for example the Winter Fuel Payment is available to all pensioner households – only 10% of whom are actually in fuel poverty).¹² And they probably increase carbon emissions, since their effect is simply to increase spending on energy.

11 CCC (2014) *Fuel Poverty Strategy Consultation Response and Annex*.

12 DECC (2013) *Fuel poverty – UK Advisory Forum on Ageing*.

Redefining the Winter Fuel Payment (WFP) could result in savings of over £500 million per annum (£450m of which in England), which could be reallocated into energy efficiency investment in fuel poor homes. Making the WFP an 'opt-in' policy, similar to many other welfare payments, could save around £400m per annum according to Policy Exchange estimates. Those who are reliant on the WFP would still be able to access it at the current level, but some individuals

“The government should allocate infrastructure capital to energy efficiency investment in fuel poor homes”

would opt not to receive it. Introducing means testing to make higher earners ineligible could save a further £100m per year. There has also been a proposal to introduce a 'temperature test', to exclude pensioners retiring overseas to warmer countries such as Spain from

receiving the payment, which would save a further £13m per year.

Thirdly, the government should **allocate infrastructure capital to energy efficiency investment in fuel poor homes**. Homes are not generally thought of as 'infrastructure'. The recently published National Infrastructure Plan (2014) briefly mentions domestic energy efficiency but not fuel poverty. However, investing in domestic energy efficiency meets many of the requirements which HM Treasury considers when valuing infrastructure spend, for example: immediate and long term macro-economic benefits, increasing the capacity and resilience of the economy, reducing environmental impacts, and linked benefits with other forms of infrastructure (such as the NHS). **Government should consider energy efficiency as a 'Top 40' national infrastructure priority, and allocate some of the £100bn public infrastructure spend over the next parliament to domestic energy efficiency.**

Lastly, there is a growing body of evidence on how best to implement and deliver fuel poverty and energy efficiency schemes. This suggests that **whole house retrofits** can be a more cost-effective and impactful way to address fuel poverty than more incremental improvements in energy efficiency. There are ways to improve the targeting and efficiency of fuel poverty schemes, by pursuing **'Area Based Approaches'** to delivery, and by government departments and agencies **making additional data available**. The role of the NHS in reducing fuel poverty could also be strengthened – for example by **health and social care professionals 'prescribing' energy efficiency measures** through an improved referrals system to schemes such as ECO and the Green Deal.

1

Introduction

This report considers the government's approach to tackling fuel poverty – in particular:

- the government's emerging Fuel Poverty Strategy, which it consulted on in Summer 2014;
- the effectiveness of public spending on fuel poverty (both taxpayer and bill-payer funded);
- the likely cost of meeting the government's fuel poverty target;
- the best way in which to fund fuel poverty measures; and
- ways in which to improve the implementation and delivery of fuel poverty and domestic energy efficiency policies.

Box 1: What is Fuel Poverty?

Put simply, fuel poverty is the inability to afford to heat your home adequately. The Warm Homes and Energy Conservation Act (2000) used the following definition of fuel poverty:

- 'A fuel poor household is one which needs to spend more than 10% of its income on all fuel use and to heat its home to an adequate standard of warmth (generally defined as 21°C in the living room and 18°C in the other occupied rooms)'.

However, this definition led to some anomalies, with evidently well-off people being drawn into 'fuel poverty' because of the size of their heating bills. A definition that reflected the types of homes most genuinely at risk was sought. In 2011, following an independent review by Professor John Hills, the Government updated its definition of fuel poverty – known as the 'Low Income, High Cost' (LIHC) definition:

Households are considered fuel poor if:

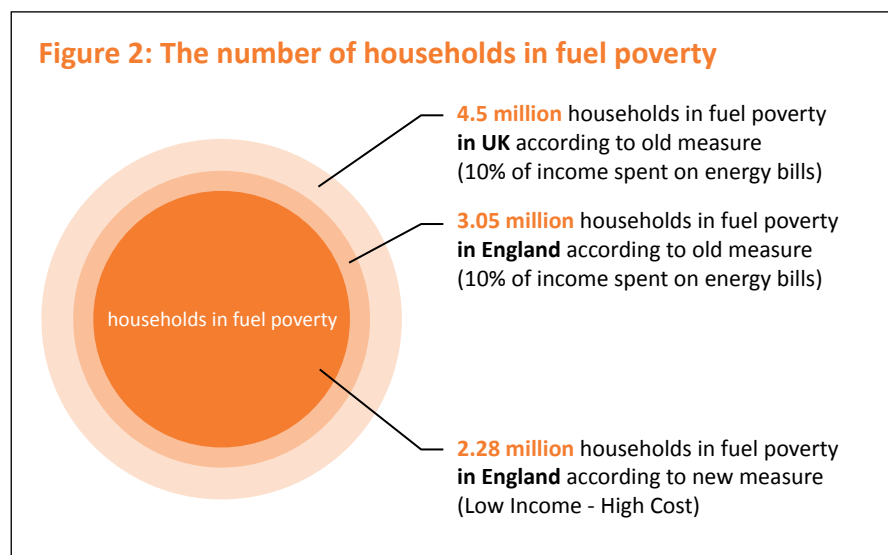
- *They have required fuel costs that are above the median level, and*
- *Were they to spend that amount they would be left with a residual income below the official poverty line (defined as 60% of median income after housing costs).*

Whilst the new definition focuses more clearly on those genuinely at risk, one downside is that in practice it makes it more difficult to identify the fuel poor, since it relies on estimates. The new definition is used in England, but has not been adopted by the Devolved Administrations.

The Hills Review also recommended a new indicator for the extent of fuel poverty, the 'fuel poverty gap', defined as 'the amount by which the assessed energy needs of fuel poor households exceed the threshold for reasonable costs'. This can be assessed both at household level and at national aggregate level.

The scale of the problem

According to the original measure of fuel poverty introduced in the Warm Homes and Energy Conservation Act (2000), there were **4.5 million households in fuel poverty across the UK** in 2012, of which 3.05 million households were in England.¹³ Northern Ireland has the highest rates of fuel poverty in the UK – due to the high proportion of households off gas grid and generally lower incomes – followed by Wales, Scotland, and then England.



The government has introduced a new measure of fuel poverty (see Box 1) – the ‘Low Income – High Cost’ measure. Official data on the new ‘LIHC’ measure is only available for England, since the measure has not been adopted by the Devolved Administrations. The latest government statistics identify that **2.28 million households in England** were in fuel poverty in 2012 according to this measure – or **10.4% of all households**. The number of fuel poor households has remained broadly constant over the last decade at between 2.3–2.5 million households. Analysis by the Association for the Conservation of Energy forecasts that the number of households in fuel poverty will increase back to 2.46 million in 2014.¹⁴

Whilst the number of households in fuel poverty has remained broadly constant, the extent of fuel poverty (as measured by the ‘fuel poverty gap’) has been increasing sharply in recent years – due to a substantial increase in consumer energy prices relative to household incomes, offset to an extent by slight improvements in energy efficiency:

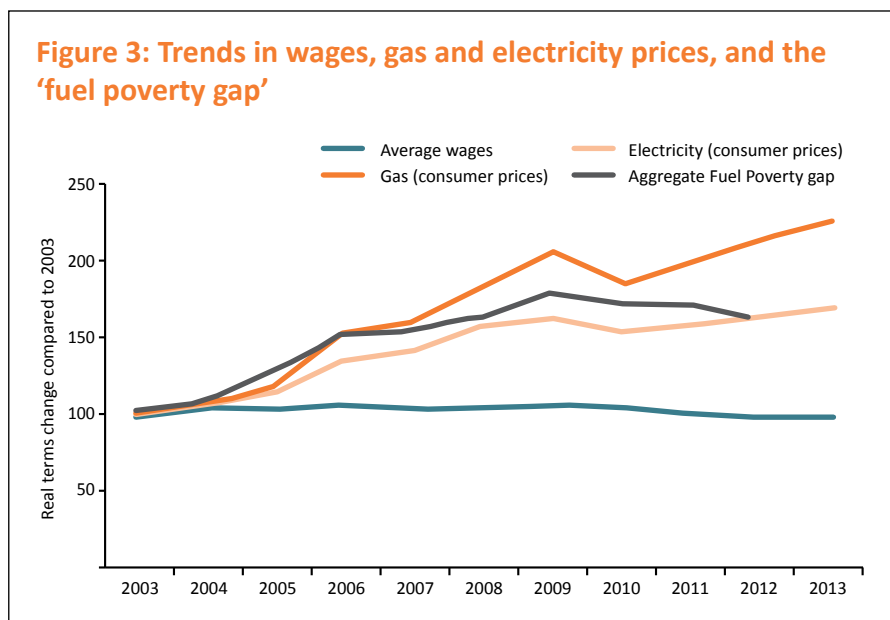
- Rising energy Prices:** Consumer energy prices have been rising substantially in recent years. DECC data¹⁵ shows that **over the period 2003 to 2013, consumer electricity prices increased by 73% in real terms, and gas prices by 128%**. This increase was driven by substantial increases in commodity prices, coupled with increases in network and environmental levies placed on consumers. Commodity prices are now in decline, but this will take a while to feed through to reductions in consumer bills due to forward purchasing strategies amongst large energy companies. And any reduction in wholesale costs will be offset to some extent by further increases in consumer levies.

¹³ DECC (2014) *Annual Fuel Poverty Statistics Report*.

¹⁴ ACE (2014) *Fuel Poverty: 2014 Update*.

¹⁵ DECC (2014) *Domestic energy price indices*.

- **Stagnant household incomes:** at the same time, household incomes have been largely stagnant due to the economic downturn. Average weekly earnings increased by 6% from 2003 to 2008, **but have since fallen by 10% in real terms.**¹⁶



- **Energy Efficiency:** Overall, since 1996, the energy efficiency of the average house in the UK has improved – with **the average Energy Performance rating moving from a Band 'E' to a Band 'D'**. Household energy consumption is also falling – between 2005 and 2011 overall energy consumption in homes in England and Wales fell by almost a quarter.¹⁷ The reduction in demand is due to: consumers responding to higher prices (although energy demand is relatively inelastic), greater insulation (e.g. 16 million homes in GB now have adequate loft insulation), and tighter product standards for boilers and other appliances.

Putting these factors together **the 'aggregate fuel poverty gap' in England** (see Box 1 for definition) **increased by around 70% in real terms since 2003**, and now stands at **£1 billion, or £443 per fuel poor household.**¹⁸

Despite the improvement in energy efficiency noted above, it is worth saying that **the UK's housing stock remains woefully inefficient compared to other European countries** – in particular to some of the leaders such as Norway, Sweden and Finland.¹⁹ In the UK, some 15.9% of the population describes their home as 'leaky', around double the rate in Scandinavian countries (6–8%). Our homes are generally very poorly insulated – for example the average U-value²⁰ of walls in England is 1.16, compared to just 0.35 in Sweden. Consequently, whilst 6.5% of people in the UK say they cannot afford adequate heat, in Norway the corresponding rate is just 1.2%, despite having average annual temperatures some 5°C lower than the UK.

¹⁶ ONS (2014) *Annual Survey of Hours and Earnings, 2014* Provisional results.

¹⁷ ONS (2013) *Household Energy Consumption in England and Wales 2005–2011*.

¹⁸ DECC (2014) *Annual Fuel Poverty Statistics Report*.

¹⁹ ACE / EBR (2013) *Fact-file: The Cold Man of Europe*.

²⁰ U-value is a measure of thermal efficiency and heat loss, in W/m²K.

Who are the fuel poor?

It is notoriously difficult to identify the fuel poor – with government data largely based on modelled estimates rather than actual households. Fuel poverty is often associated with pensioners, but in actual fact it affects a broad cross section of households as shown in the chart overleaf and as follows:

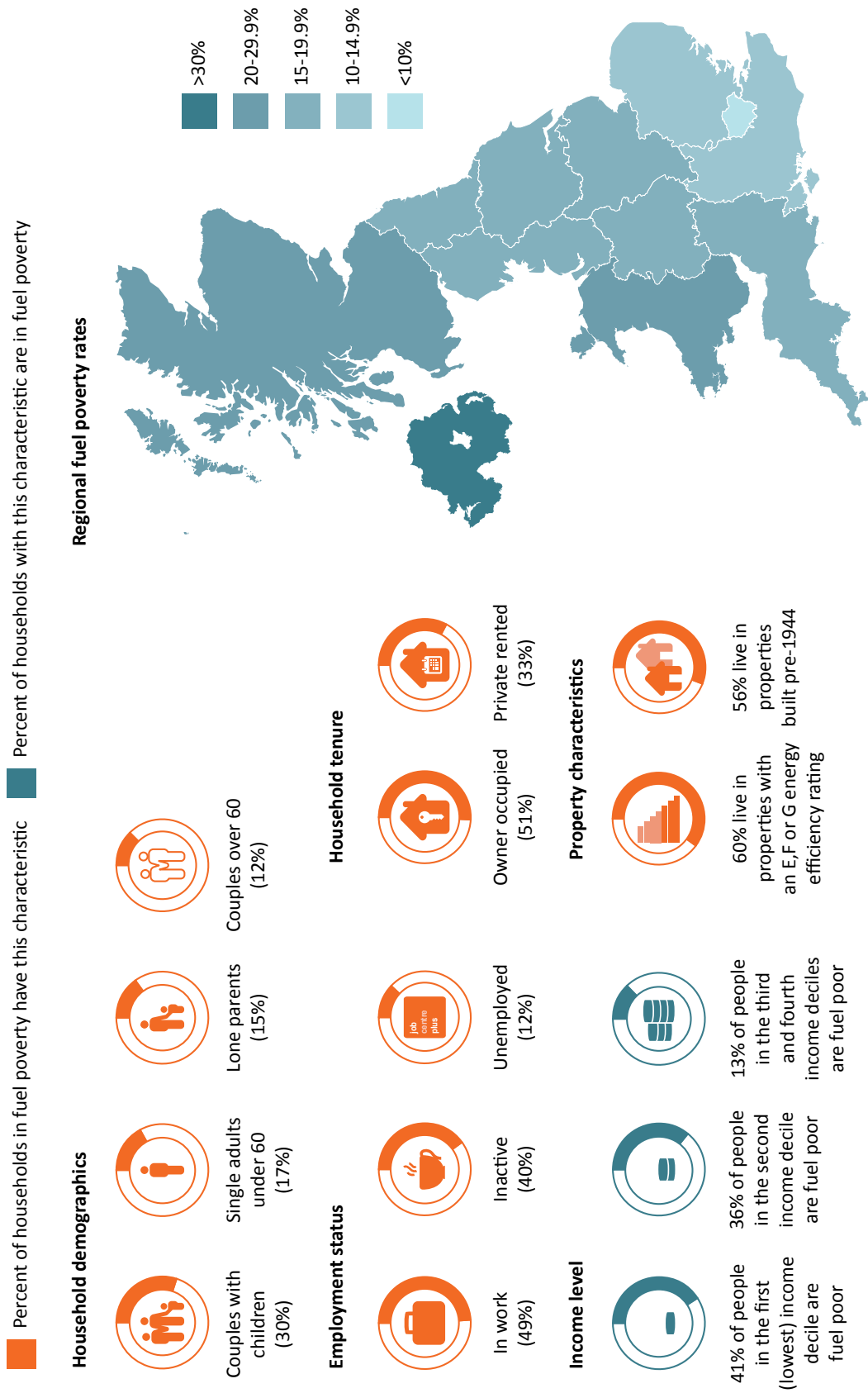
- **2.3 million households** in England fall into the current definition of fuel poverty (Low Income-High Cost measure), equivalent to 10.4% of all households in England.
- **Low income households:** 41% of households in the lowest income decile are in fuel poverty.
- **Working households:** 49% of fuel poor households are working – or over 1.1 million households in England. 40% of fuel poor households are inactive, and only 12% are unemployed.
- **Mix of household types:** 30% of fuel poor households are couples with children, 17% are single adults under 60, 15% are lone parents, and 12% are couples over 60.
- **Inefficient homes:** 60% of fuel poor households live in inefficient properties (EPC rating of E, F, or G). Those living in the most inefficient properties (G rated) face a fuel poverty gap of £1,700 per annum.
- **Older dwellings:** 56% of fuel poor households live in properties built pre 1944.
- **Tenure:** 51% of fuel poor households are in owner occupied properties, and 33% live in private rented accommodation. The incidence of fuel poverty is highest in the private rented sector.
- **Urban/Rural:** 14% of households in rural areas are in fuel poverty, and face an average fuel poverty gap of £943 per annum.
- **Regional:** Northern Ireland has the highest rates of fuel poverty in the UK, followed by Wales, Scotland, and then England. Within England the incidence of fuel poverty is highest in the West Midlands and North West.

Note: All data drawn from DECC (2014) Annual Fuel Poverty Statistics Report. Unless stated otherwise, data relates to England only, using the ‘Low Income-High Cost’ measure of fuel poverty.

There are several distinct households groups where fuel poverty is concentrated, as identified in a recent report by the Centre for Sustainable Energy²¹ (all groups are also assumed to have low incomes):

- Lone parents and single adult households under 60
- Properties in rural areas
- Electrically heated dwellings
- Private rented sector
- Unemployed households
- Larger dwellings (by number of bedrooms)
- In properties without wall insulation

Figure 4: Who are the fuel poor?



Why fuel poverty matters

Fuel poverty is a particularly acute example of a **cost of living problem** – in one sense, the fuel bills faced by householders are just one component of essential household spending such as housing, food, water and other utilities. Energy bills have been a particular concern: Policy Exchange polling has repeatedly found that energy bills rank among the public's top concerns, and that proposals to cut energy bills are more popular than other ways of reducing household living costs.²²

With Ed Miliband's proposed energy bill freeze,²³ and David Cameron's initiative early in 2014 to amend the ECO scheme to cut an estimated £30–35 per year on bills,²⁴ political parties have clearly become more attentive to energy costs (this is not to say that either of these methods is a particularly good way of dealing with the problem, merely that it shows that they have identified a problem). Campaigns such as those led by Conservative MP Robert Halfon, and much of the Labour front bench, have sought to focus policymakers' attention on cost of living issues.

Still, despite the rhetoric directed at cost of living issues in general, and cost of energy issues in particular, little change has occurred over the past few years in reducing those costs, and little progress is being made in reducing fuel poverty.

Whilst fuel poverty can be characterised as a cost of living problem, government and experts also recognise it as a distinct problem. Research for Consumer Futures²⁵ describes how susceptibility to fuel poverty is 'a function of household income adequacy and the thermal and energy efficiency of housing stock... and appliances'. This means that 'for any given level of income, households and individuals have an unequal capability to convert income into adequate warmth which is distinct from, and additional to, those deprivations associated with insufficient income itself.' In simple terms, fuel poverty is concentrated in households which have lower incomes, badly-insulated expensive to heat homes, or both.

The Hills Review of fuel poverty²⁶ identifies it as an 'overlap issue' which cuts across the policy areas of poverty, health and wellbeing, and carbon. This adds complexity to the challenge of addressing fuel poverty, but also offers the prospect of 'win-win-win' outcomes across the three linked policy domains:

- **Poverty:** households with high energy costs living in poverty (or on its margins) face high costs to keep warm relative to typical households with much higher incomes. Households with the lowest incomes (in the bottom 20%) spend around 8% of their household budget on fuel, compared to just over 3% in the highest earning households (despite the fact that the highest earners spend far more on fuel in absolute terms).²⁷ Energy costs are largely outside the control of fuel poor households – given the scale of capital investment that would be required to reduce them. As a result, fuel poor households trade off warmth against other necessities, and typically under-heat their homes.
- **Health and well-being:** living at low temperatures as a result of fuel poverty contributes to a range of health conditions, as well as a wider range of problems of social isolation and poor outcomes for young people. Age UK has estimated that there is a cost to the NHS of £1.36bn per year from people

21 CSE (2014) *Research on fuel poverty: The Implications of meeting the fourth carbon budget*.

22 Policy Exchange (2012) Northern Lights; and Policy Exchange (2014) 'Poll shows large scale support for housebuilding to keep economy growing'; <http://www.policyexchange.org.uk/media-centre/press-releases/category/item/poll-shows-large-scale-support-for-housebuilding-to-keep-economy-growing>.

23 BBC News (2013) 'Ed Miliband: Labour would freeze energy prices'; 24th September 2013; <http://www.bbc.co.uk/news/uk-politics-24213366>

24 Rowena Mason (2014) 'Green scheme cuts will leave 400,000 homes without help to bring down bills' in the *Guardian*; 13th March 2014; <http://www.theguardian.com/environment/2014/mar/13/green-deal-eco-cuts-homes-insulation-energy-bills>

25 Fahmy, E (2011) *The definition and measurement of fuel poverty*.

26 Hills, J (2012) *Getting the Measure of Fuel Poverty*.

27 DECC (2014) *Annual Fuel Poverty Statistics Report*.

living in cold homes.²⁸ Cold housing can be a contributor to excess winter deaths – of which there are around 25,000 per year on average across England and Wales.²⁹

- **Carbon reduction:** Fuel poor households generally live in less efficient properties – the average EPC rating (Energy Performance Certificate) is a Band ‘E’ for fuel poor households, compared to a Band ‘D’ for non-fuel poor households. In addition, fuel poverty also acts as a barrier to the implementation of other policies to mitigate climate change, since those on low incomes are least able to afford any increase in prices that may result from them.

Structure of this report

The remainder of this report is set out as follows:

- **Chapter 2** outlines the government’s emerging Fuel Poverty Strategy – which has recently been consulted on – and the current package of measures to address fuel poverty. We outline possible improvements to the strategy and fuel poverty targets.
- **Chapter 3** discusses how to prioritise fuel poverty interventions – arguing the case for an approach focused on improving energy efficiency, as opposed to income or price support measures. Improving the UK’s housing stock is the most effective way to permanently reduce fuel poverty, whilst also realizing wider benefits in terms of health and reducing carbon emissions. This chapter also considers the targeting of fuel poverty interventions.
- **Chapter 4** looks at the cost of addressing fuel poverty, and how government interventions should be funded. Our analysis shows that the current policies fall well short of the required level of funding to hit the government’s 2030 fuel poverty target, but that the shortfall could easily be made up through improvements in the scope and targeting of fuel poverty and energy efficiency policies.
- **Chapter 5** considers some of the practical challenges in delivering fuel poverty policies and learnings from previous schemes.
- **Chapter 6** provides a summary of recommendations.

²⁸ Age UK (2014) *Reducing fuel poverty – a scourge for older people*.

²⁹ Analysis by National Energy Action; average number of ‘excess winter deaths’ over the 5-year period to 2013/14. There are a range of estimates of the contribution of fuel poverty to excess winter deaths. Research by the World Health Organisation suggests that 30%+ of excess winter deaths in Europe are linked to living in cold homes, whilst the Hills Review (2012) suggests that at least 10% of excess winter deaths in the UK can be linked to fuel poverty. The Marmot Review (2011) suggested that 21.5% of excess winter deaths are linked to cold homes.

2

The Current Approach to Fuel Poverty

The government is in the process of renewing its approach to fuel poverty. This chapter considers possible improvements to the emerging strategy, and outlines the current package of interventions.

The current fuel poverty strategy

The Warm Homes and Energy Conservation Act (WHECA) of 2000 established the concept of fuel poverty in British legislation. It defined the problem (see Box 1) and set a timetable for solving it. Written in response to the Act, the 2001 Fuel Poverty Strategy stated the intent to eliminate fuel poverty among vulnerable households by 2010, and in its entirety by 2016.³⁰ The 2010 target was missed; and the 2016 target will undoubtedly also be missed.

The Fuel Poverty Strategy is now being renewed. The main components of the old Fuel Poverty Strategy have been cast aside, with the Hills Review redefining how fuel poverty is measured (see Box 1). **Government recently consulted on a new Fuel Poverty Strategy for England**, and a new set of targets. The proposed headline target is ‘to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency standard of Band C, by 2030’.³¹ This high level target is accompanied by interim milestones for 2020 (‘as many fuel poor homes as reasonably practicable to level E’), and 2025 (‘as many fuel poor homes as reasonably practicable to level D’).

In our view the new Fuel Poverty Strategy is an improvement on the old one, but there is still scope for further refinement. We have assessed the strategy and new targets using a framework developed in the 2008 Policy Exchange report ‘Green Dreams’,³² which assessed the efficacy of 138 high level energy and environmental targets:

- **Ambiguous targets:** the way in which the target is worded (‘as is reasonably practicable’) makes it somewhat ambiguous. This undermines industry and consumer confidence in the government’s commitment to the target. The target is also open to some interpretation – for example it is possible for households to move in and out of fuel poverty, making it less clear who is being targeted. **Government should remove these ambiguities.**
- **Targets set far in advance:** by 2030 when the target is measured, at least 4 Parliaments (including the current one) will have sat. Responsibility for meeting the target could be split amongst many governments, each with

³⁰ Inter-Ministerial Group on Fuel Poverty (2001) *The UK Fuel Poverty Strategy*.

³¹ HM Government (2014) *Cutting the Cost of Keeping Warm*; p. 20.

³² Tara Singh and Thomas Sweetman (2008) *Green Dreams*; Policy Exchange.

their own view on the relative prioritisation of fuel poverty against other public policy challenges. **Commitment to the target should be strengthened by seeking cross-party support – potentially by establishing the fuel poverty target through primary rather than secondary legislation.**

The proposed new fuel poverty strategy includes ‘interim milestones’ to measure along the way, but they appear to defer the bulk of the activity well in to the 2020s. For example, the 2020 milestone implies moving about 320,000 homes from bands F and G, to band E; the 2025 milestone implies moving 1.3 million homes from E to D between 2020–2025 (including all of those previously upgraded to E); and then 2.2 million from D to C between 2025–2030 (again including all those previously upgraded to reach band D).³³ The biggest tranche of work in terms of numbers of homes, (and cost as we show in Chapter 4) is pushed far into the future. **Interim targets should be revised to bring forward rather than defer activity.**

- **Policy and financial commitment:** the consultation draft does not clearly state how the target should be achieved – it describes a process of preparing a new fuel poverty strategy, not the strategy itself. The strategy mentions current initiatives – such as ECO, the Green Deal, and the Warm Home Discount – but given that they are only committed to 2016 or 2017, they will only be the beginning of the policy response. They are also policies suffering from significant flaws as described in Chapter 3. More worryingly, the fuel poverty strategy ‘analytical annex’ shows that even with additional policy interventions the number of households in fuel poverty in England could increase to 2.5 million by 2027.³⁴ **The strategy needs to be developed further to identify how the target can be met through a range of current and future interventions.**

The consultation draft does not identify the cost of meeting the target or whether the government is willing to meet the required level of expenditure. Third party estimates by the Committee on Climate Change³⁵ suggest that upgrading the energy efficiency performance of all fuel poor homes in England to Band C would cost £18bn, or £1.2bn per annum to 2030. Current spending on energy efficiency in fuel poor homes in England is around £490 million per annum – suggesting a disconnect between government aspiration and currently funded schemes. **In Chapter 4 we show that this funding gap can be met simply by reprioritising existing fuel poverty and energy efficiency schemes.**

- **Responsibility and accountability:** Policy Exchange previously identified fuel poverty as a policy area suffering from cross departmental failure (for example in the 2008 ‘Green Dreams’ report). In theory this should not be problematic, but it remains so. The new fuel poverty strategy is being developed by the Department of Energy and Climate Change (DECC), and DECC also controls energy efficiency policy. However, many of the schemes which ostensibly tackle fuel poverty (such as the Winter Fuel Allowance and Cold Weather Payment) are overseen by the Department for Work and Pensions; the Department for Communities and Local Government leads on building regulations; and the NHS bears the brunt of health impacts. This already complex landscape is further complicated by the fact that fuel poverty is a devolved matter – with the Devolved Administrations operating a number of standalone schemes.

This has led some to call for greater leadership and responsibility on the issue across government. Energy and Climate Change Select Committee

³³ Based on estimates of fuel poverty by energy efficiency band from: DECC (2014) *2012 Fuel Poverty Detailed Tables*; 2014.

³⁴ DECC (2014) *Fuel Poverty: A Framework for Future Action – analytical annex*.

³⁵ CCC (2014) *Fuel Poverty Strategy Consultation Response and Annex*.

member John Robertson MP recently recommended creating a non-ministerial ‘fuel poverty champion’ working across DECC and DWP.³⁶ The draft Fuel Poverty Strategy suggests the creation of a new cross departmental group, to sit alongside the existing Fuel Poverty Advisory Group, together with an enhanced role for Ofgem and the Ofgem Sustainable Development Advisory group. **Government should simplify and clarify the fuel poverty landscape, strengthening the role of a lead minister to take accountability for the issue, coordinate across government departments and the Devolved Administrations, and report to parliament on a regular basis.**

Fuel poverty groups have also criticised the government’s level of ambition in respect of fuel poverty. Organisations such as the Association for the Conservation of Energy, Energy Bill Revolution, and the UK Green Building Council, have called for the government to bring forward the target date of moving to Band C from 2030 to 2025; and also to expand the target to cover all low income households, rather than just the current fuel poor.^{37 38} The government’s own Fuel Poverty Advisory Group also suggested the need to ‘strive to reach [the] target by an earlier date’.³⁹ The argument to expand the strategy beyond tackling the current fuel poor is that other low income households could fall into fuel poverty if their circumstances change negatively (known as ‘fuel poverty churn’). **In Chapter 4 we consider the cost and feasibility of increasing ambition or expanding the scope of the fuel poverty target.** We show that current spending is well below what is required even to achieve the government’s current target, and that increasing ambition as suggested above would cost an additional £500 million per year.

Recommendation 1: The government needs to refine its Fuel Poverty Strategy before it is finalised by:

- **Tightening up the proposed fuel poverty target to remove ambiguity.**
- **Strengthening cross-party commitment to the target – potentially by establishing the fuel poverty target through primary rather than secondary legislation.**
- **Revising interim milestones to bring forward activity.** At present the milestones appear to defer significant activity to the 2020s.
- **Producing a costed plan showing how the fuel poverty target can be achieved.** The incoming government in 2015 should prepare a plan covering the period to 2030 containing a revised package of measures and clear funding commitment. **In Chapter 4 we outline suggestions on how to bridge the identified funding gap.**
- **Creating a more joined-up response to fuel poverty across government.** Government should simplify and clarify the fuel poverty landscape, strengthening the role of a lead minister to take accountability for the issue, coordinate across government departments, and report to parliament on a regular basis.

36 <http://www.respublica.org.uk/item/How-do-you-Solve-a-Problem-like-Fuel-Poverty->

37 ACE (2014) *Cutting the cost of keeping warm – A new fuel poverty strategy for England: Consultation Response*.

38 Energy Bill Revolution / UKGBC (2014) *A Housing Stock Fit for the Future*; p. 3.

39 <http://www.businessgreen.com/bg/analysis/2356562/government-proposes-legal-target-for-tackling-fuel-poverty-but-critics-warn-of-loopholes>

The current package of measures to address fuel poverty

As explored in Chapter 1, fuel poverty can be explained in terms of household incomes, energy costs, and energy efficiency. Therefore to tackle fuel poverty, three approaches can be pursued:

1. Raising household incomes
2. Reducing costs of energy
3. Improving energy efficiency / reducing energy use

Measure	Timescale	2014/15 budget	Scope
<i>Current schemes</i>			
Winter Fuel Payment	2000 onwards	£2,076m	Raising Household Incomes: Non-means tested cash payment of between £100 – £300 per annum. Available to all pensioners over the age of 62 (including those living in other European countries). There is no requirement to spend the cash on energy bills. Funded through general taxation.
Cold Weather Payment	1988 onwards	£253m	Raising Household Incomes: Means tested cash payment. £25 paid for each 7 day period of sub-zero temperatures. Funded through general taxation.
Warm Home Discount	2011–16	£298m	Reducing Cost of Energy: Provides energy bill support (£140 per annum) to elderly and vulnerable households. Funded through a levy on consumer bills.
ECO (Energy Company Obligation)	2013–17	£859m	Reducing Energy Use: Energy efficiency scheme funded through a consumer levy and delivered by energy suppliers. It includes a Carbon Saving Obligation focused on installing insulation in solid wall and ‘hard to treat’ homes; a Carbon Saving Communities Obligation focused on deprived areas and rural areas; and an Affordable Warmth Obligation targeted at low income and vulnerable households.
Green Deal	2013 onwards	£166m ⁴¹	Reducing Energy Use: Energy efficiency scheme mainly aimed at ‘able to pay’ households. Provides loans paid back through an uplift on personal energy bills, on the basis of a commercial return. Also provides grants – made available on a periodic basis through the Green Deal Home Improvement Fund. The costs of administration and grants are funded through general taxation.
<i>Previous schemes</i>			
CERT (Carbon Emissions Reduction Target)	2008–12	n/a	Reducing Energy Use: Energy efficiency scheme delivered through an obligation on suppliers, and funded through a consumer levy. This was primarily a carbon reduction scheme, although there was some prioritisation of low income / vulnerable households. Largely focused on low cost measures such as insulation / lighting.
CESP (Community Energy Savings Programme)	2009–12	n/a	Reducing Energy Use: Energy efficiency scheme delivered through an obligation on suppliers, and funded through a consumer levy. Targeted at deprived areas. Combined fuel poverty and carbon targets. Focused on more costly measures such as solid wall insulation, boiler upgrades.
Warm Front	2000–13	n/a	Reducing Energy Use: Energy efficiency scheme targeted at low income pensioner households. Funded from general taxation.

40 Note that this is by no means an exhaustive list – there are many other schemes including those led by the Devolved Administrations and by individual Local Authorities.

41 The DECC Final Impact Assessment for the Green Deal identifies a cost of £1,660m over 10 years but is not explicit on the profiling of this cost. We have assumed the cost is spread evenly over time.

The current government approach does a bit of all three, as shown in the previous table, which identifies some of the main schemes⁴⁰ to address fuel poverty and domestic energy efficiency.

The interventions target a wide range of outcomes, including raising household incomes, reducing energy costs, reducing energy usage, reducing emissions, and reducing fuel poverty. They vary in the extent to which they are targeted on the fuel poor – with some being means tested or focused on lower income groups, and others open to all households. They also vary in terms of how they are funded – with some paid for out of general taxation, and others funded through levies on consumers.

This throws up some important questions about the approach to tackling fuel poverty, namely:

- Which is the most effective way to address fuel poverty – raising incomes, reducing energy costs, and improving efficiency?
- Is there a tension between addressing fuel poverty and reducing carbon?
- Are schemes sufficiently targeted on the fuel poor?
- What are the distributional impacts of the current schemes? Could they actually be exacerbating fuel poverty?
- What is the scale of the funding required, and how should this be raised?

The following chapters address these questions in turn, proposing principles to be adopted in the design of future fuel poverty policies, as well as implications for current policies.

3

How to Prioritise Fuel Poverty Interventions

The current approach to fuel poverty comprises a range of interventions designed to increase incomes and reduce bills of those on low incomes, and to improve energy efficiency. But which of these is the most effective in tackling fuel poverty? To what extent do these policies actually benefit the fuel poor? And is there a tension in the government’s approach to energy efficiency between addressing fuel poverty and decarbonisation?

Balancing fuel poverty with decarbonisation

Policy towards energy efficiency has combined efforts aimed at reducing fuel poverty and efforts aimed at reducing greenhouse gas emissions. The two are not the same, and indeed each can exacerbate, rather than help one another. Policies aimed at reducing emissions that do not target fuel poor homes create additional charges which, if paid for through levies on energy bills, will disproportionately hit poorer households (this is explored further in Chapter 4). Efforts to address fuel poverty can lead to increasing emissions as people able to more affordably heat their home choose to do so. Those people gain in quality of life, rather than in reduced consumption – a process referred to in the jargon as ‘comfort taking’ or a ‘rebound effect’ (see Box 2).

Box 2: Rebound and Comfort Taking

The rebound effect is a widely acknowledged phenomenon in energy and resource efficiency. It was first described by the economist William Stanley Jevons in 1865, who identified that the improving efficiency of steam engines had led to an increase in the consumption of coal – as coal became cheaper, and more and more applications of the technology were found. Applied to the case of domestic energy efficiency, ‘rebound’ describes a situation where improvements in thermal efficiency lead to homes being heated more, and improvements in the efficiency of devices sees them used for longer. In extreme cases, this can lead to what is known as ‘backfire’, when the increasing efficiency of a product causes it to be used so much more that the extra usage more than offsets the improvement in efficiency. The relevant question for policymakers is not whether the rebound effect exists, but how big it is and in which contexts large rebound effects will cause problems.

One of the areas where this is most significant is in the relationship between energy efficiency efforts aimed at reducing fuel poverty and those aimed at cutting carbon. Fuel poor homes are generally expected to witness higher rebound rates (after energy efficiency measures are fitted) than non-fuel poor homes. Because the fuel poor have limited ability to heat their homes to comfortable temperatures, their typical response to improved energy efficiency is to increase temperatures to a comfortable level, rather than taking the financial saving. The extent of this 'comfort taking' is open to wide debate, with estimates and assumptions varying widely. The closer to 100% the rebound effect is, the more efforts to tackle fuel poverty and efforts to reduce emissions will be in conflict with each other.

Government assessments of CESP (a policy targeting a higher proportion of fuel poor households) assumed a rate of 'comfort taking' of 40%, whereas the Green Deal and ECO assessment (policies aimed at a broader cross section of society) assumed a lower rebound rate of just 15%. It has also been suggested that rebound rates may tail off the more energy efficiency measures are installed. Overall it seems fair to say that the rebound effect is poorly understood, and that claims for carbon or cost savings resulting from energy efficiency measures should be considered against the risk that they can be eroded.

In an ideal world, it would be desirable to solve both the carbon emissions and fuel poverty elements of energy efficiency at the same time, but if resources are stretched then they may need to be prioritised. The current schemes have attempted to do a bit of both. Under ECO, CERT and CESP, the government set a high level target for carbon reductions, but also insisted that some proportion of

“It is possible to tackle decarbonisation and fuel poverty at the same time provided that efforts to improve energy efficiency are explicitly targeted at the fuel poor”

that goal was achieved in low income homes. The Green Deal seems to lean the other way – not only is it not targeted on the fuel poor, it creates barriers to uptake amongst the fuel poor for example through the cost of an initial assessment.

There is a good case to be made that addressing fuel poverty first helps you subsequently tackle the remaining emissions-related energy efficiency problem, in a way that doesn't occur if they were dealt with in the opposite order. In the landmark 2009 *Green Fiscal Commission* report, Prof. Paul Ekins makes a strong case for serious efforts to improve the energy efficiency of houses in or near to fuel poverty to avoid placing an unfair burden on the group of society least able to avoid or mitigate the costs of decarbonisation policies.⁴² In this way, improved energy efficiency performance in fuel poor households is a prerequisite for appropriate climate change-oriented policy, but the reverse is not true (Chapter 4 considers the question of who pays for fuel poverty interventions in more detail).

Looking at this from the perspective of decarbonisation, it is important to consider the extent to which carbon targets can be met whilst also addressing fuel poverty. The Committee on Climate Change (CCC, the government's advisory body on decarbonisation), recently produced an analysis on the fuel poverty impacts of measures required to achieve decarbonisation to 2030.⁴³ This showed that if required energy efficiency measures are randomly allocated to households, then

42 Ekins, P et al (2009) *The Case for Green Fiscal Reform*; p. 77.

43 CCC (2014) *Fuel Poverty Strategy Consultation Response and Annex*.

they could marginally increase the incidence of fuel poverty. However, if the same energy efficiency measures are targeted at fuel poor households, then the fuel poverty rate would be more than halved by 2030. In other words, **it is possible to tackle decarbonisation and fuel poverty at the same time provided that efforts to improve energy efficiency are explicitly targeted at the fuel poor.** Separate CCC analysis shows that assuming current policies are delivered, the UK is already on track to achieve the second and third carbon budgets (2013–2017 and 2018–2022), but is well behind the level of progress required to hit the fourth carbon budget (2022–2027).⁴⁴ **This perhaps suggests a strategy whereby energy efficiency policy is focused more on fuel poverty alleviation in the period to 2020, but then shifted back towards decarbonisation in the 2020s.**

“The government needs to allocate a greater share of energy efficiency funding towards addressing fuel poverty if the 2030 target is to be met”

The problem is that current and previous energy efficiency interventions have devoted the lion’s share of resources to the carbon saving part of the agenda, with only a relatively small budget going on energy efficiency measures in fuel poor households. The CESP scheme (which targeted deprived areas) had about a tenth of the budget of CERT (which was open to all households). The balance is somewhat improved under the new ECO and Green Deal schemes, but the funding currently available under ECO for fuel poor and vulnerable households is well short of what is required to tackle the problem and hit the government’s stated target (see Chapter 4). There appears to be a disconnect in fuel poverty policy between aspiration and funding commitments. The problem may be a political one – in that focusing grants solely on the fuel poor significantly reduces the pool of potential beneficiaries (who are also voters).

The government needs to allocate a greater share of energy efficiency funding towards addressing fuel poverty if the 2030 target is to be met.

What is the best approach to solving fuel poverty?

Above we set out the case for focusing energy efficiency interventions on fuel poverty (alongside decarbonisation). Here we make the additional and complementary case that there should be an increased focus of fuel poverty interventions on energy efficiency (as opposed to income or price support).

Some of the key measures intended to reduce fuel poverty are designed to increase incomes or to reduce energy bills – for example the **Winter Fuel Payment, Cold Weather Payment and Warm Home Discount**. There are a number of issues with such measures:

- **Firstly – they are expensive.** The combined cost of the Winter Fuel Payment, Cold Weather Payment, and Warm Homes Discount is estimated to be some £2.6 billion in 2014/15. It is revealing that this level of funding is far in excess of the identified £1bn fuel poverty gap – and yet fuel poverty persists due to poor design and targeting of these policies. As shown in Chapter 4, this level of funding would be sufficient to address fuel poverty permanently if only it was targeted at the right interventions.

44 CCC (2014) *Meeting Carbon Budgets – 2014 Progress Report to Parliament*.

- **Secondly – they are extremely short term.** Policy Exchange’s previous report *Cold Comfort*, commented that the Winter Fuel Payment ‘may lift some people above the fuel poverty this year but the same people face the likelihood of unaffordable fuel bills next winter and winters after that, and will reappear in the statistics.’ Analysis within the Hills Review shows that the Winter Fuel Payment does next to nothing to address the lifetime fuel poverty gap.⁴⁵
- **Thirdly – they are poorly targeted.** As explored further below, some schemes are better than others in terms of the extent to which they actually benefit fuel poor households. The Winter Fuel Payment is extremely poorly targeted – only 10% of the recipients are actually in fuel poverty (according to the new LIHC definition).
- **Fourthly – they are likely to increase carbon emissions.** As described in Box 2 above, simply giving cash to those in fuel poverty is likely to result in them spending more on energy in order to achieve more comfortable room temperatures. This is desirable from a health and wellbeing point of view, but offsets efforts elsewhere to reduce emissions. Again, the Hills Review provides evidence on this – an additional £500m spent on a rebate policy or increase in the Winter Fuel Payment would increase greenhouse gas emissions by 0.5MtCO₂.⁴⁶

The alternative approach is to **invest in improving the energy efficiency of fuel poor homes.** Energy efficiency is a key determinant of fuel poverty – with 60% of fuel poor households living in inefficient properties (with EPC ratings of ‘E’, ‘F’, or ‘G’). 35% of households in the most inefficient properties (EPC rating of ‘G’) are fuel poor, compared to just 2% of those in the most efficient homes (EPC rating of ‘A’, ‘B’, or ‘C’).

“Policies that improve thermal efficiency of the housing stock tend to be the most cost-effective. They have persisting benefits in reducing fuel poverty, reduce greenhouse gases, and have very substantial net societal benefits”

Investing in the energy efficiency of fuel poor homes can result in a permanent reduction in energy costs, leading to lasting reductions in fuel poverty and carbon emissions. It also offers a far more cost effective solution to fuel poverty than income or price support. The Hills Review assessed the impacts of energy efficiency policies, rebate policies, and benefits/payments – in terms of their cost-effectiveness, their

impact on fuel poverty, and carbon emissions. The review concludes that ‘policies that improve thermal efficiency of the housing stock tend to be the most cost-effective. They have persisting benefits in reducing fuel poverty, reduce greenhouse gases, and have very substantial net societal benefits.’⁴⁷

Beyond the direct economic impacts to the recipients, there are also strong macro-economic arguments for investing in energy efficiency. For example Cambridge Econometrics and Verco produced analysis looking at the macro-economic impacts of an ambitious energy efficiency programme to move all low income homes (i.e. not just fuel poor) to Band C by 2025, and other households by 2035. The economic benefits clearly outweigh the costs, as follows:

⁴⁵ Hills, J (2012) *Getting the Measure of Fuel Poverty*.

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

Box 3: Macro-economic impacts of an ambitious domestic energy efficiency programme:

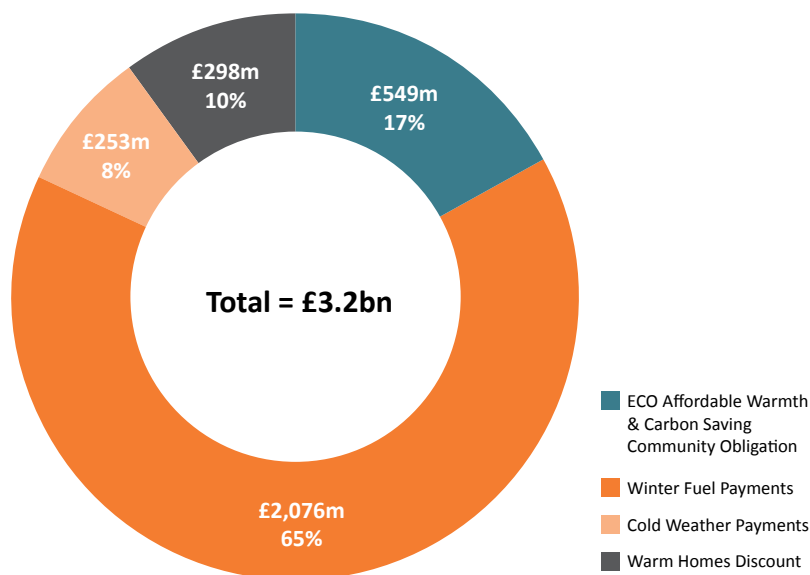
- Net benefits of £5bn per annum (from energy bill savings, after repayments)
- Increase in GDP of £3.20 for every £1 invested by government
- Over 100,000 additional jobs over the period 2020–30
- Greater fossil fuel efficiency, reducing imports of natural gas by a quarter in 2030
- Emissions reductions of 23.6MtCO₂ p.a. by 2030

Source: Cambridge Econometrics / Verco (2014) Building the Future: The economic and fiscal impacts of making homes energy efficient

Similarly, analysis by the International Energy Agency demonstrates that large scale energy efficiency programmes can lead to increases in GDP of up to 1.1% per year; can create significant employment (8–27 job years per €1million invested); and can have a benefit to cost ratio of 4:1.⁴⁸

On this basis, we should applaud the fact that the emerging fuel poverty strategy has set targets on the basis of energy efficiency improvements in fuel poor households. However, the current suite of government interventions is far from aligned to the delivery of this headline target. Analysis by Energy Bill Revolution shows that **only 17% of fuel poverty spending in 2014/15 is targeted at energy efficiency**, whilst there is a disproportionate emphasis on income support schemes such as the Winter Fuel Payment and Cold Weather Payment. The funding currently directed at energy efficiency in fuel poor households (through ECO) is simply insufficient compared to the level of funding required – as shown in Chapter 4.

Figure 5: Government spending on Fuel Poverty (2014/2015)



48 International Energy Agency (2014) *Capturing the multiple benefits of energy efficiency.*

We recommend that government rebalances fuel poverty spending towards energy efficiency, and away from income and price support schemes.

Targeting the fuel poor

Beyond the arguments above about the efficacy and suitability of fuel poverty interventions, it is also clear that the current package of measures is very poorly targeted at the fuel poor. The principle that fuel poverty measures should be targeted at the fuel poor seems obvious, but in practice has not been followed. Research by the Association for the Conservation of Energy suggests that **only 33% of the total budget nominally aimed at fuel poverty actually reaches the fuel poor.**⁴⁹ This in part reflects the notorious difficulty in characterising and identifying the fuel poor – as discussed in Chapter 1.

Many fuel poverty schemes have used proxies to target support on those likely to be in fuel poverty. For example, the Cold Weather Payment is limited to those of pensionable age in receipt of certain benefits, whilst the Warm Home Discount is limited to low income or vulnerable groups. Other schemes

“Only 10% of Winter Fuel Payment recipients fall into the new definition of fuel poverty”

have allocated a specific proportion of funds to particular priority groups. For example CERT allocated 40% of funds to a ‘priority group’ – although the definition of this group was broader than just fuel poor households, also

encompassing all over-70s and recipients of certain benefits.⁵⁰ Several fuel poverty campaign groups criticized this choice of priorities for inadequately improving conditions for the fuel poor.⁵¹ Government data shows that only 16% of households in the CERT priority group meet the current definition of fuel poverty.⁵² Under ECO the overall funding has been divided up – with the Carbon Saving Community Obligation targeting low income areas, the Affordable Warmth component targeting low income and vulnerable households, and the Carbon Emissions Reduction Obligation available to all households.

Using eligibility proxies has benefits in terms of simplicity, but depending on the criteria chosen, may or may not be effective in targeting the fuel poor. Probably the best example to date was the now defunct ‘Warm Front’ scheme – which targeted low income households in low efficiency dwellings. In this case 40% of households meeting the eligibility criteria would also meet the new definition of fuel poverty⁵³ – and the scheme was highlighted in the Hills Review as a highly effective approach to targeting fuel poverty.⁵⁴ One note of caution is that if criteria are defined too tightly, then this can lead to under-delivery, as in the case of Warm Front.

At the other extreme, the Winter Fuel Payment is not targeted on the fuel poor at all – it is available to all people over the age of 62, and is automatically paid to all state pension recipients. While the name suggests a link to energy costs, the payment is in cash and may be spent on whatever the recipient chooses (although analysis by the Institute of Fiscal Studies suggests that 41% of it is spent on fuel anyway).⁵⁵ There is no link to weather conditions nor heating costs, though the sums of money do vary depending on age and benefits status. As a measure to tackle fuel poverty it is extraordinarily poorly targeted – with **only 10% of Winter Fuel Payment recipients falling into the new definition of fuel**

49 ACE (2013) *Fact-file: Families and fuel poverty*.

50 House of Commons Library (2013) *Carbon Emissions Reduction Target (CERT)*.

51 Ibid.

52 DECC (2014) *Annual Fuel Poverty Statistics Report 2014*.

53 Ibid.

54 Hills, J (2012) *Getting the Measure of Fuel Poverty*.

55 Institute for Fiscal Studies (2011) *Cash by any other name? Evidence on labelling from the UK Winter Fuel Payment*.

poverty.⁵⁶ Its backers seem to support it on the basis of being a general increase to pensioners' incomes, rather than because of any effect on fuel poverty.⁵⁷ Overall – little has changed since Policy Exchange wrote in 2010 that 'if the government wants to boost the incomes of older people, it should do so transparently through the pensions or benefits system... if it wants to tackle fuel poverty it ought to target the resources more precisely. The Winter Fuel Payment should be seen for what it is: a universal income boost for all over 60s, not a credible part of the response to fuel poverty.'⁵⁸

Overall – it appears that some fuel poverty policies have been better targeted than others, but in general improvements could be made. **The Winter Fuel Payment appears to be a particularly ineffective way of targeting the fuel poor, whilst use the proxies can be effective provided they are designed appropriately (targeting low income, low efficiency homes).**

Recommendation 2: The government needs to reprioritise fuel poverty and energy efficiency programmes to place a far greater emphasis on energy efficiency improvement in fuel poor homes:

- **Energy efficiency schemes should dedicate a greater share of funding to fuel poor households (as opposed to 'able to pay' households), particularly in the period to 2020.** It is possible to meet the UK's 'carbon budgets' whilst simultaneously alleviating fuel poverty.
- **Interventions to tackle fuel poverty should place more emphasis on improving energy efficiency, not providing income or price support.** At present only 17% of fuel poverty funding goes on energy efficiency, with the rest spent on income and price support schemes which are largely ineffective in terms of long term fuel poverty reduction.
- **Targeting of fuel poverty interventions needs to be substantially improved. At present only 33% of fuel poverty funding actually benefits the fuel poor.** In general, fuel poverty programmes should be focused on 'low income, low efficiency' homes. We also support the use of Area Based Approaches to delivery (see further below).

⁵⁶ DECC (2013) *Fuel poverty – UK Advisory Forum on Ageing*.

⁵⁷ Andrew Brinkley and Simon Less (2010) *Cold Comfort*; Policy Exchange.

⁵⁸ Ibid.

4

Costing and Funding Fuel Poverty Policies

In the previous chapter we identified that the current suite of policies and measures is insufficiently focused on energy efficiency improvements in fuel poor homes, and poorly targeted. This section of the report examines how much it is likely to cost to meet the government’s aspirations to improve the energy efficiency of fuel poor homes, and the extent to which there is a funding gap. We argue that the current spending envelope is sufficient to address the problem, albeit that it should be refocused. We also consider the question of how fuel poverty policies should be funded.

How much will it cost?

The consultation on the Fuel Poverty Strategy provides little quantification of either the costs or the benefits of the proposed targets and milestones for tackling fuel poverty. However, estimates from third parties provide a clue as to the scale of investment the government is backing, as well as how that compares with the higher level of ambition advocated by fuel poverty campaign groups.

The Committee on Climate Change⁵⁹ has costed two trajectories, as summarized in the following table. This shows that meeting the proposed target (moving fuel poor households in England to Band ‘C’ by 2030) would cost **£18bn or £1.2bn per annum**. Moving the target date forward to 2025 (as suggested by fuel poverty campaign groups) would increase the cost to £1.6bn per annum.

Table 2: Cost of meeting the government’s fuel poverty target

Proposed targets (moving all fuel poor homes to EPC Band C by 2030)				
Year/EPC rating	2020/E	2025/D	2030/C	Cumulative total
Total costs (£bn)	£1.67	£5.10	£11.24	£18.01
Average annual cost (£bn)	£0.3	£1.0	£2.2	£1.2
Average cost per dwelling	£3,420	£3,290	£5,800	£4,530
‘Stretch’ target (moving all fuel poor homes to EPC Band C by 2025)				
Year/EPC	2020/D	2025/C	2030/B	Cumulative total
Total costs (£bn)	£6.83	£11.16	£6.47	£24.46
Average annual cost (£bn)	£1.4	£2.2	£1.3	£1.6
Average cost per dwelling	£3,950	£5,760	£5,300	£5,010

Source: Committee on Climate Change

59 CCC (2014) *Fuel Poverty Strategy Consultation Response and Annex*. Note that these figures exclude any efforts directed at energy efficiency in non-fuel poor households.

Separately, Verco has estimated that upgrading all 4.7 million **low income homes** (i.e. not only fuel poor homes) in England to Band ‘C’ would cost around £26 billion, implying a cost of around **£1.7bn p.a. if met by 2030**, or up to £2.6bn p.a. if achieved by 2025. However, as we show below, even with the changes we propose to fuel poverty policies it may be difficult to achieve this level of spending.

Timing plays a big role – the longer you give yourself to lift the same number of people out of fuel poverty the less you need to spend each year. But the consequence of doing it more slowly is that the problem persists for longer, with all its knock-on outcomes including lower living standards, higher health costs and higher greenhouse gas emissions. One revealing aspect of the CCC analysis is that it confirms the hypothesis that the proposed trajectory (as per the target and interim milestones) defers significant activity to the late 2020s. Moving all fuel poor homes to EPC Band E is relatively cheap (total investment of £1.7bn) whilst the incremental cost of moving to Band D rises to £5.1bn, and a further £11.2bn to achieve Band C. **Improvements in energy efficiency need not be deferred in this way, since as we show below there is the prospect to increase investment in energy efficiency in fuel poor households beyond current levels. The interim fuel poverty milestones need to be revised in order to bring forward, not defer activity.**

How big is the funding gap? And how can it be filled?

As described in Chapter 3, the only funding currently allocated to energy efficiency in fuel poor households comprises the ECO Affordable Warmth and Carbon Saving Community Obligations – which for the 2015–17 period have an annual budget of £570m across Great Britain. We estimate that around £490m of this relates to England (based on the number of households in England as a proportion of GB). In other words – the **current package of measures provides less than half of the annual budget required to meet the government’s proposed fuel poverty target for England (£1.2bn p.a.)**.

There are a number of ways in which this funding gap could be filled, which are discussed in turn:

1. Increase the total envelope of spending.
2. Allocate a greater proportion of current ECO funding to fuel poor households.
3. Reallocate funding from income and price support schemes into energy efficiency.
4. Invest Infrastructure Capital in domestic energy efficiency.

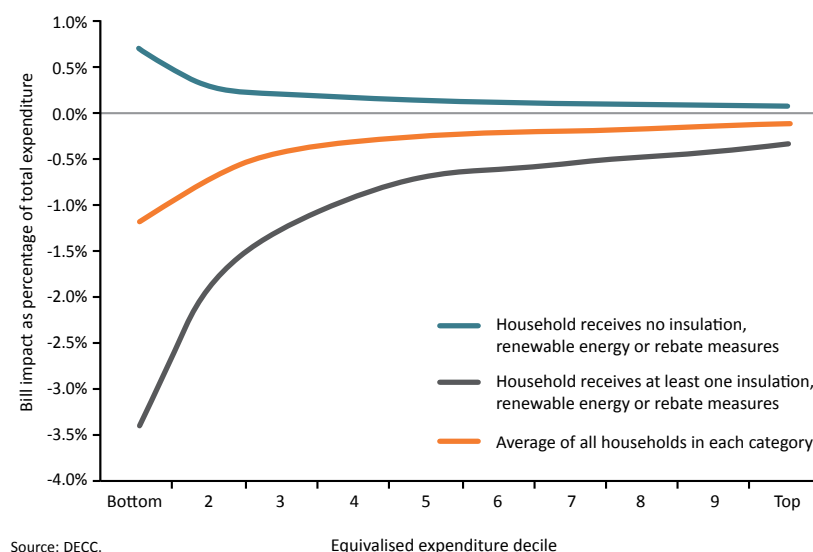
Increasing overall funding?

Despite the economic case for increasing public levels of spending on energy efficiency (see Box 3), it is difficult to see how the overall level of funding could be further increased. As described in Chapter 2, current fuel poverty measures are funded through a mix of exchequer funding (£2.3bn) and consumer levies (£0.9bn). The prospect to increase the overall taxpayer burden is low given the economic climate (with the recession having dampened taxation receipts), the scale of the current budget deficit, and the target to balance the budget by 2018.

Equally – it is difficult to see how consumer levies could be increased beyond current plans, given the competitiveness concerns and consumer bill impacts. Consumer levies are already used to fund fuel policy schemes, as well as subsidies for low carbon generation (which are set to rise substantially over the coming years, from £4.3bn in 2014/15 to £7.6bn in 2020/21).⁶⁰

Levy-funding is a particularly regressive form of funding – since lower income households spend a much higher proportion of their income on energy than higher income households. The added difficulty with levy-funded energy efficiency programmes is that some households win and others lose. On average such policies can lower bills, but this is the average effect of some households receiving measures and savings, and a larger number of households who end up paying for the programmes.⁶¹ This effect is most marked among the poorest deciles (Figure 6). Unless levy funded policies target the poorest households they potentially suffer the most.

Figure 6: The effect of receiving an insulation or renewable energy measure or a rebate on the impact of policies on household energy bills as a percentage of expenditure in 2020 – across expenditure deciles.



In this context it is difficult to see how an increase in spending on fuel poverty could be funded through additional consumer levies. Conversely, in early 2014 the government took a step in the opposite direction – reducing commitments under ECO in order to reduce consumer bills by £30–35.

Overall it seems that there is little prospect of increasing the overall budget targeted at fuel poverty. However, given the points made in the preceding sections, it is mainly the targeting not the scale of public investment which needs to change.

60 National Audit Office (2013) *The Levy Control Framework*.

61 See also Simon Less (2012) *The Full Cost to Households of Renewable Energy Policies*; Policy Exchange.

Re-orientating ECO

Within the current energy efficiency policy package, the Energy Company Obligation (ECO) has already been extended until 2017.⁶² Government took action in early 2014 to reduce the overall cost of ECO – with the total annual budget now standing at £940m in 2015/16 and 2016/17.⁶³ Under current plans, only £570m of this budget is targeted at fuel poor households – with the remainder available to all households under the Carbon Emissions Reduction Obligation. As described above and in Chapter 3, there is a strong case to re-orientate this funding towards fuel poor households. **We recommend that the totality of ECO funding is directed at fuel poor households. This would result in an immediate increase in spending on energy efficiency in fuel poor homes of £375 million across Great Britain (of which we estimate £320m relates to England based on the share of households).** This proposal has already been included within the Labour’s proposed plans for energy efficiency.⁶⁴ However, on its own this does not entirely bridge the funding gap required to hitting the government’s proposed fuel poverty target – hence we have explored additional ways in which further funding could be increased.

Increasing focus of fuel poverty spending on energy efficiency

At present the vast majority of fuel poverty spending goes on income support and bill rebate schemes such as the Winter Fuel Payment, Cold Weather Payment and Warm Homes Discount – making up £2.6bn of the £3.2bn overall expenditure. As shown in Chapter 3, these schemes are poorly targeted on the fuel poor and are largely ineffective in addressing long term fuel poverty.

If all of this funding was redirected at energy efficiency in fuel poor homes then this would be more than sufficient to meet even the most aspirational fuel poverty reduction targets. However, this would leave a hole in the incomes of the current recipients that would need to be made up by other means (e.g. an increase in the state pension), meaning the amount of money that could feasibly be committed from this budget would be somewhat less than the whole amount. However, we have identified some incremental options which could still release significant sums for reinvestment in energy efficiency:

- George Osborne has proposed making the Winter Fuel Payment subject to a ‘temperature test’, such that pensioners living abroad in warmer countries are excluded. The savings would be modest since Winter Fuel Payments to pensioners living abroad were just **£13m** in 2012.⁶⁵
- The Winter Fuel Payment could be means-tested, resulting in savings of around **£100 million per annum**. This option has been proposed by Ed Balls if there is a Labour government after the next General Election.
- A further, more substantial, option would be to make the Winter Fuel Payment an ‘opt-in’ policy. Eligibility criteria would remain unchanged, but recipients

“At present the vast majority of fuel poverty spending goes on income support and bill rebate schemes such as the Winter Fuel Payment, Cold Weather Payment and Warm Homes Discount”

⁶² DECC (2014) *The Future of the Energy Company Obligation*.

⁶³ Ibid.

⁶⁴ One Nation Labour (2014) *An end to cold homes: One Nation Labour’s plans for energy efficiency*.

would simply have to apply each year to continue to receive the benefit (e.g. online or through the Post Office). This approach is not uncommon amongst other welfare payments. Government would need to communicate this change effectively in order to ensure that vulnerable pensioners are aware of the change and continue to receive the payment.

Analysis by Policy Exchange suggests that this could result in **savings of around £400 million per annum. This assumes take-up of around 76% – which we have benchmarked against the take-up of similar ‘opt in’ schemes such as Pension Credits. We assume that Pension Credit recipients would automatically take up with Winter Fuel Payment at the same time, but apply 76% take-up to all remaining Winter Fuel Payment recipients.**

An added advantage of the proposed changes to the Winter Fuel Payment is that the ‘opt-in’ process could also be used as a **mechanism to gather information to help identify the fuel poor** – for example asking potential recipients for details of their energy spend and energy efficiency measures already implemented in their homes. As shown in Chapter 5, data availability has been a barrier to the implementation of energy efficiency and fuel poverty schemes – and this could be a route to addressing this.

Overall it appears that **there is the potential to reduce the budget of the Winter Fuel Payment by over £500 million per annum, and reallocate this funding to energy efficiency measures for fuel poor households. Around £450 million of this headline saving relates to England (based on the breakdown of WFP expenditure across the UK).**

Infrastructure investment

Another potential source of funding for household energy efficiency is public and private infrastructure investment. Historically, houses have not been considered part of ‘infrastructure’, at least in the way it is supported by government investment. The government’s recently updated National Infrastructure Plan⁶⁶ identifies a total infrastructure pipeline of £466bn – which comprises both private and public investment (included in this total is £100bn of committed public capital over the next parliament).⁶⁷ The National Infrastructure Plan says relatively little about domestic energy efficiency, and nothing about fuel poverty. The energy infrastructure priorities listed are generally large scale projects such as nuclear, offshore wind, and gas power generation; transmission and distribution upgrades; oil and gas production; and the Smart Meter programme. Energy efficiency is not included in the ‘Top 40 Infrastructure Priorities’ despite the fact that the total capital expenditure (£18bn for fuel poor households alone) is significantly larger than many of the schemes listed (several of which are below £1bn).⁶⁸

However, energy efficiency (and specifically domestic energy efficiency in fuel poor households) could be seen as an attractive infrastructure investment proposition. It meets several of the requirements listed by the Treasury that are taking into account when considering infrastructure investments:⁶⁹

⁶⁵ <http://www.theguardian.com/politics/2013/jun/26/osborne-winter-fuel-payment-test>

⁶⁶ HM Treasury (2014) *National Infrastructure Plan 2014*.

⁶⁷ HM Treasury (2013) *Investing in Britain’s Future*.

⁶⁸ HM Treasury (2014) *National Infrastructure Plan 2014: Top 40 Update*.

⁶⁹ HM Treasury (2011) *Valuing Infrastructure Spend*; pp. 9–10.

- **Macro-economic benefits:** As shown in Box 3, investment in energy efficiency can lead to a range of positive economic effects (short term and long term) such as an increase in GDP, job creation, and reduced fossil fuel imports.
- **Resilience against economic shocks:** More efficient resource usage increases resilience against network failure, whether caused by deliberate acts of sabotage or natural disasters such as extreme weather. Improving the energy efficiency of households will provide a greater capability to absorb disruptive supply shocks.
- **Environmental impacts:** By reducing the amount of energy – especially fossil fuels – needed to heat homes, energy efficiency can reduce both greenhouse gas emissions and the extent of pollutants that cause health problems.
- **Linked network impacts:** Improving energy efficiency may reduce the demands on transmission and supply infrastructure further up the energy supply chain. Improvements which reduce electricity demand can reduce the need for generation capacity; improvements which affect heating can reduce the demands on gas supply and storage. Energy efficiency could also reduce costs to other ‘networks’ such as the NHS
- **Increasing labour market participation:** A decline in cold-related ill health could boost labour market participation. While much of this will come from homes with residents who are either too old or too unwell to work, there may be some proportion of people who could return to work if their health improved.
- **Regional and local impacts:** Fuel poverty tends to be concentrated in pockets of deprivation. A policy focused on improving household energy efficiency in deprived areas should improve economic prospects in those locations. As energy efficiency installations tend to be relatively labour intensive, they can also drive up employment opportunities in more deprived areas.

On this basis, domestic energy efficiency could be quite compelling as an infrastructure investment. It may be that opinions are already changing: Lord Deighton (the Commercial Secretary to the Treasury) recently said that he is ‘extremely attracted’ to the idea of improving homes’ energy performance as an infrastructure priority.⁷⁰

Government should consider (domestic) energy efficiency as a ‘Top 40’ national infrastructure priority, utilising some of the £100bn of public infrastructure expenditure over the course of the next parliament to boost spending in this area.

Chapter summary

The proposed fuel poverty target to improve the energy efficiency of fuel poor homes in England to Band C by 2030 would require an annual investment of £1.2bn – well above the current level of investment. It is unlikely that the overall expenditure on fuel poverty measures could be increased (whether taxpayer or bill-payer funded). However, we have identified several ways in which existing funding could be re-orientated towards investment in energy efficiency in fuel poor homes to bridge the identified funding gap:

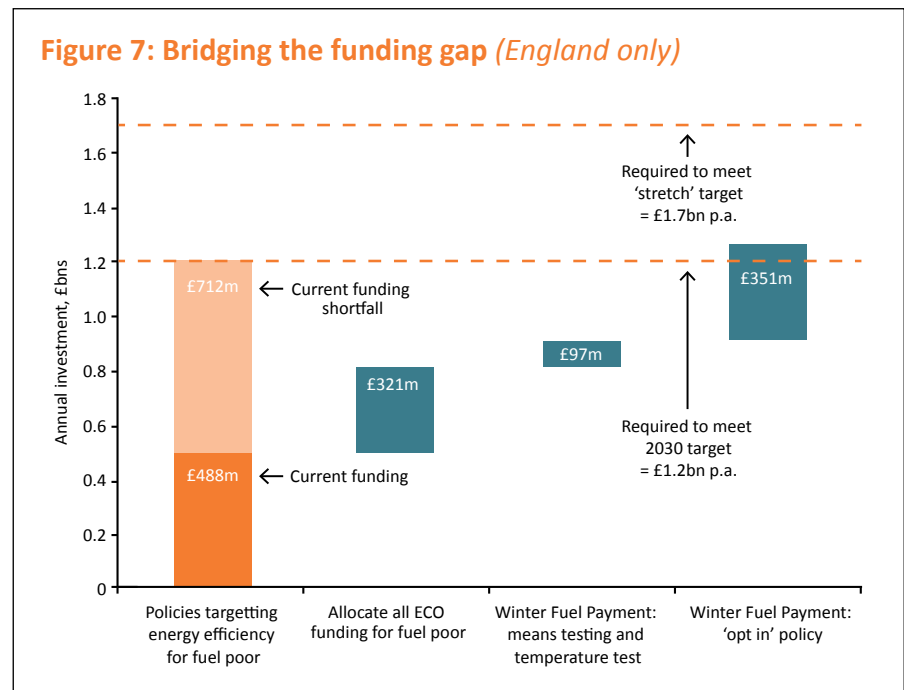
⁷⁰ Lord Deighton; ‘Remarks to the Government Construction Summit’; 1st July 2014, reported by UK Green Building Council; <http://www.ukgbc.org/news/lord-deighton-%E2%80%98extremely-attracted%E2%80%99-energy-efficiency-infrastructure-priority>

Recommendation 3: There is a disconnect between government aspirations and funding available to invest in energy efficiency in fuel poor homes. Government should reallocate funding to bridge the identified funding gap by:

- **Refocusing the Energy Company Obligation just on fuel poor households.** This would result in an additional £375 million per annum (£320m of which in England) available for energy efficiency investment in fuel poor homes above the status quo.
- **Redefining the Winter Fuel Payment, and reallocating the savings into energy efficiency programmes targeting the fuel poor (to augment or sit alongside ECO).** Making the Winter Fuel Payment an ‘opt in’ policy and limiting eligibility through means testing and a ‘temperature test’ could save over £500m p.a. (of which £450m relates to England).
- **Considering energy efficiency as a ‘Top 40’ national infrastructure priority, allocating some of the £100bn public infrastructure spend over the next parliament to domestic energy efficiency.**

Reforms to ECO and the Winter Fuel Payment would create an overall budget of just over £1.2bn – which would be sufficient to achieve the government’s proposed 2030 fuel poverty target for England. In addition, allocating infrastructure capital to domestic energy efficiency would make it possible to increase ambition (i.e. expanding the target to cover other low income homes and/or bringing the target date forward from 2030 to 2025), albeit that this would need to be balanced against other competing infrastructure priorities. These changes also make it possible to strengthen the interim milestones for 2020 and 2025 in order to bring forward activity, rather than defer activity until the 2020s.

Figure 7: Bridging the funding gap (England only)



5

Implementation and Delivery

Fuel poverty is a complex policy area, and the implementation and delivery of policies to date has been challenging. This section briefly considers some of the learnings from current and previous schemes and how these can be taken forward.

Incremental versus whole house approaches

One of the key questions in the implementation of fuel poverty policies targeting energy efficiency has been whether to pursue low cost measures in a large number of homes, or more substantial interventions ('whole house retrofits') in a smaller number of homes. Some low cost measures such as loft insulation offer extremely good value for money (in terms of £s per tonne CO₂ saved), and also mean that a large number of households can benefit for a fixed budget. Conversely it is argued that carrying out more extensive retrofits involving multiple interventions per home leads to economies of scale, and less disruption (compared to multiple interventions in the same house over a period). Another potential downside of the 'incremental' approach is that it may be insufficient to lift households out of fuel poverty due to the modest savings made, which may be offset due to comfort taking.

Previous schemes have combined a mix of extensive retrofits and small scale measures. The Carbon Emissions Reduction Target scheme (CERT, 2008–2012) focused mainly on low cost measures such as insulation and lighting – which made up 84% of the scheme's total carbon savings. 3.9 million homes received professionally fitted loft insulation, and 2.6 million got cavity wall insulation.⁷¹ Suppliers could count carbon savings from giving energy efficient lightbulbs to households without any way of verifying that they had been installed, although this method of complying with CERT was dropped in the later years that the policy was in effect. CERT came under criticism for its reliance on individual households applying to receive efficiency measures – which led to a fragmented approach, potentially missing out on efficiencies that could have been gained by engaging in more extensive retrofits. Overall the scheme cost about £3.9 billion – implying an average cost of just over **£13** per tonne CO₂ saved.⁷² The Community Energy Saving Programme (CESP, 2009–2012) had a greater focus on cost-intensive measures. Under CESP, companies received a 'bonus' credit if they installed two or more measures in the same home (such as replacing a boiler and fitting insulation). It led to around 300,000 individual measures being installed in around 150,000 homes,⁷³ with 60% of the homes treated receiving at least 2 measures during their renovation.⁷⁴ CESP funded more cost-intensive measures than CERT, with solid wall insulation being the most common installed measure,

71 House of Commons Library (2013) *Carbon Emissions Reduction Target (CERT)*.

72 Lord Marland, responding to a question by Lord Vinson; Hansard; 25th October 2011; <http://www.publications.parliament.uk/pa/ld201011/ldhansrd/text/111025w0001.htm#11102553000331>

73 House of Commons Library (2013) *Community Energy Saving Programme (CESP)*.

74 Ofgem (2013) *The Final Report of the Community Energy Saving Programme (CESP) 2009–2012*; p. 14.

followed by improved heating controls and replacement of the most inefficient (G-rated) boilers. Use of cavity-wall insulation and loft insulation was restricted under CESP to steer companies towards more intensive measures. CESP cost £350 million in total, at an average cost of £21 per tonne CO₂ saved.

The ECO scheme combines lower cost and higher cost measures. The Affordable Warmth Obligation and Carbon Saving Community Obligation focus on lower cost measures and push suppliers towards a ‘least cost’ approach to delivery; whilst the Carbon Emissions Reduction Obligation specifically targets more expensive measures in solid wall and hard to treat properties. In the recent government review of ECO, one of the ways in which DECC reduced the cost of the scheme was to expand the list of eligible measures under CERO, making it less stringent.

The draft Fuel Poverty Strategy seems to imply an incremental approach whereby households receive multiple interventions over a period (e.g. moving fuel poor households to Band E by 2020, then Band D by 2025, then Band C by 2030). However, independent analysis⁷⁵ suggests that moving fuel poor homes straight to Band C is a more cost effective strategy than moving to Band D and then coming back to finish the job – in terms of the return on investment and the impact on fuel poverty.

	Moving to Band D (by 2020)	Moving to Band C (by 2025)
Average cost to improve each home that can reach target Band for less than £10,000	£3,120	£4,750
Annual bill saving once implemented	£153	£273
Annual Saving as a proportion of cost	3.8%	5.1%
Aggregate Fuel poverty gap in target year (£955m in 2015)	£657m	£574m

Recommendation

We recommend that schemes targeting energy efficiency improvement in fuel poor homes should allocate the majority of resources to whole house retrofits targeting the achievement of a ‘Band C’ EPC rating. This approach is more cost effective and has a much greater impact on fuel poverty than a strategy of incremental improvements.

Identifying the fuel poor

A significant barrier to the effective operation of recent fuel poverty-oriented energy efficiency policy has been the burden of identifying just who is fuel poor. Under both the previous CERT system and the current ECO system, the energy companies tasked with tackling fuel poverty have to find for themselves which households qualify for measures. The cost of finding eligible customers has run to £100+ per eligible household. What makes this particularly wasteful is that some of the relevant information is already held by government, but cannot be shared due to data protection concerns. DWP holds data on incomes and recipients of

75 Association for the Conservation of Energy & Energy Bill Revolution (2014) *Who to target and Depth of Retrofits*.

benefits; DCLG holds data on EPC certificates; and DECC has detailed information on gas connections and household energy demand estimates.

Exceptions exist in law for certain types of data under certain circumstances to be released. Reforms to the pension system in 2008 enabled the sharing of pension credit data, giving information on a part of the wider fuel poor group. And a 2010 pilot allowed for data sharing when a clear and direct benefit – in that case an £80 cash rebate – was provided to the relevant consumers. But an energy efficiency programme where householders may reject the offer of energy efficiency measures and are thus not *guaranteed* to benefit, fails the Information Commissioner’s Office criteria on when government data may be shared. As a result, money is spent on administrative costs and less reaches the target housing stock.⁷⁶

Organisations including the Fuel Poverty Advisory Group have backed changes to the law that would allow for wider use of data matching powers to support energy efficiency schemes.⁷⁷

Recommendation

Government should make additional data available in order to improve targeting of fuel poor households and reduce administrative overheads. In addition, if the Winter Fuel Payment becomes an ‘opt-in’ scheme, then it could be used as a mechanism to gather additional data to identify the fuel poor.

Area-based approaches

Another possible solution to the issue of identifying the fuel poor is the use of so-called ‘area-based approaches’ (ABAs). These involve focusing resources on specific areas known to have high incidences of fuel poverty. Those areas could range in size from a single street to several local authorities, depending on the scale of the programme. Customarily, they operate in a proactive way, seeking to knock on every door and identify opportunities for energy or bill savings in the target area, as opposed to depending on fuel poor households self-identifying and registering for help.

It has been claimed that Area Based Approaches are ‘much more effective’ than other methods of encouraging energy efficiency,⁷⁸ however in practice their success rate to date has been a little more mixed. They have not always proved cheaper or raised uptake compared with traditional approaches, but they are improving all the time as lessons from field trials and pilots are learnt. A study of ABA pilot schemes⁷⁹ identified the steps they need to take to ensure they live up to their potential:

- The development of a local strategic and integrated approach to fuel poverty reduction.
- Access to sufficient resources for hard and soft measures to have a significant impact on the problem (i.e. free measures for all fuel poor households).
- Evidence of clustered concentrations of fuel poverty within a locality that can benefit from Zones’ high impact approach. We estimate that a minimum of 10–12% fuel poverty concentration is required. These are more likely to be urban in nature, although Warm Zones covering rural areas can be viable if there are substantial ‘pockets’ of concentrated fuel poverty.

⁷⁶ Peter Broad (2013) *Data Matching*; Consumer Futures.

⁷⁷ Fuel Poverty Advisory Group (2012) *Tenth Annual Report 2012*; p. 4.

⁷⁸ Energy Saving Trust (2011) *Area Based Approach Best Practice Guide*.

⁷⁹ William Baker (2005) *Warm Zones External Evaluation*.

- The demonstration of need in both the social and private housing sectors. There may be circumstances in which the Zone approach is not required in the social sector. However, Zones should still play a role in synchronizing and monitoring activity in the two sectors, e.g. address local contractor capacity issues.

Some of the zones studied in the pilot failed on one or several of these requirements, meaning they ended up being no more cost-effective than the benchmark alternatives they were assessed against. On the other hand, a programme in Stockton exhibited significant potential to make savings and increase uptake using ABAs.⁸⁰ With well-designed ABAs, the study concluded, authorities could expect a 20–30% reduction in fuel poverty over existing policy programmes of the time.

Targeting money for alleviating fuel poverty at ABAs in areas known to have the highest incidences of fuel poverty, if the above criteria are followed, offers the potential to deliver better ‘bang for the buck’ than some of the previous scattergun approaches. This approach is being followed under the ECO Carbon Saving Community Obligation (CSCO) but not the Affordable Warmth and Carbon Emissions Reduction components of ECO.

“Area Based Approaches have been shown to be an effective way of targeting the fuel poor”

This leaves the question of how these areas should be defined. Analysis by the Centre for Sustainable Energy⁸¹ suggests that ‘targeting based on the Index of Multiple Deprivation Income Domain offers one approach to identifying areas with a high proportion of households

in receipt of benefits (therefore likely to be some of the poorest and most deprived areas).’ Separately, DECC has produced analysis of different types of intervention in different locations – which shows that interventions in off gas grid areas are by far the most cost effective in moving fuel poor households to an EPC rating of ‘D’ or better.⁸² However there is a risk that areas are defined too tightly – the consultation on the Future of ECO⁸³ noted that the Carbon Saving Community Obligation had been defined too tightly, leading to under-delivery (it was subsequently broadened).

Recommendation

Area Based Approaches have been shown to be an effective way of targeting the fuel poor. Further research is required to identify suitable area based definitions – focusing on a mix of deprived urban and rural areas.

Increasing NHS involvement

The NHS bears the brunt of the health impacts of fuel poverty, as identified in Chapter 1. The NHS has recognised the health risks associated with living in cold homes, and is considering how to respond – NICE (the National Institute for Health and Care Excellence) recently consulted on draft guidance on the matter.⁸⁴ The guidance includes a range of recommendations such as: considering the consequences of living in cold homes in NHS strategic planning; health and

⁸⁰ William Baker (2005) *Warm Zones External Evaluation*.

⁸¹ CSE (2014) *Research on fuel poverty: The Implications of meeting the fourth carbon budget*.

⁸² DECC (2014) *Fuel Poverty: a Framework for Future Action – Analytical Annex*.

⁸³ DECC (2014) *The future of the Energy Company Obligation: Government response*.

⁸⁴ NICE (2013) *Public Health Draft Guideline: Excess winter deaths and morbidity and the health risks associated with cold homes*.

social care providers identifying those at risk and assessing their heating needs; providing support services to those at risk; and ensuring vulnerable hospital patients are not discharged to a cold home. It is argued that health and social care providers are potentially better placed than energy companies to address these challenges.

Separately, in a trial scheme carried out by Gentoo (a social housing provider), energy efficiency improvements were provided to people suffering from cold related illnesses. The measures cost £5,000 per home and were funded by the local clinical commissioning group. The study found that the energy efficiency improvements led to a reduction in visits to GPs and to hospital, as well as a reduction in energy bills of £30 per month and improvements in quality of life. Professor David Ballard, Vice Chair of the Royal College of GPs commented on the scheme that ‘Prescribing energy efficiency looks like a really, really cost-effective thing to do.’⁸⁵

The Centre for Sustainable Energy (a charity which has advised the government on fuel poverty) has made a further suggestion to allow health professionals to ‘prescribe’ energy efficiency measures to those affected by cold-related illnesses or disabilities made worse by living in cold homes.⁸⁶ In this model the measures would be provided through referrals to mainstream schemes such as ECO, rather than being funded by the NHS. It is already possible to make third party referrals to an ECO provider, but the process is quite clunky, as eligibility needs to be verified by a third party and there is no guarantee of support. The CSE proposal would be to place health professionals at the heart of the eligibility decision-making process, improving the chances of success. This proposal could be further enhanced if support is guaranteed for those deemed eligible.

“Prescribing energy efficiency looks like a really, really cost effective thing to do”

Recommendation

Health and social care providers could have a clearer role in ‘prescribing’ energy efficiency measures through referrals to schemes such as ECO. DECC should work with the Department of Health, the NHS, and relevant professional bodies to refine guidance and the process of referral.

⁸⁵ <http://www.theguardian.com/environment/2014/dec/09/boiler-on-prescription-scheme-transforms-lives-saves-nhs-money>

⁸⁶ CSE (2014) Energise Newsletter: Autumn 2014; http://www.cse.org.uk/downloads/file/energise_autumn_2014.pdf

6

Summary of Recommendations

1. The government needs to refine its Fuel Poverty Strategy by:

- **Tightening up the proposed fuel poverty target to remove ambiguity.**
- **Strengthening cross-party commitment to the target – potentially by establishing the fuel poverty target through primary rather than secondary legislation.**
- **Revising interim milestones to bring forward activity.** At present the milestones appear to defer significant activity to the 2020s.
- **Producing a costed plan showing how the fuel poverty target can be achieved.** The incoming government in 2015 should prepare a plan covering the period to 2030 containing a revised package of measures and clear funding commitment.
- **Creating a more joined-up response to fuel poverty across government.** Government should simplify and clarify the fuel poverty landscape, strengthening the role of a lead minister to take accountability for the issue, coordinate across government departments and the Devolved Administrations, and report to parliament on a regular basis.

2. The government needs to reprioritise fuel poverty and energy efficiency programmes to place a far greater emphasis on energy efficiency improvement in fuel poor homes:

- **Energy efficiency schemes should dedicate a greater share of funding to fuel poor households (as opposed to ‘able to pay’ households), particularly in the period to 2020.** It is possible to meet the UK’s ‘carbon budgets’ whilst simultaneously alleviating fuel poverty.
- **Interventions to tackle fuel poverty should place more emphasis on improving energy efficiency, not providing income or price support.** At present only 17% of fuel poverty funding goes on energy efficiency, with the rest spent on income and price support schemes which are largely ineffective in terms of long term fuel poverty reduction.
- **Targeting of fuel poverty interventions needs to be substantially improved.** At present only 33% of fuel poverty funding actually benefits the fuel poor.

In general, fuel poverty programmes should be focused on ‘low income, low efficiency’ homes. We also support the use of Area Based Approaches to delivery (see further below).

3. There is a disconnect between government aspirations and funding available to invest in energy efficiency in fuel poor homes. Government should reallocate funding to bridge the identified funding gap by:

- **Refocusing the Energy Company Obligation just on fuel poor households.** This would result in an additional £375 million per annum (£320m of which in England) available for energy efficiency investment in fuel poor homes above the status quo.
- **Redefining the Winter Fuel Payment, and reallocating the savings into energy efficiency programmes targeting the fuel poor (to augment or sit alongside ECO).** Making the Winter Fuel Payment an ‘opt in’ policy and limiting eligibility through means testing and a ‘temperature test’ could save over £500m p.a. (of which £450m relates to England).
- **Considering energy efficiency as a ‘Top 40’ national infrastructure priority, allocating some of the £100bn public infrastructure spend over the next parliament to domestic energy efficiency.**

4. Government and industry need to improve the implementation and delivery of fuel poverty interventions, based on learnings from previous schemes:

- **Schemes targeting energy efficiency improvement in fuel poor homes should allocate the majority of resources to whole house retrofits targeting the achievement of a ‘Band C’ EPC rating.** This approach is more cost effective and has a much greater impact on fuel poverty than a strategy of incremental improvements.
- **Government should make additional data available in order to improve targeting of fuel poor households and reduce administrative overheads.** In addition, if the Winter Fuel Payment becomes an ‘opt-in’ scheme, then it could be used as a mechanism to gather additional data to identify the fuel poor.
- **Area Based Approaches have been shown to be an effective way of targeting the fuel poor.** Further research is required to identify suitable area based definitions – focusing on a mix of deprived urban and rural areas.
- **Health and social care providers could have a clearer role in ‘prescribing’ energy efficiency measures through referrals to schemes such as ECO.** DECC should work with the Department of Health, the NHS, and relevant professional bodies, to refine guidance and the process of referral.



Fuel poverty is a serious issue facing the UK. There are 2.3 million households living in fuel poverty in England who are unable to afford to heat their home to an adequate standard. Fuel poverty has been made worse by rising energy prices in recent years, but also reflects the inefficiency of the nation's housing stock – which remains woefully poor compared to other European countries. Living in cold housing can lead to a range of health problems, and places a significant burden on the NHS. Despite their best efforts, successive governments have failed to get to grips with the issue.

Warmer Homes examines the government's approach to tackling fuel poverty. It makes the case for a fuel poverty strategy focused on improving the energy efficiency of fuel poor homes. Our analysis shows that there is a disconnect between the government's aspiration to reduce fuel poverty, and the amount currently being spent. The report shows how fuel poverty can be permanently reduced by redirecting existing funding towards energy efficiency improvements in fuel poor households, and making energy efficiency a national infrastructure priority.

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Policy Exchange
Clutha House
10 Storey's Gate
London SW1P 3AY
www.policyexchange.org.uk