

# Fuel Poverty: changing the framework for measurement

Taking forward the recommendations from the Hills Review



**Fuel Poverty: changing the framework for measurement**

Presented to Parliament  
by the Secretary of State for Energy and Climate Change  
by Command of Her Majesty

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# Foreword

Earlier this year, Professor John Hills published the final report of his comprehensive Review of fuel poverty that was commissioned by this department. I very much welcome the considerable insight that his work has brought to this issue, as well as the renewed focus the Review has generated on how we tackle this problem.

Professor Hills made clear that the problem of fuel poverty was being measured in the wrong way, and that the definition that we have been using has not accurately reflected the changes in the core drivers. Being able to measure the problem correctly matters. It is central to accountability and measuring progress. It is also integral to being able to design effective policies to tackle fuel poverty.

In his Review, Professor Hills set out an understanding of fuel poverty as a long-term, structural problem. Among key factors, he identifies the varying quality of the housing stock as a principal driver of fuel poverty suggesting a solution that is focused on improving energy efficiency.

Defining the problem in this way raises a question about how we might want to measure progress. This is not straightforward, and given the great level of interest in this issue and its importance, we are using the opportunity of this consultation on the definition to seek views on the implications for the current legal framework.

I know that some will see this question of definition as a distraction from the core task of designing and delivering effective policies helping those in fuel poverty. But I am clear that unless we properly understand the problem, we cannot design effective solutions. I therefore welcome the insights the Review brought to the interventions, and the opportunity that it provides to reappraise our policies. An updated, refreshed strategy will therefore follow in the New Year and will ensure that our resources are being used as effectively as possible. This is not simply a challenge for DECC, but across Government.

Meanwhile we will continue to deliver policies that we know are making a difference, through the Warm Home Discount scheme requiring energy

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**suppliers to provide support to low income and vulnerable customers with their energy costs, and the new Energy Company Obligation which will run in parallel the Green Deal and is intended to focus particularly on households that cannot achieve financial savings without additional support, including the poorest and most vulnerable, and those in hard to treat homes.**

**Edward Davey**

**Secretary of State for Energy and Climate Change**

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# General information

## Purpose of this consultation

The purpose of this consultation is to seek views on the Government's proposed changes to the way we measure fuel poverty in England. This includes:

- a proposal to change the definition of fuel poverty,
- recommendations on changing elements of the methodology used to calculate the fuel poverty statistics
- the implications for the associated fuel poverty target which is set out in the Warm Homes and Energy Conservation Act 2000 ("WHECA").

**Issued:** 18 September 2012

**Respond by:** 30 November 2012

## Enquiries to:

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Consultation reference: URN 12D/336 – Fuel Poverty: changing the framework for measurement

## Territorial extent:

Fuel Poverty is a devolved area of policy, and Scotland, Northern Ireland and Wales undertake their own approaches. The legislation relating to fuel poverty measurement, the Warm Homes and Energy Conservation Act (WHECA) 2000, applies to England and Wales (The Act provides for the Secretary of State to legislate in respect of England and the National Assembly in respect of Wales).

Any proposed changes to the definition (and potential legislative changes) would only apply to England.

## How to respond:

Your response will most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

## Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at <http://www.decc.gov.uk/en/content/cms/consultations/>

**Confidentiality and data protection:**

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on our website at [www.decc.gov.uk/en/content/cms/consultations/](http://www.decc.gov.uk/en/content/cms/consultations/). This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

**Quality assurance:**

This consultation has been carried out in accordance with the Government's Code of Practice on consultation, which can be found here:

<http://www.bis.gov.uk/files/file47158.pdf>

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

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# Executive Summary

This consultation looks at changing the approach to the measurement of fuel poverty (whether a person lives in a household that can be kept warm at reasonable cost). It follows an independent Review conducted by Professor John Hills of the London School of Economics (“the Review”) which looked in depth at whether fuel poverty is a distinct issue, its causes and impacts, and whether the current definition is fit for purpose.<sup>1</sup>

Section 1 of this consultation sets out the background to the Review and summarises its main findings. Professor Hills’s Review made clear that there were some fundamental flaws with the definition, and suggested a new approach. At the time of the Review’s final report, the Government committed to moving away from the current definition (based on whether a household would need to spend more than 10% of its income on energy to keep warm).

Section 2 of this consultation focuses on the proposal for a new definition (the Low Income High Costs indicator proposed by Professor Hills). It also covers the recommended changes to the methodology used to calculate the fuel poverty statistics made by the Review.

Given the different understanding of the problem that Professor Hills suggests (and the Government is proposing to adopt) the change in definition of fuel poverty raises questions about how a new definition fits with the current target, which is set out in the Warm Homes and Energy Conservation Act 2000. Section 3 considers whether the definition and target need to be aligned, and how this could be achieved. It also looks at what form of target would fit with the new definition.

Finally, Section 4 considers next steps, and sets out the Government’s intention to publish a refreshed strategy in the New Year which will reflect the new definition of fuel poverty and how our policy suite fits with this.

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<sup>1</sup> See: [http://www.decc.gov.uk/en/content/cms/funding/fuel\\_poverty/hills\\_review/hills\\_review.aspx](http://www.decc.gov.uk/en/content/cms/funding/fuel_poverty/hills_review/hills_review.aspx)

# Catalogue of consultation questions

| <b>Consultation Questions</b> |  |
|-------------------------------|--|
| 1.                            | Do you agree with the Government's intention to change the definition away from the 10% definition and adopt the Low Income High Costs approach?     |
| 2.                            | Do you agree with the proposals for setting the income and energy costs thresholds? If not what alternatives are there for setting these thresholds? |
| 3.                            | Do you agree that incomes should be equivalised to take account of household size and composition?   |
| 4.                            | Do you agree that energy costs should be equivalised to take account of household size and composition?  |
| 5.                            | Do you agree with the method proposed for equivalising energy costs?   |
| 6.                            | Do you agree that the core indicator should calculate income after housing costs have been deducted?   |
| 7.                            | Do you agree that extra cost benefits should continue to be included in the calculation of income, in line with current Government practice?         |
| 8.                            | Do you agree that we should consider changing the legislation and if so do you have a view on how and where the target should be specified?          |
| 9.                            | Do you have a view on the possible options for the form of target?   |

# 1. Background to the consultation

## Fuel poverty and the legal framework

1. Tackling fuel poverty is about helping people on low incomes who cannot keep warm at reasonable cost. Among other impacts, living in cold homes can lead to multiple health problems, including contributing to excess winter deaths<sup>2</sup>.
2. Government is committed to helping people keep warm at reasonable cost. The Warm Homes and Energy Conservation Act 2000 (WHECA) places a duty on government to have a strategy in place which sets out the steps the government will take to “ensure, as far as reasonably practicable, that no person lives in fuel poverty”.
3. The 2001 Fuel Poverty Strategy sets out a more specific definition of fuel poverty that is currently used, where a household is fuel poor if it would need to spend more than 10% of its income on energy costs in order to meet a prescribed standard of warmth and other energy needs. The Act sets out a statutory target to ensure no households in England live in fuel poverty, as far as reasonably practicable, by 2016.

## Government action

4. The aim of our fuel poverty programme is to help more of the most low income vulnerable households to afford to heat their homes to an adequate level. This is also key to the Department’s key priority to save energy with the Green Deal and support vulnerable consumers.
5. Our fuel poverty policies bring down the cost of achieving an adequate level of warmth, reducing the likelihood of households falling into fuel poverty, and the extent to which fuel poor households experience it. Our strategy can be split into three main strands: (1) improving the thermal efficiency of dwellings (through providing insulation and efficient heating systems); (2) providing more direct assistance with energy bills (e.g. energy bill rebates); and (3) supporting incomes.
6. Improving the thermal efficiency of a home is usually the most cost-effective way of making long-term reductions to the cost of keeping it warm. That is why the Government provides support to eligible households (broadly speaking low income households with an additional vulnerability) for a range of heating and insulation measures. For example the Warm Front

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<sup>2</sup> The Health Impacts of Cold Homes and Fuel Poverty, written by the Marmot Review Team for Friends of the Earth, published in May 2011

scheme has assisted over 2.3 million vulnerable households across England since its introduction in June 2000.

7. Alongside this, the Carbon Emissions Reduction Target (CERT) operates as an obligation on the major energy suppliers to meet targets by encouraging households to take-up energy efficiency measures (free or heavily discounted loft and cavity wall insulation). Suppliers are required to target 15% of these carbon savings on a Super Priority Group (SPG) of vulnerable households on income-related benefits. In addition the Community Energy Saving Programme targets households across Great Britain, in areas of low income, to improve energy efficiency standards, and reduce fuel bills by promoting a “whole house” approach (i.e. a package of energy efficiency measures best suited to the property).
8. 2012/13 will see a number of significant changes made to the policy framework, with Warm Front, CERT and CESP all coming to an end. From late 2012, the Green Deal will be the key policy to improve household energy efficiency. Support for heating and insulation for the most vulnerable will largely be delivered through the Energy Company Obligation (ECO). ECO is due to start at the end of 2012 and will run in parallel with the Green Deal. It is intended to focus particularly on households that cannot achieve the financial savings through the Green Deal without additional support, including the poorest and most vulnerable, and those in hard to treat homes.
9. Upgrading the housing stock is however a gradual process. UK SAP improved from an average rating in 1990 of 40.2, to 45.5 in 2000 and 55 in 2010.<sup>3</sup> As such, it is important that more immediate support is available to support fuel poor households in the short run.
10. The Warm Home Discount scheme was introduced on 1 April 2011 and requires energy suppliers to provide support to low income and vulnerable customers with their energy costs. This scheme is worth over £1.1 billion to March 2015 and will help around two million low income vulnerable customers a year.
11. In addition, beyond the support that DECC provides, the Winter Fuel Payment provides an automatic annual payment to pensioners worth up to £300 to help with heating costs. In winter 2010/11 an estimated 12.7 million older people in more than 9 million homes received this in Great Britain.
12. The Cold Weather Payment is paid to vulnerable groups on income-related benefits during periods of severely cold weather to help with additional heating costs during that time. The Department for Work and Pensions paid over 5 million Cold Weather Payments worth more than £129m across Great Britain in winter 2011/12.

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<sup>3</sup> Source: Energy Consumption in the UK (DECC)

## Background to the Review

13. At the Spending Review in October 2010, the Government announced its intention to commission an independent review of fuel poverty to take a fresh look at the fuel poverty definition and target. The primary objective of the Review was to enable better focusing of available resources where they will be most effective in tackling the underlying causes of fuel poverty.
14. In March 2011, Professor John Hills of the London School of Economics was appointed to lead the Review of fuel poverty<sup>4</sup> in England, which was independent of Government. The Review was asked to examine fuel poverty from first principles including determining the nature of the issues at its core, whether fuel poverty is distinct from income poverty, and the detriment it causes. The Review was also asked to examine whether the current definition was fit for purpose and, if it found that this was not the case, develop possible formulations for an alternative definition and associated form of target. The Review looked at the cost-effectiveness of different interventions in contributing towards progress towards any target. Finally, the Review considered practical solutions, particularly around identification and targeting of fuel poor households and measuring the progress resulting from Government action. In March 2012, Professor Hills presented his final report to Government.
15. One issue raised during the Review, which Professor Hills acknowledges in his interim report, is the relevance of accurate measurement and in particular its role in contributing to policy development. As the interim report sets out, one reason to want to ensure accurate measurement of the problem is because Government is under a duty to report on progress to meeting its statutory target. Accurate measurement (and as part of that, an accurate definition) is fundamental to this.
16. The framework for measurement can help in other ways too. Effective targeting of policies requires understanding as much as possible about those affected by fuel poverty. One of the concerns with the current definition is that it has not been correctly capturing the problem, and therefore has not been useful in helping to develop policies, or focusing resources on those who most need help.

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<sup>4</sup> The full terms of reference for the view can be found at Annex D

## Summary of the Review

17. The Review looked in detail at the causes and impacts of fuel poverty in England. It confirmed that the principal causes of fuel poverty are a combination of low incomes and high costs driven by poor energy efficiency and high energy prices.

### Causes and impacts of fuel poverty

18. The Review found that there were three different perspectives from which fuel poverty could be viewed as a serious problem, relating to health and wellbeing, poverty, and the impact on the Government's emissions reduction objectives. Given these different areas of concern, it concluded that fuel poverty is a problem distinct from the wider issue of poverty, with different characteristics.

19. The Review found that the varying quality of the housing stock (and an inability for many households to afford the substantial capital sums required to upgrade their homes) and people's ability to access the lowest prices for energy (due either to payment type, being off the gas network or not being able to access the internet for instance) led to households with similar levels of income having an unequal ability to turn cash into warmth and other energy needs. Particular types of households (for example pensioners and disabled people) may spend more time at home and therefore require more energy. All of these factors lead to significant variations in a household's energy bills.

20. The Review also looked at the impacts of fuel poverty, particularly the health and wellbeing impact which drove much of the original concern about fuel poverty. The rate of Excess Winter Deaths in the UK is higher than in many other countries, and while the extent to which these are caused directly by fuel poverty is uncertain, what is clear is that fuel poverty is a factor. The Review pointed to the cost to the NHS of the medical treatment associated with the health impacts of fuel poverty, ranging from depression to cardiovascular disease. There are also wider concerns about the social impacts associated with living in cold homes, such as social isolation and poor educational attainment in young people.

21. One other finding of the Review was that the evidence on the precise temperatures at which people need to live to avoid negative health impacts is less certain than had previously been supposed, and therefore so too is the evidence that is used as the basis for the temperature standards used within the fuel poverty methodology.

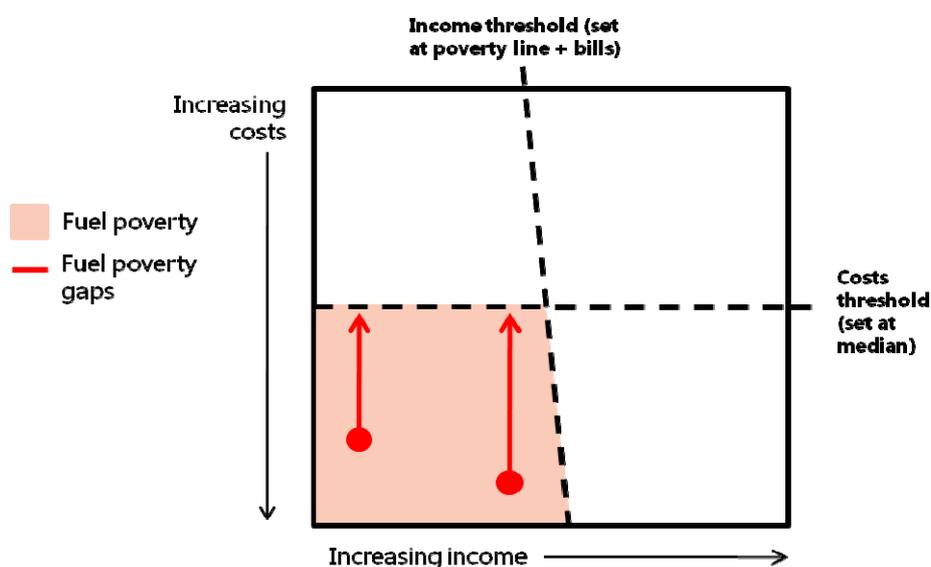
### Definition of fuel poverty

22. Professor Hills examined the current definition of fuel poverty to see whether it was fit for purpose. He concluded that while there were positive aspects of the current definition (in particular its focus on what a household would *need* to spend to maintain an adequate

temperature rather than what a household actually spends) it was not appropriately capturing the drivers of fuel poverty. In particular, it is based on some arbitrary assumptions (for example, the level of average energy consumption 25 years ago) and, because of the way the indicator is calculated, the number of households captured is very sensitive to those assumptions. This sensitivity means that the measure tends to overstate the problem in times when energy prices are high and understate the problem when energy prices are low. This, Professor Hills argued, makes it difficult for Government to make optimal policy decisions in how to tackle fuel poverty. The Review concluded that this made the definition an unreliable measure of the problem of fuel poverty. In addition, the use of a ratio tends to distort the picture around the relative effectiveness of different policy levers – for example, reducing someone’s energy bill by £10 would have as much effect as increasing their income by £100. Section 2.1 sets out some of these concerns in more detail.

23. Instead he proposed an alternative indicator, the Low Income High Cost (LIHC) indicator, which Professor Hills argues offers a more accurate measure of fuel poverty. This would mean a household was considered to be fuel poor where:
- It had required fuel costs that were above average; and
  - Its income is below the average poverty line (once housing and fuel costs have been taken into account).
24. The depth of fuel poverty for these households is also calculated using a wholly new measure – the fuel poverty gap – which is the difference between a household’s required fuel costs and what these costs would need to be for it not to be in fuel poverty. The gap for each household can be summed to produce an aggregate fuel poverty gap as well as an individual one. In this way the severity of the problem can be understood for different households, as well as giving an understanding of the scale of the national problem.

*Figure 1.1: The Low Income High Costs indicator including the fuel poverty gap*

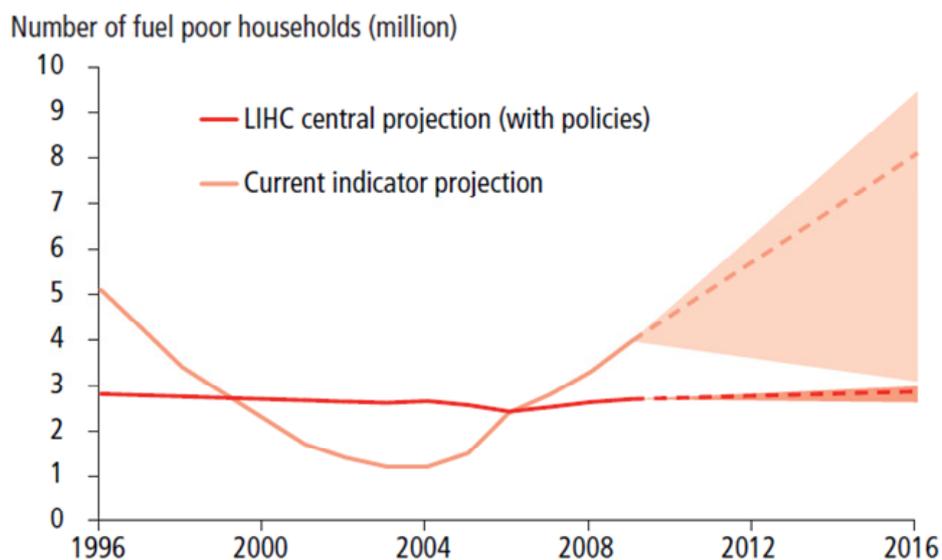


25. Using this approach 7.7 million individuals in 2.7 million households are found to be fuel poor in 2009. The average fuel poverty gap for each household is £415, giving a total fuel poverty gap of £1.1 billion.

### Projections of fuel poverty

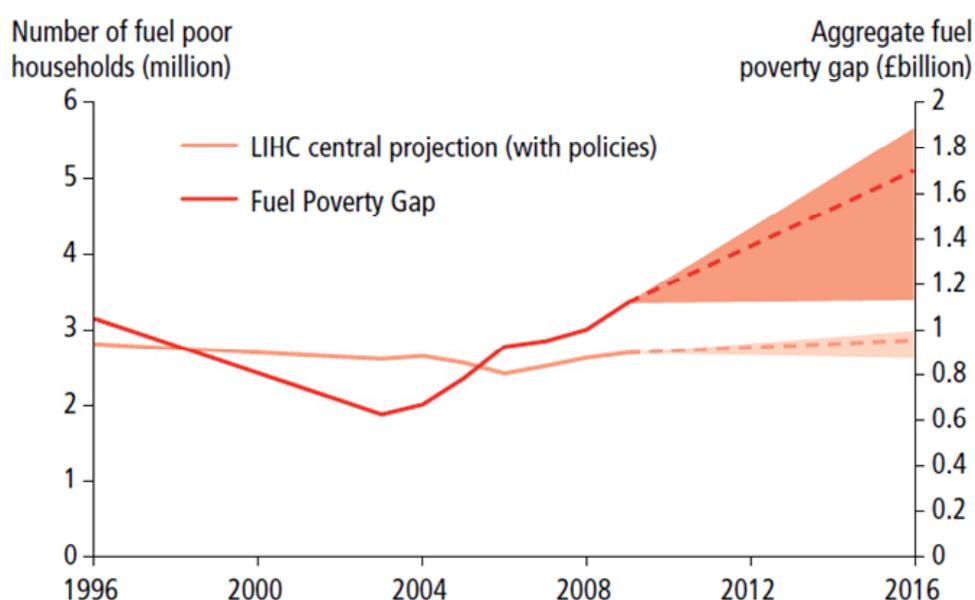
26. Having proposed an alternative definition the Review then went on to calculate how many households in England would be defined as fuel poor under both approaches in future. Figure 1.2, from the final report of the Review, shows the headcount numbers for both. Under the central projection of the Low Income High Costs indicator, some 2.9 million households are expected to be fuel poor in 2016. Under the current definition, this number is expected to be 8.1 million households in 2016, though as the chart illustrates there is considerable uncertainty around these numbers and based on different energy and income assumptions this could be anywhere between 3.1 and 9.2 million households.

*Figure 1.2: Projected fuel poverty headcount under the LHC and current definition*



27. Professor Hills also looked at the fuel poverty gap (figure 1.3) where the central projection suggests this will be £1.7 billion. Again a range is set out reflecting different assumptions of changes in energy price and incomes.

*Figure 1.3: Projected fuel poverty gap to 2016*



### Form of target

28. The terms of reference also asked Professor Hills to look at the associated form of target for any proposed alternative definition. He recommended that any target should naturally be based on the Low Income High Cost framework that he proposed, and should encompass both aspects of that indicator: that is the extent and the depth of the problem. In his report he recognised that literal elimination of this issue would be very difficult. Instead he suggested that a more realistic approach would be to set the target in relation to the aggregate fuel poverty gap, where that gap should be reduced to very low levels. This would ensure that, whilst some households are always likely to be above the contemporary median, it would be possible that no households would be very far above it.

### Cost effectiveness of policy interventions

29. The Review also considered the cost effectiveness of different interventions in contributing to progress towards any target. The Review looked at three broad types of intervention: policies to tackle energy prices, through delivering bill rebates; policies that aim to improve thermal efficiency through delivering subsidised insulation and heating systems to

certain households; and policies that act on incomes by delivering direct income support. These were tested against a number of criteria: their cost-effectiveness in driving a reduction in fuel poverty; their impact on carbon emissions and their net associated benefits. The Review distinguished between funding sources i.e. Exchequer funded or supplier funded through additions to bills. Policies were either considered to be broadly targeted on all high cost households or narrowly targeted at low income high cost households.

30. For each of these policies archetypes, the Review looked at the short and long term (2016) impact of interventions with standardised costs of £500 million. Professor Hills's conclusion was that policies that improve the thermal efficiency of the housing stock tend to be the most cost effective. However the Review recognised that upgrading the housing stock is a gradual process and there was a role for other short-term interventions such as price subsidies in the meantime.

### Identification and targeting of households

31. Finally, the Review was asked to develop practical solutions around the identification and targeting of households and measuring progress resulting from Government action. The Review noted that it would be prohibitively expensive to carry out a full property and income assessment for each household to understand whether they are fuel poor. Instead proxies have to be used to allow for targeting of policies at those with both low incomes and high costs. The normal proxy used for low income of means-tested benefits accounts for 62% of LHC households. Professor Hills goes on to identify a small set of physical characteristics which could be ascertained without an in-depth physical survey, and which could account for households with more than half the total fuel poverty gap. These are having oil, solid fuel or portable heating, living in a rural property off the gas grid, having solid walls, or being built before 1945.

### Government response to the Review

32. The Government welcomes the work Professor Hills has undertaken in examining the issue of measurement of fuel poverty, and which has provided great insight into this serious issue. It is clear that improving the way fuel poverty is measured is integral to delivering the right policy outcomes. Without the right measure it will not be possible to focus available resources in the most effective way, and improving the indicator is therefore integral in developing an effective strategy on the ground.
33. It is important that this opportunity to improve the framework for tackling fuel poverty is seized. The Government has therefore committed to moving away from the current definition of fuel poverty and to adopting a revised approach to measurement. This consultation sets out that approach and seeks views on a set of proposals related to the framework for measurement.



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## 2. Taking forward the recommendations from the Hills Review

### 2.1 Changing the definition of fuel poverty

34. The bulk of the recommendations from the Review relate to the current definition of fuel poverty and Professor Hills's proposed alternative. This current definition is set out in the fuel poverty strategy that was produced in 2001.
35. The definition is used as the basis for the calculations of the number of households in fuel poverty. Underpinning the definition is a detailed methodology that is used to produce the statistics for fuel poverty. England, Wales, Scotland and Northern Ireland all produce separate statistics for fuel poverty, based on their own definitions. Currently all four use the 10% definition as the basis of their calculations, but the assumptions and methodologies used vary.
36. Professor Hills made a number of recommendations relating to the definition of fuel poverty. The first was that the Government should move away from the current definition of fuel poverty and instead adopt an approach which would capture the problem as set out in WHECA (i.e. which only captured those with low income and high energy costs).
37. The following sections set out two options for the overall definition of fuel poverty (retaining the current definition or adopting the Low Income High Costs definition), as well as further consideration of how the Low Income High Costs indicator is constructed and the methodology used to calculate fuel poverty. This section also looks at the technical recommendations that were made by the Review. Annex C sets out the composition of fuel poverty under both the current (10%) indicator and the alternative that Professor Hills proposed, the Low Income High Costs indicator.

## Overall framework for the definition

*Hills Recommendation 1:* The Government should change its approach to fuel poverty measurement away from the current '10 per cent' ratio indicator.

*Hills Recommendation 2:* The Government should adopt a new indicator of the extent of fuel poverty under which 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.

The Government should count the number of individuals in this position as well as the number of households they live in.

*Hills Recommendation 3:* The Government should adopt a new indicator of the depth of fuel poverty as represented by the average and aggregate 'fuel poverty gap', defined as the amounts by which the assessed energy needs of fuel poor households exceed the threshold for reasonable costs.

### Option 1: Retain the current definition (with a possible income threshold)

38. As set out in section 1, the current definition is based on whether a household would need to spend more than 10% of its income on its household fuel use (see the Fuel Poverty Methodology Handbook for a further discussion of the heating regime, and the Review interim report for details on the underlying methodology<sup>5</sup>).
39. In 2010, the current definition found 3.5 million households in England to be fuel poor.
40. One of the concerns raised by the Review was that the 10% definition resulted in households who are relatively better off (i.e. would not be considered to be on a low income) being counted as fuel poor. Although these households may be the focus of other DECC energy efficiency policies, they are not the focus of fuel poverty policies aimed at lower income households. These households are counted as fuel poor under the current definition because, due to the ratio, increases in energy prices tend to result in potentially large numbers of households being counted as fuel poor for the first time, households may have

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<sup>5</sup> The Fuel Poverty Methodology Handbook: <http://www.decc.gov.uk/assets/decc/Statistics/fuelpoverty/614-fuel-poverty-methodology-handbook.pdf> and the Hills Review interim report: <http://www.decc.gov.uk/assets/decc/11/funding-support/fuel-poverty/3226-fuel-poverty-review-interim-report.pdf>

the same fuel poverty ratios but with very different absolute levels of income. This is partly due to the distribution of households on the margins of fuel poverty. There is of course no doubt that increases in energy prices put pressure on all households budgets. But Professor Hills argued that this was not capturing the core problem of fuel poverty – which he characterised as the overlap between low income and high energy prices.

41. The threshold for the current definition appears to derive from an original calculation that in 1988 the median household spent 5 per cent of its income on fuel . Twice this ratio was considered to represent unreasonable energy costs. This was in some part confirmed by the fact that the poorest 30 per cent of households also spent 10 per cent of their income of domestic energy in 1988.
42. The calculation therefore contains some outdated assumptions on what constitutes 'unreasonable' costs, and furthermore relates them to a particular point in time. Since then spending patterns have changed and will continue to do so. Whilst it would always be necessary to make a decision on where to set the threshold with this form of indicator (and this decision will always be somewhat arbitrary), the form of current indicator means that the number of fuel poor households is very sensitive to these decisions. In this case it means that the indicator is showing the tail of the distribution of costs in relation to income. Small changes to the threshold could result in significant changes in the number of fuel poor households. To use this type of indicator, one would need to have great confidence in the underlying assumptions used. Hills concluded that the combination of the uncertainty in the assumptions used and the construction of the 10% definition makes it an unreliable indicator.
43. Linked to this is a further problem: that the indicator is very sensitive to other assumptions used in its construction, including temperature standards. The underlying model uses four different heating patterns, all of which use a target temperature (21°C in the main living room and 18°C elsewhere). The Review showed that changing these assumptions had a significant impact on the numbers of fuel poor. For instance, the Review calculated that for each reduction of 1°C in the temperature standard for the main living room, the numbers in fuel poverty would reduce by 300,000 (using 2009 figures). Given that the Review had found the basis for those temperature assumptions to be less clear cut than might have been supposed, it is a weakness of this type of indicator that it is so sensitive to the standards used.

#### *Adding an income threshold*

44. One solution that has been suggested would be to include an income threshold which would ensure that those on a higher income are not counted. Whilst this solves one problem, this type of solution would not deal with the underlying problems of a measure that is extremely sensitive to energy prices and to the assumptions that underpin the ratio (e.g. where the threshold is drawn, and the temperature assumptions – as set out above) and has therefore painted a misleading picture of trends in fuel poverty.
45. In discussions around the Review, some have suggested that it would also be possible to include a measure of depth with the 10% measure in the same way that Professor Hills

proposes a fuel poverty gap to accompany the headcount indicator under his approach. However, as the Review outlined, concerns regarding the reliability of income data, particularly households which are reporting the very lowest incomes, means that there would not be enough confidence in the results produced from this data. In addition, because we believe that the 10% definition is not accurately capturing those who are fuel poor, it is not helpful to capture the fuel poverty gap of the wrong people.

46. The Government's view is that, as Professor Hills sets out, the underlying problems with the 10% definition extend beyond those of including households on a higher income and it is therefore not possible to correct these problems simply through applying an income threshold.

#### Option 2: Low Income High Costs approach

47. As set out in the section above, Professor Hills proposes a Low Income High Costs indicator as a new approach to measuring fuel poverty. His proposed approach focuses on households with low incomes (once fuel bills are taken into account) and higher than typical energy costs. Alongside a headcount measure of fuel poverty, this framework also includes a measure of the depth of the problem, through the fuel poverty gap. The fuel poverty gap represents the amount a household's energy bill would need to be reduced by in order for them not to be in fuel poverty. This provides an indication of the severity of the problem, both for individual households, and for the fuel poor as a whole.

48. In 2010, the latest year for which we have statistics, this approach found 7.7 million people in 2.7 million households in England to be fuel poor.<sup>6</sup> On average the fuel poverty gap for each household was £415, or a total of £1.1 billion.

49. This is constructed using the same underlying methodology as the current definition, which Professor Hills found to be broadly sound (though see section 2.3 for a discussion of some of the methodological issues raised by the Review).

50. The fuel poverty gap provides a means for understanding who is worst affected by fuel poverty through the depth of their problem (for instance rural, off grid households have an average fuel poverty gap that is twice as high as the average fuel poverty gap for all households). An additional strength of the dual indicator approach is that as energy prices change, this impact is reflected both through an increase in the extent of the problem (through a change in the income threshold) as well as a change in the depth of the problem through the change in the gap.

51. This approach better reflects the three main drivers of fuel poverty. Although the headcount indicator is likely to only see small changes over time, changes in energy prices do have an impact both on the headcount (though to a far lesser extent) and more clearly on the fuel poverty gap which measures the depth or severity of poverty. If energy prices increase by

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<sup>6</sup> See DECC Annual Fuel Poverty statistics: <http://www.decc.gov.uk/assets/decc/11/stats/fuel-poverty/5270-annual-report-fuel-poverty-stats-2012.pdf>

10% then the numbers of households in fuel poverty would typically increase by less than 3% (assuming no other changes), while the fuel poverty gap increases by 12.5%. When energy prices change, some additional people are brought into fuel poverty (as the current indicator suggests) but more crucially the extent to which households are experiencing fuel poverty (i.e. having to make trade-offs between energy and other types of consumption) is captured, through the gap. At the same time, changes in energy efficiency would work both to bring households out of fuel poverty, and to lessen the extent to which they have greater than typical costs.

52. As mentioned above, the LIHC headcount indicator is relatively stable in terms of the numbers of fuel poor households. However it is less stable in terms of the types of households that are fuel poor. This is because as certain types of households receive help that improves their circumstances, or takes them out of fuel poverty, this will be reflected by movements in the energy costs threshold, bringing different households into fuel poverty.
53. Because of the nature of the indicator, which reflects what is happening in any one year rather than against a specific benchmark, the indicator automatically tracks contemporary standards and would not need updating. In the future, once the entire housing stock has been improved to a high standard and energy efficiency levels have risen sufficiently, it may be necessary to consider fuel poverty in different terms.
54. One of the features of the LIHC indicator is the way in which it can show the impact of policy choices. A criticism of the LIHC indicator is that the way in which it is constructed puts climate change and energy efficiency goals and fuel poverty goals in conflict with one another. It is true that if the energy efficiency of households with a relatively higher income improved at a faster rate than those with a lower income this would lead to the numbers in relative fuel poverty increasing even though their absolute standard of living had not declined. This might at first glance seem to create the wrong incentives but, as Professor Hills argues, it reflects two important factors. Firstly, the general risk that those on a lower income get left behind (reflecting the overall relative approach to measuring this problem). Secondly it allows us to understand how potential future policies would impact across all households, and to take account of these distributional concerns when devising policies.
55. The fuel poverty gap in particular allows us to understand which types of households are suffering from the deepest fuel poverty and so may be a priority for action.

**Government intention: We agree with Professor Hills assessment of the weaknesses of the current definition, and agree that the Low Income High Costs framework provides a better approach to understanding the issue of fuel poverty and intend to adopt it as the main measure of fuel poverty in future.**

**The number of individuals in fuel poverty as well as the households will also be reported on.**

**As well as the using the LIHC indicator as the main measure of fuel poverty, we expect to continue to report on numbers under the 10% definition in our annual report of fuel poverty statistics.**

**Question 1: Do you agree with the Government's intention to change the definition away from the 10% definition and adopt the Low Income High Costs approach?**

## Using the fuel poverty indicator

The purpose of any indicator is not just to be able to provide the basis for calculating the numbers of households who are in fuel poverty and to inform policy development (including eligibility for Government support), but also to provide a means by which others can use the indicator to identify households who are at risk of fuel poverty.

The existing 10% indicator of fuel poverty has been criticised in the past because it doesn't lend itself particularly well to targeting households in need of assistance. Some of this criticism has also been levelled at the LIHC indicator, which some believe to be a policy maker's indicator rather than one which could be used by those on the ground.

In some respects, the 10% indicator seems easier to understand than the LIHC indicator and therefore easier to apply by those who would be trying to find those affected by fuel poverty, in order to deliver support. The LIHC indicator does appear complicated, methodologically speaking, in that it would not be easy to calculate a person's equivalised bill or income. However, the existing indicator is just as complicated in terms of methodology. For example, it would not be possible for organisations on the ground to calculate how much a household would need to spend to maintain a prescribed level of thermal comfort. In fact, any indicator which has the level of detail used in calculations for national statistics is unlikely to be usable in that form by other organisations. What matters then is whether it can be simplified, or whether it can tell us anything about the characteristics of fuel poverty that would allow Local Authorities, NGOs or energy suppliers to identify the types of property or households that are most likely to be fuel poor.

Seen in that way, the LIHC indicator is easier to use than the 10% indicator, because it lends itself better to proxies that might help identify households affected and, in particular, it helps to identify those with the worst problem. In the simplest of terms, we know that we need to identify households that have low incomes and may be more susceptible to higher bills.

It would be possible to identify households at greater risk of having energy bills above the median, by using a number of proxies. For example, we know that 81% of the fuel poverty gap, under the LIHC indicator, have an EPC energy efficiency rating of E, F or G.

Some characteristics of fuel poor properties are less immediately recognisable and would again require self identification. However, the analysis undertaken by Professor Hills' review finds a strong correlation between fuel poverty and other characteristics that could be determined by using a simple checklist. For example, Hills found that:

- Non-cavity wall properties make up 45% of the fuel poor;
- One in Four households paying for energy by pre-payment meter were fuel poor, compared to fewer than one in ten who pay by direct debit; and
- Detached properties have the highest average fuel poverty gap at £767.

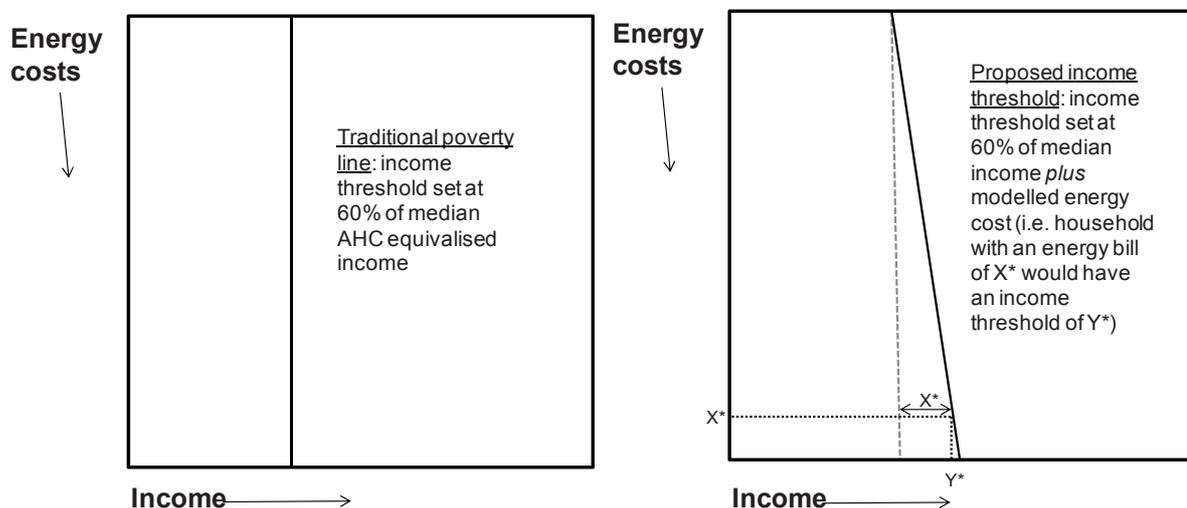
Using these characteristics could be one way of identifying those households who are most likely to be at risk of fuel poverty.

## 2.2 Constructing the indicator

56. Moving beyond the general framework for the definition, there are then decisions on how precisely the indicator is constructed within this overall framework, in particular how the thresholds are set. Section 2.3 goes into detail on some of the other methodological questions including how incomes are calculated and whether and how to adjust energy bills to take account of household composition. In this section we consider the options for setting the thresholds, in particular the energy cost threshold which has been the focus of much debate.

### Income threshold

57. Professor Hills recommends setting the income threshold using the official poverty line (60% of median equivalised household income measured after housing costs have been deducted). He also recommends making an adjustment for a household's fuel costs. This is because some households might be just above the official poverty line (DWP's Household's Below Average Income), but were they to spend the amount required to achieve a reasonable standard of warmth, they would be pushed below the poverty line.<sup>7</sup> So the income threshold is adjusted to include modelled fuel costs, which results in a poverty line that is slightly angled, reflecting the increased risk of poverty amongst those with higher fuel costs.



58. Professor Hills also recommended that income should be measured after housing costs. This is because income spent on housing costs is not discretionary and is not available to be

<sup>7</sup> Of course we know that many households may not be spending as much as the model suggests they should. Section 2.3 discusses actual and modelled fuel costs in more detail. An adjustment for fuel costs allows us to capture these households.

spent on energy. We discuss this further in section 2.3, alongside other methodological issues.

59. We are minded to agree with his judgement that an adjustment for fuel bills should be made. As was set out in the interim report of the Hills Review, households with a similar level of income face an unequal ability to turn income into warmth and many face barriers to improve their situation. As such, to some extent, energy expenditure shares some of the same characteristics as housing expenditure and does not represent a fully disposable element of a household's income.

### Energy cost threshold

*Hills Recommendation 5(i):* The Government should set the reasonable costs threshold at the level of the contemporary median energy requirements for the population as a whole.

60. Professor Hills recommended setting the threshold as 100% of typical energy costs on the basis that this represented typical behaviour and anything above median should be considered to be higher than typical and therefore unreasonable. This provides for a relative measure, where the threshold would change year on year as energy costs change.
61. This has been the main area of discussion since the Review was published. It is possible to set the threshold in a number of different ways. The main options for doing so which were either examined during the course of the Review, or have been suggested by stakeholders since, are:
- Option A: To use median energy costs as the threshold.
  - Option B: To use a different proportion of the median (e.g. 60%).
  - Option C: To set a threshold based on the best performing households (e.g. the 30% most energy efficient).
  - Option D: To set a threshold based on an absolute level of costs (e.g. the costs in a particular year).
62. For each of these, it would be possible to calculate both a 'headcount' and fuel poverty gap measure. An assessment of each of these options (as well as the threshold proposed by Professor Hills) is set out below.

#### Option A: To use 100% of median energy costs as the threshold (the Hills proposal)

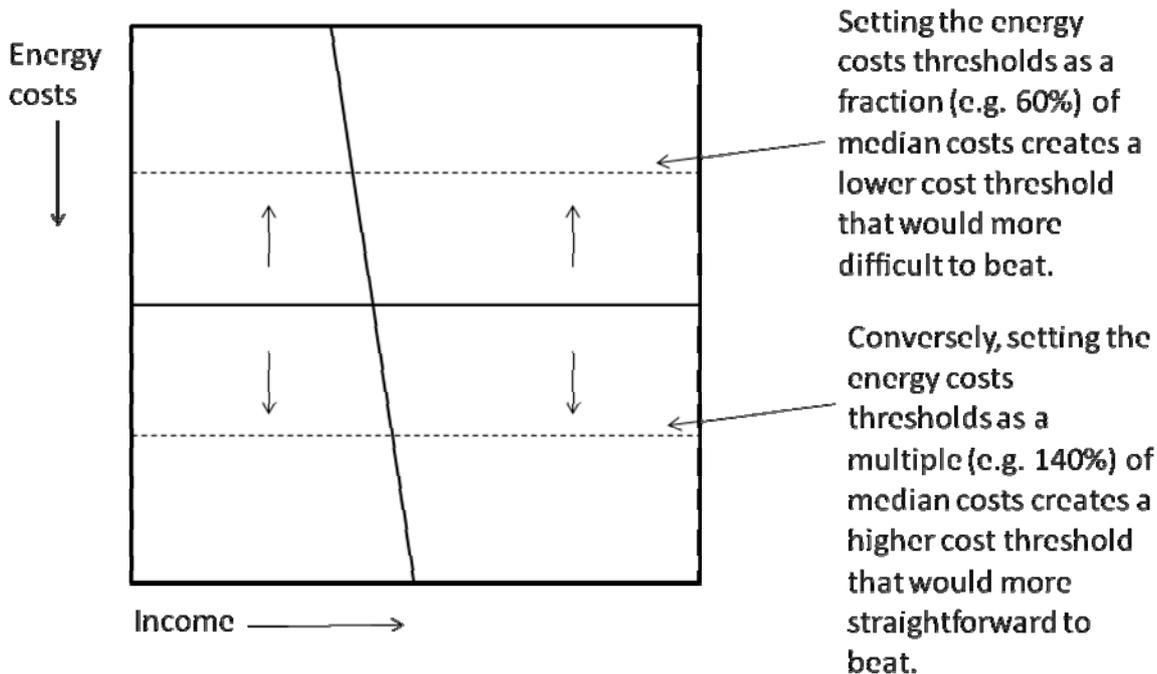
63. As we set out above, the Hills proposal uses 100% of median costs. The key advantage of this approach is that over time the threshold will move, as it reflects improvements in energy efficiency and therefore costs, as well as reflecting changes in energy prices. As the energy efficiency of Low Income High Cost households is improved, the threshold will potentially shift upwards. This means that a small number of households which had previously been below the threshold (i.e. were deemed to have low costs), would be brought into fuel

poverty for the first time. Using average energy costs provides the clearest rationale for setting the threshold, on the basis that costs above those of a typical household are unreasonable. A feature of this approach is that it is likely that the households that were in the deepest fuel poverty that would be the focus for policy interventions. As standards improve over time, other households would become the focus of efforts to tackle fuel poverty. This gradual change in the composition of fuel poverty would also help to inform the strategy for interventions.

Option B: To use a different proportion of the median

64. Some stakeholders have raised concerns that using 100% of median does not represent 'reasonable costs'. This is because energy efficiency standards are still relatively low and therefore even the median is considered too high. Instead of using average costs, a threshold could be set which uses a different proportion of median costs, in the same way poverty is generally measured using 60% of average (median) income. It would be possible to use any amount, not necessarily 60%.

Figure 2.1: Setting the energy costs threshold as a different proportion of the median.



65. The question is whether this approach holds any advantages over Professor Hills's proposal. As we set out under Option A, the households that are deepest in fuel poverty will still be the priority for action. Drawing a higher threshold which includes a greater number of households would not necessarily result in a change to that approach.

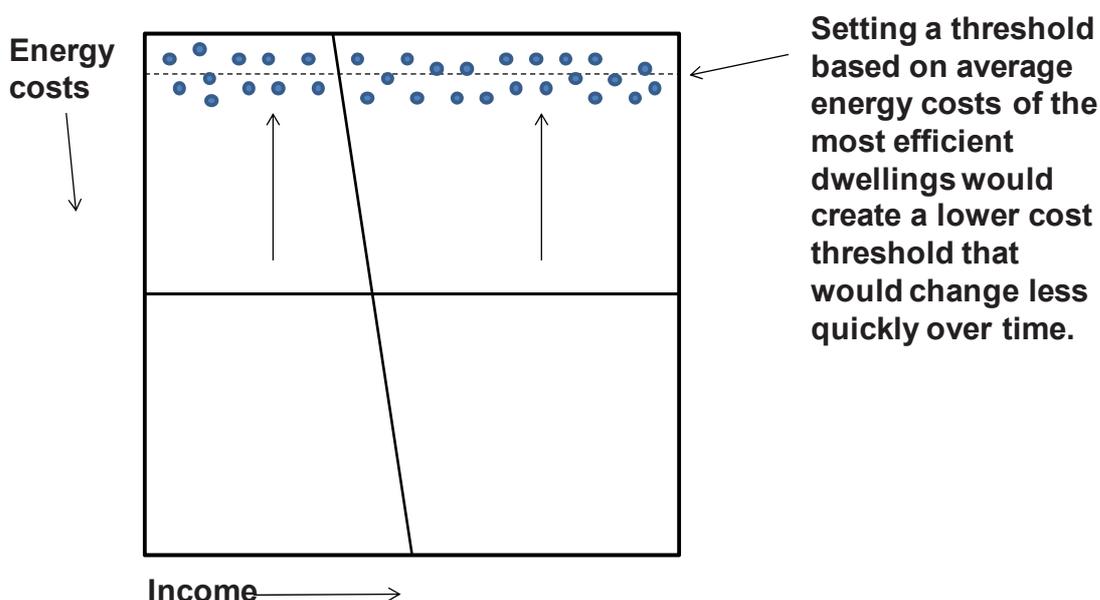
66. One concern raised by some stakeholders is that using average (median) costs and thereby embedding a relative approach, makes the problem of fuel poverty impossible to

eradicate (as we discuss above). Using a smaller proportion of median costs (i.e. lowering the threshold) would exacerbate this problem. In order to use an approach similar to that used in poverty more generally, the threshold would need to be set at a point above 100%. This is because a threshold which represents greater than average costs is easier to meet than one which represents average costs when the aim is to reduce the number of households with high energy bills. In the same way ensuring no household has an income which is significantly less than the average (i.e. 60%) is more easily achievable compared to ensuring all households have average income. In addition, apart from the (theoretical) ability to eradicate the issue, there does not appear to be any rationale for setting the threshold at a point higher than 100%. Similarly, we have not been able to find any evidence for what would constitute reasonable costs at a lower threshold and any constructed threshold would therefore be arbitrary. For those reasons, our view is that we should not consider setting the threshold at an amount either above or below 100% of the median.

Option C: To set a threshold based on the best performing households

67. One of the concerns about the LIHC approach is that the headcount measure is less good at showing overall progress in tackling the issue. One way of over-coming this could be to use a relative threshold but set it in relation to the best performing/most energy efficient housing stock. This would have the advantage of the threshold changing less quickly over time, and would therefore be less of a ‘moving target’, allowing progress in tackling the issue to be shown more easily. On the other hand, a threshold based on the most energy efficient housing stock would mean a threshold that was ‘impossible to beat’ at least in practice and so there would always be households in fuel poverty.

68. Then there is the question of how exactly to set the threshold. This could be done by either setting a threshold based on a proportion of housing stock (e.g. 30%) or setting a threshold based on the average bills for properties with a particular energy efficiency rating.



69. The Government's view is that the advantages of this approach do not outweigh the disadvantages of having to choose an essentially arbitrary threshold, and losing the positive characteristics of a relative approach (in particular that it reflects the risk of low income households being left behind as energy efficiency standards improve overall). Again, this approach would not necessarily change the strategy of who would be a top priority for interventions.

Option D: To set a threshold based on an absolute level of costs (e.g. the costs in a particular year)

70. A different approach to setting the threshold would be to base it on an absolute level.

71. The simplest way of using an absolute threshold under the overall Hills approach is to fix the energy costs threshold in a certain year. This would give a fixed standard against which to measure progress in future years. The disadvantage of such an approach is that the numbers become very sensitive to energy price changes. This means the scale of the problem (in terms of the number of households that are captured by the indicator) changes very quickly, and so do the types of households affected, making it harder to target policies. As Professor Hills mentions, this type of indicator is also very sensitive to the decision as to which year to base it on as energy prices vary so much from year to year. It is hard to see a rationale for a particular year. Professor Hills compared a threshold set at 2004 energy bills and 2009 energy bills and found that the difference between the number of households found to be fuel poor to be significant (twice the number of households). These problems are very similar to the reasons we are looking to move away from the existing 10% definition, and it is therefore hard to justify such an approach.

72. One way of addressing the sensitivity to energy prices of a fixed threshold would be to construct a threshold which worked in the same way as option A above, but where the costs threshold is based on an energy requirement that is fixed in a particular year but where energy prices are varied in line with yearly fluctuations. This would give an indicator that is relative in energy prices, but absolute in energy consumption. The key advantage of this approach is that it would emphasise the impact of improving the thermal efficiency of fuel poor households – fixing the energy requirement based on a specific year means that it becomes easier for fuel poor households to cross the threshold as the efficiency of their dwellings improves. However, an unfortunate consequence of fixing the threshold in consumption is that the indicator would no longer respond to changes in the thermal efficiency of non-fuel poor households (i.e. an improvement in the thermal efficiency of higher income homes would have no impact on fuel poor households, in spite of the fact that they would have fallen further behind contemporary standards). This would therefore not be as sensitive to changes in energy prices which tend to make a fully absolute options out of date very quickly. However, the fact that the energy requirement is fixed in a given year would mean that the energy threshold would eventually become out of date and would, therefore, require periodic updating. Again, a decision on which year to use would have to be made.

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73. One further significant disadvantage of this approach is that it is very complicated both to understand and to calculate, and we do not therefore believe it is appropriate as the core indicator of fuel poverty.

**Government intention: Given the concerns set out above with the alternatives thresholds, the Government intends to adopt the Low Income High Costs approach as put forward in Professor Hills's final report. This would set the income threshold based on the DWP Households Below Average Income line, but with an adjustment for fuel costs. The energy costs threshold would be set at 100% of median energy costs.**

**Question 2: Do you agree with the proposals for setting the income and energy costs thresholds? If not what alternatives are there for setting these thresholds?**

## 2.3 Recommendations related to the fuel poverty methodology

74. As well as overall recommendations on the definition of fuel poverty and the thresholds, the Hills Review also made a number of more technical recommendations relating to the methodology used in the calculation of fuel poverty. This section examines those recommendations and sets out the Government's intention in relation to each of them.
75. In looking at the approach to measurement, Professor Hills not only considered the definition but also the underlying methodology used in the calculation of fuel poverty. The fuel poverty calculations use the data from the English Household Survey combined with the BREDEM model. This models the amount of energy required to achieve a given temperature standard and combines this with an assessment of needs for water heating, lighting, appliance use and cooking. The calculation allows for different occupancy patterns and for the differences in prices paid for energy, which depend on region and payment method.
76. For the 10% definition, a fuel poverty ratio is calculated for each household (by dividing modelled fuel bills by household income). The Hills approach uses the same data from EHS combined with the BREDEM model to generate costs for each household which are then plotted on the matrix.
77. Professor Hills found the overall methodology to be generally robust but suggested some amendments to how some of the different factors are treated, and potential changes to the methodology.

### Treatment of income and energy costs to reflect household size (equivalisation)

*Hills Recommendation 5(ii)*: The modelled bills for individual households should be adjusted for household size and composition – using a specific set of adjustment factors - when comparing them to this threshold.

78. Professor Hills recommended that, within the methodology, both income and energy bills should be adjusted so that households with different numbers of occupants can be compared to a single threshold. This reflects an understanding that in order to achieve the same standard of living, a family of four requires more income than a family of one. Weighting their income and energy bills (i.e. the two thresholds used in the LIHC indicator) allows for a comparison of both households against a single threshold. This is known as 'equivalisation' and is commonly used in income measurement to compare the incomes of households of different sizes and composition on the same scale.
79. The same rationale can be applied to energy costs. As Professor Hills set out in his Review, what are reasonable energy costs for a household of four, might not be reasonable for a household of one. For instance, suppose the modelled average household energy bill is

£800 for a single person, £1,500 for a family of four and £1,200 for all households. A single person in a low energy-efficiency home with a modelled bill of £1,100 would not be considered to have high costs compared to the median bill/threshold, whereas a family of four with a bill of £1,300 would be considered to have unreasonable costs. This would be in spite of the fact that the family of four had lower than average costs for their household type, while the single person household had higher than average costs for their household type.

80. The Department for Work and Pensions' Households Below Average Income threshold uses equivalised incomes to compare households to a single threshold. Professor Hills argued that energy bills also need to be equivalised in order to be able to compare different types of households using the energy costs threshold.

#### *How to equivalise energy bills*

81. Professor Hills initially considered using the same equivalisation factors that are applied to income and which are based on the modified OECD scale. However he subsequently rejected this approach on the basis that income factors were not appropriate as energy costs do not show the same relationship to household size compared to general living costs. For instance, an additional person in a household would imply additional living costs but does not necessarily imply an increase in heating costs because the same space still requires heating. Some change in costs will take place relating to e.g. hot water but not at the same level as general expenditure. Using the same equivalisation factors as income therefore had the effect of setting too low a threshold for small households relative to larger ones, as the Review acknowledged.

82. In his final report Professor Hills therefore suggested equivalising energy costs using factors that had been developed from the modelled spending requirements of each household type, based on data from the fuel poverty dataset and English Household Survey. This gives a factor for each of the main household types. These are set out below.

*Table 2.1: Equivalisation factors for energy costs proposed by the Hills Review<sup>8</sup>*

| <b>Household type</b>             | <b>Equivalisation factor</b> |
|-----------------------------------|------------------------------|
| Couple with dependent children    | 1.15                         |
| Couple without dependent children | 1.00                         |
| Lone parent                       | 0.94                         |

<sup>8</sup> Hills highlighted that one difficulty with using an approach based on average modelled costs is that spending patterns may be distorted by different groups having unequal standards of living. In order to ensure that the factors are based on households with fairly typical incomes and not skewed by those with particularly high or low incomes, the data that these are based on use only households whose income is within 20 per cent either side of the national median. For more detail see the annex to Chapter of Hills's final report:

<http://www.decc.gov.uk/assets/decc/11/funding-support/fuel-poverty/4662-getting-measure-fuel-pov-final-hills-rpt.pdf>

|                              |      |
|------------------------------|------|
| Single person                | 0.82 |
| Other multi-person household | 1.07 |

83. This way of equivalising (i.e. in relation to energy bills rather than income) is new, and there is no established set of factors for doing this in the same way as there are for income. Other ways of adjusting energy bills would also be possible, taking account of different factors. For instance it has been suggested that equivalising in the way that Professor Hills proposes does not sufficiently take account of property size, and leads to smaller properties needing to be more atypical in their costs than a larger property in order to be fuel poor. It would be possible to adjust energy bills using factors based on energy costs per m<sup>2</sup>.
84. The key concern with this is how to take account of dwelling size within the methodology. Property size is a factor driving higher costs and so using these factors would 'neutralise' this issue.
85. It is of course possible to use factors for both household and dwelling size, giving you specific factors to use for each of these variables (25 in total<sup>9</sup>). This raises the additional concern about whether having such a large number of factors is practical, and whether the dataset used to produce them is of sufficiently large size to make them robust.

#### *Impact of equivalisation on composition*

86. The impact of equivalisation overall (i.e. when applying factors to both income and energy bills) compared to not using any equivalisation factors is to change the composition of households in fuel poverty. For instance, the proportion of the the fuel poor accounted for by families - either couples with dependent children or particularly lone parents with dependent children - increases (from 14% to 20% for couples with dependent children and 16% to 24% for lone parents with dependent children). The other group that sees a significant change is single person households over 60 who would comprise a quarter of the fuel poor without equivalisation but with equivalisation account for 11% of the fuel poor. Other households types remain almost unchanged.

**Government intention: our aim in equivalising is to be able to compare households of different sizes and composition to a single threshold. As dwelling size is a key factor in driving high energy costs, we do not believe it is appropriate to adjust energy costs for this as it would reduce the impact this has in driving high costs. We therefore propose to use the equivalisation factors that the Hills Review set out, which take account of the different size and composition of households only.**

#### **Question 3: Do you agree that incomes should be equivalised to take account of household size and composition?**

<sup>9</sup> Each of the 5 household types would require a dwelling size of which there are 5 suggested categories, numbering 25 in total.

**Question 4: Do you agree that energy costs should be equivalised to take account of household size and composition?**

**Question 5: Do you agree with the method proposed for equivalising energy costs?**

**Adjusting income: After Housing Costs income**

*Hills Recommendation 4:* The Government should measure incomes for fuel poverty purposes after housing costs and adjusted for household size and composition. The threshold should be set at 60 per cent of median income plus calculated household energy requirements.

87. The current methodology uses income in two ways, measured before and after housing costs. The headline figures produced are on the basis of income before housing costs. In his report, Professor Hills proposed using income after housing costs have been deducted. He argued that this would better reflect the true disposable income of households – on the basis that income spent on housing costs does not represent truly discretionary expenditure.
88. Elsewhere poverty indicators are produced using either after or before housing costs income (or both). For instance the targets set out in the Child Poverty Act and the broader set of income measures in the Child Poverty Strategy are calculated on a before housing costs basis. This is because when considering the living standards of children or working age adults, measures after housing costs can underestimate the true standard of living as a family may make a choice to spend more on rent or their mortgage to attain a higher standard of living. Conversely measures for pensioners are generally on an after housing costs basis. This is because pensioners are far more likely to own their homes outright and so receive value from housing, without having to pay for rent or mortgage payments out of their current income. So for assessing pensioner poverty a before housing costs basis does not provide a good comparison of living standards. In the case of fuel poverty, which encompasses all household types, using after housing costs income is most appropriate because income spent on housing is not available to be spent on fuel.
89. One of the main impacts of this methodological change is in relation to the fuel poverty composition. Because housing costs are removed from the income calculation, those who have relatively lower housing costs (e.g. those who own their homes outright) are less likely to be fuel poor, while those with high housing costs are more likely to be fuel poor.
90. As a greater proportion of older households own their homes outright compared to other household types, the overall effect is for the proportion of pensioners in fuel poverty to decrease.

**Government intention: The methodology used to produce the fuel poverty statistics will be calculated on the basis of income after housing costs have been deducted.**

**Question 6: Do you agree that the core indicator should calculate income after housing costs have been deducted?**

## Treatment of extra costs benefits

*Hills Technical Recommendation 5:* Government should assess whether removing extra cost benefits such Disability Living Allowance from the calculation of income in the fuel poverty measurement methodology would be appropriate.

91. The Review also recommended that the same type of adjustment as is proposed for housing costs be made for the receipt of certain 'extra cost' benefits (i.e., the benefits that certain households receive in order to compensate them for additional living costs that they are required to bear). Specifically, Professor Hills recommended that the adjustment was made for those receiving disability living allowance i.e. for these households, income should also be measured after extra cost benefits have been deducted. Other benefits that could also be considered to fall into this category include Attendance Allowance (which is available to some people over 65 with a disability).
92. However this approach would move away from current Government practice in this regard, as the HBAI line does not exclude these benefits when calculating income. Standard measures of income poverty do not take account of additional costs associated with disability, which we acknowledge is likely to mean that the position of disabled people in the income distribution may be somewhat upwardly biased. Whilst it is recognised that there are additional costs associated with disability, research shows that these vary greatly in level and nature, and there is no general agreement on how to measure these costs.

**Government intention: We intend to continue to include extra costs benefits in the calculation of income.**

**Question 7: Do you agree that extra cost benefits should continue to be included in the calculation of income, in line with current Government practice?**

## Other recommendations

93. Professor Hills also made a number of technical recommendations relating to the collection and analysis of data on actual energy usage, household temperatures and energy tariffs. These are:

Hills technical recommendation 1: The Government should compare data that are due to become available in the future on actual consumption patterns in homes with modelled spending requirements for the same households in order to identify the kinds of household that are at the greatest risk of living at low temperatures and to provide information that would allow refinement of the way in which energy needs are currently modelled.

Hills technical recommendation 2: The Government should reinstate a component to its surveys that allows an up-to-date assessment of contemporary behaviour in terms of the temperatures of people's homes. The information this provides should be used in the development of the fuel poverty measurement methodology.

Hills technical recommendation 3: Once this is done the evidence of the health effects of cold temperatures should be examined to establish whether it implies the need for separate temperature standards that allow for the particular vulnerability of the elderly and infants, and of some groups affected by disability and long-term illness.

Hills technical recommendation 4: Based on data available in the future, the Government should examine the case for a more direct assessment of the tariffs actually paid by low-income households within the fuel poverty measurement methodology.

### *Actual energy usage and temperature data*

94. New data on energy use and household temperatures, especially where it can be compared with notional energy requirements at the household level, would be useful in helping to understand the nature of the fuel poverty problem. For example, it will highlight where there are groups of households that are under-consuming energy relative to their modelled requirement (and are, therefore, likely to be heating their homes to lower temperatures).
95. The Government is currently working on the collection and analysis of data on both actual energy usage and internal temperatures.

96. The Energy Follow-up Survey (EFUS), which collected data during 2011/12, used a sample of households from the English Household Survey (EHS) to get a better understanding of how energy is being used in homes. The EFUS included temperature monitoring of around 1,000 homes for a full year. This will provide information on the pattern of heating usage and the temperatures to which people heat their homes.
97. DECC has also run a successful pilot to 'match' modelled energy consumption from the EHS with a sample of metre point data for domestic properties in England. This gives a sample dataset (of around 3,100 households for electricity and 2,800 for gas) for which we are able to determine both actual and notional energy requirements.<sup>10</sup> Following this successful pilot, we are now intending on matching and analysing a larger dataset. This work is likely to take place in Autumn 2012.
98. Whilst useful in helping to deepen our understanding of the specific problem faced by fuel poor households, there will be limits to the strength of conclusion that we are able to draw from this sort of data. By way of illustration, households that are under-consuming relative to need are more likely to be living in colder dwellings and are therefore more likely to be suffering from the associated health impacts. Households that are consuming at or near their notional requirement will tend to be living in warmer homes, but it may be that they are choosing to prioritise energy expenditure over other types of consumption (e.g. food) which may result in other negative impacts on the household. We will therefore need to exercise some caution in using this type of data to support policy recommendations.

### *Energy tariffs*

99. The current fuel poverty methodology applies a series of modelled energy prices in order to calculate each household's energy costs. Collecting data on actual energy tariffs at the household level could allow for a more sophisticated measure that better reflects the costs faced by the household. If, for example, the fuel poor tend to be on the most costly energy tariffs for a particular payment type, then the current methodology will under-estimate their energy costs (and therefore their fuel poverty gaps). Having data on actual tariffs could also be useful in policy development. For example, were it to show that the fuel poor were generally on the most costly tariffs, then it may suggest that an increased focus on improving switching and customer engagement with energy markets would be an effective approach in reducing household energy costs. Some data on energy tariffs was collected as part of the interview stage of the Energy Follow-Up Survey.
100. In addition to utilising these data sources to improve our understanding of fuel poverty, we will also use these data to review aspects of the methodology such as heating duration patterns and appliance use. If the latest evidence suggests these assumptions might need

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<sup>10</sup> The results of this are available in the Annual Report of Fuel Poverty:

<http://www.decc.gov.uk/assets/decc/11/stats/fuel-poverty/5270-annual-report-fuel-poverty-stats-2012.pdf>

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changing, we will consult on this in Spring 2013. We will engage on this with relevant stakeholders through the FP methodology group and other forums in this work.

**Government intention: when the data becomes available, we will assess these technical recommendations to see whether further changes to the methodology are required.**

### 3. Implications of a change in definition for the fuel poverty target

101. In his Review, Professor Hills raises the question of how the current fuel poverty target could relate to his proposed definition. It is important to consider this relationship because using the LIHC approach makes it almost impossible to literally eradicate fuel poverty. This is because, as a consequence of the LIHC approach, half of all households will always be defined as having higher than average (median) costs and it is difficult to imagine that none of these households would be low income.
102. Adopting the LIHC definition would therefore suggest a different approach to the one used to date, which has been focussed on elimination by a specific date, so far as reasonably practicable. The framework proposed by Professor Hills reflects an understanding of the issue of fuel poverty as a structural one, which would require an ongoing effort to mitigate. Seen in this light, a target which is concerned with eradication becomes less appropriate, particularly for tracking progress in efforts to tackle the problem. This is because the headcount measure of fuel poverty is unlikely to change by a significant amount from year to year for the reasons outlined above.
103. When considering a change to the definition, it therefore seems necessary to consider whether there should be a consequent change to the formulation of the target within the Act so that it is better aligned with the proposed framing of the problem and provides a legal framework that supports long term action on this issue.
104. In making such a consideration of how any new target could be set, there appear to be two main issues:
- What form that target should take.
  - Whether and how that target is specified in legislation.

#### Form of target

105. In considering these issues, it is worth setting out the possible options for forming a target which are presented by the Low Income High Costs framework. We consider there to be three broad options for setting a target: These are setting a target in relation to:
- Option 1: The headcount indicator i.e. the total number of households who are found to be fuel poor under the Low Income High Costs approach.

- Option 2: The fuel poverty gap (the difference between a household's required energy bill and what that bill would need to be for them not to be fuel poor) consisting of either:
  - a) the total (aggregate) fuel poverty gap or
  - b) the average (individual) fuel poverty gap.
- Option 3: The ratio of the fuel poverty gap (this would be the ratio of required energy costs of fuel poor households to median required energy costs) i.e. the distribution of energy costs.

106. As Professor Hills set out in his Review, the headcount indicator of fuel poverty (option 1) is likely to remain relatively stable over time (as you would expect from a relative measure which is based on the median energy costs of all households). Setting a meaningful target in relation to the headcount is therefore problematic because it will not be possible to measure progress in addressing the problem from one year to the next. As overall standards in energy efficiency improve, for example, some households would be taken out of fuel poverty. But because the measure is a relative one, the threshold would change bringing other households into fuel poverty. It would be difficult to assess what progress was being made using the headcount approach.

107. For this reason, Professor Hills suggested that the fuel poverty gap was a more appropriate basis for target setting. Although there would always be some level of fuel poverty gap, it would be possible to reduce the size of this gap. This could be done by setting a target for reducing the total or aggregate gap (option 2a), or the individual or average gap (option 2b) to a specified level. Unlike the headcount indicator, it would be possible to discern the impact of policies to address fuel poverty and therefore possible to set targets against which progress could be measured. One concern about this approach is the role energy prices play in driving the level of the gap. This is appropriate given the importance of energy prices as a factor in the severity of the problem that households are facing. But it makes the gap very sensitive to these changes (as the current 10% definition is).

108. An approach that could allow us to understand the rate of change in the fuel poverty gap would be to consider the ratio of required energy costs of fuel poor households to what their costs would need to be in order for them not to be fuel poor (option 3). As Professor Hills set out, one of the features of fuel poverty is a household's unequal ability to convert income into warmth<sup>11</sup>. This inequality is reflected in the ratio of the fuel poverty gap and using this as an indicator would allow us to see the extent to which the energy requirements of the fuel poor are changing, compared to average households. A large ratio would imply there were many households with large gaps, whilst a ratio of one would imply no fuel poverty gap.

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<sup>11</sup> This is because of the different energy efficiency of a dwelling, or because a household may not have access to the cheapest tariffs.

109. The objective with this type of indicator would be to reduce it as much as possible. Because this indicator is a ratio it is not sensitive to energy price changes in the same way as simply looking at the fuel poverty gap (whether total or individual).

### A date for achieving the target

110. In considering a change to the form of target, we also need to consider the date by which to achieve that target. One option would be, as now, to set a specific date in the future by which progress would have been made against one of the options set out above.

111. Another approach would be a staged one, which would allow us to set a series of different targets or milestones which would measure progress over time alongside a longer-term target. This could work in the same way as carbon budgets, with a short term target being set every five years and with a requirement to set out in a strategy how the target will be met.

### Supplementary indicators

112. Alongside the main indicator for fuel poverty, it is also worth considering whether there are supplementary indicators which can assist in understanding how progress is being made either for specific groups or characteristics. These could be particularly useful if adopting a staged approach but could be used under any of the options outlined. For example, these indicators could be based on:

- The number of households that have both low income and low SAP, which would give an indicator of progress in improving energy efficiency for those on the lowest incomes.
- The number of fuel poor households that live in SAP E, F or G rated properties.
- The number of fuel poor households that live in properties with a particular characteristic (heating system or type of heating fuel, insulation etc).

113. Whilst none of these indicators by themselves can be used as the main indicator of fuel poverty, taken together alongside the dual indicators of the Low Income High Costs approach they can provide a picture of how progress is being made in specific areas. In particular it is clear that a combination of relative and absolute indicators will be needed in order to provide a complete picture of fuel poverty.

### How the target is specified

114. In thinking about whether a change to the target is required, it is also necessary to consider whether and how the primary legislation would need amending. Should any change be made to the legislation, there appear to be two main approaches that could be taken:

- 1) To change the form and date of target so that they align with the Low Income High Costs approach.
- 2) To retain a duty to act within primary legislation including setting out a strategy, and the form and date by which any target should be achieved within that strategy.

115. The first option would be similar to the current situation with the duty and type of target specified in the legislation alongside a date for meeting the target. The form or type of target would however be different from the current one, which is focused on eradication so far as reasonably practicable. Instead it would reflect one of the options for the form of target outlined in paragraph 105 above.

116. A key question within this is the setting of a target date. Having a long term target is useful to provide a framework for action and measuring progress in tackling the problem of fuel poverty. However specifying a target date can be problematic because of the lack of certainty in how key variables (e.g. energy prices) will change over time.

117. The second option would be to retain a duty to act (within the primary legislation), but specify that the strategy must indicate the form of target and date by which any target should be achieved. The strategy could also set out interim milestones, as well as any supplementary indicators which could be used alongside the main target. This approach would still require a change to the primary legislation.

*Hills recommendation 6:* The Government should use the LIHC indicator and fuel poverty gap as the basis for operational target setting. The fuel poverty gap in particular gives the best focus on the scale of the problem and progress in tackling it.

**Government intention: Given the significant change that the Low Income High Costs definition would represent, there is an opportunity to align the target with the definition to underpin a set of (long term) government objectives. However given the significance of this issue, we wish to seek stakeholders views both on whether to do so, and how to do so.**

118. Subject to the outcome of this consultation and a subsequent decision on whether any changes to the current legal framework are necessary, the Government would seek to make any changes at the earliest opportunity in order to align the form of target with any change to the definition.

**Question 8: Do you agree that we should consider changing the legislation and if so do you have a view on how and where the target should be specified?**

**Question 9: Do you have a view on the possible options for the form of target?**

## 4. A fuel poverty strategy

119. Professor Hills's independent Review offers a unique insight into our understanding of fuel poverty, highlighting the seriousness of the issue and the different perspectives from which fuel poverty should be seen as a serious social problem: health and wellbeing; poverty; and reducing carbon emissions. In our view, Professor Hills rightly argues, given the seriousness of the problem, that it is important to measure fuel poverty accurately so that we can properly understand trends, including both the depth, extent and persistence of the problem, to identify those affected, and to enable us to better design policies that are targeted at the correct households.
120. Not only does this insight help us to achieve these objectives, perhaps equally as significant, the publication of the Review presents us with an opportunity to look again at the issue of fuel poverty and reflect on how well our actions are helping to mitigate the problem.
121. We are committed to tackling the problem of fuel poverty. Between 2011-15 the Warm Home Discount scheme will be worth around £1.1bn, assisting over 2 million vulnerable and low income households each year. In addition to this, we expect the Energy Company Obligation will provide measures for 230,000 low income households a year over the next 3 years (to 2015). This consultation sets out our intention to change the fuel poverty definition, as recommended by Professor Hills, to one which we believe will help us better identify those who are affected, allowing us to focus resources where they are most needed and help in finding those who require those measures.
122. It has been over ten years since the fuel poverty strategy required by the legislation was developed and published. The strategy for meeting it was last reported on in 2009. Taking into account the implications of a new definition and the changing landscape, we believe it is necessary to take this opportunity to revisit the Fuel Poverty Strategy. In particular, as discussed in section 3 of this consultation, any change to the definition will also affect the composition of households found to be fuel poor, which potentially has implications for who we target with our fuel poverty policies. Over the course of the next few months we will therefore examine our current policy package to understand how it fits with our new fuel poverty definition and in contributing to our fuel poverty goals.

*Recommendation 7:* The Government – not just DECC but also other Departments– should set out a renewed and ambitious strategy for tackling fuel poverty, reflecting the challenges we lay out in this report and the framework we have set out for understanding them.

**Government intention: In the new year the Government will set out a new fuel poverty strategy, reflecting a revised definition of fuel poverty.**

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## Annex A: Terms of reference for John Hills's Review of fuel poverty

The terms of reference for the review were:

- 1) To consider fuel poverty from first principles: to determine the nature of the issues at its core, including the extent to which fuel poverty is distinct from poverty, and the detriment it causes.
- 2) As appropriate and subject to the findings under (1), to develop possible formulations for a future definition and any associated form of target, which would best contribute to:
  - a. Addressing the underlying causes identified;
  - b. Helping Government focus its resources (which are set out in the Spending Review for the period to 2014-15) and policies on those who need most support;
  - c. Measuring the cost-effectiveness of different interventions in contributing to progress towards any target; and
  - d. Developing practical solutions, particularly around identification and targeting of households and measuring progress resulting from Government action.

The review is independent of Government. The review relates only to fuel poverty as regards England.

## Annex B: Hills Fuel Poverty Review list of recommendations

### Key Recommendations

Recommendation 1: The Government should change its approach to fuel poverty measurement away from the current '10 per cent' ratio indicator.

Recommendation 2: The Government should adopt a new indicator of the extent of fuel poverty under which 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.

The Government should count the number of individuals in this position as well as the number of households they live in.

Recommendation 3: The Government should adopt a new indicator of the depth of fuel poverty as represented by the average and aggregate 'fuel poverty gap', defined as the amounts by which the assessed energy needs of fuel poor households exceed the threshold for reasonable costs.

Recommendation 4: The Government should measure incomes for fuel poverty purposes after housing costs and adjusted for household size and composition. The threshold should be set at 60 per cent of median income plus calculated household energy requirements.

Recommendation 5: The Government should set the reasonable costs threshold at the level of the contemporary median energy requirements for the population as a whole. The modelled bills for individual households should be adjusted for household size and composition – using a specific set of adjustment factors - when comparing them to this threshold.

Recommendation 6: The Government should use the LIHC indicator and fuel poverty gap as the basis for operational target setting. The fuel poverty gap in particular gives the best focus on the scale of the problem and progress in tackling it.

Recommendation 7: The Government – not just DECC but also other Departments– should set out a renewed and ambitious strategy for tackling fuel poverty, reflecting the challenges we lay out in this report and the framework we have set out for understanding them.

### Technical Recommendations

Technical Recommendation 1: The Government should compare data on actual consumption patterns in homes that are due to become available in future with modelled spending requirements for the same households in order to identify the kinds of household that are at

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greatest risk of living at low temperatures and to provide information that would allow refinement of the way in which energy needs are currently modelled.

Technical Recommendation 2: The Government should reinstate a component to its surveys that allows an up-to-date assessment of contemporary behaviour in terms of the temperatures of people's homes. The information this provides should be used in the development of the fuel poverty measurement methodology.

Technical Recommendation 3: Once this is done the evidence of the health effects of cold temperatures should be examined to establish whether it implies the need for separate temperature standards that allow for the particular vulnerability of the elderly and infants, and of some groups affected by disability and long-term illness.

Technical Recommendation 4: Based on data available in future, the Government should examine the case for a more direct assessment of the tariffs actually paid by low-income households within the fuel poverty measurement methodology.

Technical Recommendation 5: Government should assess whether removing extra cost benefits such Disability Living Allowance from the calculation of income in the fuel poverty measurement methodology would be appropriate.

## Annex C: Composition of fuel poverty under both the current (10%) definition and the proposed new definition

Changing the definition will impact upon the number of households that are considered to be suffering from the problem of fuel poverty and will change the composition of those households.

One of the most significant impacts of moving to the LIHC indicator is on the composition of the fuel poor by household type. Table x compares how the households captured by current 10 percent and LIHC indicators in 2010 breaks down across household types.

*Table A.1: breakdown of fuel poor under 10 percent and LIHC definition by household type*

|  | 10 per cent<br>indicator<br>of fuel poverty<br>(%) | LIHC<br>indicator<br>of fuel<br>poverty<br>(%) |
|--|--|--|
| Couple with dependent child(ren)                   | 8.5  | 23.8   |
| Couple, no dependent child(ren) aged<br>60 or over | 18.9   | 14.5   |
| Couple, no dependent child(ren) under<br>60        | 6.4  | 8.7  |
| Lone parent with dependent child(ren)              | 8.9  | 19.8   |
| One person aged 60 or over                         | 31.1   | 10.7   |
| One person under 60                                | 19.6   | 13.7   |
| Other multi-person households                      | 6.6  | 8.7  |

Moving to the LIHC definition increases the share of families and reduces the share of single person households that are classified as fuel poor. This shift in the composition is largely driven by the equivalisation of household incomes under the LIHC indicator, with a smaller effect from the equivalisation of energy costs. As discussed in section 2.3, the use of equivalisation factors adjusts household incomes according to household composition in order to give a better sense of the standard of living of a particular household (based on the rationale that a larger households will require more income than a smaller household to enjoy a comparable standard of living). The equivalisation of incomes will therefore increase the likelihood of a multi-person household falling below the income threshold in the LIHC indicator and being in fuel poverty (and, conversely, will decrease the likelihood of a single person household being in fuel poverty).

These compositional changes also partly reflect the proposed move to an after housing costs measure of income. As discussed in section 2.3, moving to after housing costs income will mean that households that have low or zero housing costs will be less likely to fall below the low income threshold. This means that households that people that own their house outright – a large proportion of whom are pensioners - are less likely to be fuel poor under the revised approach.

The change to an after housing costs approach also has implications for the composition of fuel poor by region. Table A.1 sets out the regional breakdown of fuel poor households in 2010 under the LIHC and 10 percent indicators. As we might expect, the move to an after housing costs

measure of income increases the proportion of fuel poor households in regions where housing is on average more costly (e.g., London).

*Table A.2: breakdown of fuel poor under 10 percent and LIHC definition by region*

|                          | 10 per cent<br>indicator<br>of fuel poverty<br>(%) | LIHC<br>indicator<br>of fuel<br>poverty<br>(%) |
|--------------------------|--|--|
| East England             | 10.8   | 10.8   |
| East Midlands            | 9.7  | 10.3   |
| London                   | 9.4  | 14.1   |
| North East               | 6.7  | 6.4  |
| North West               | 17.0   | 15.5   |
| South East               | 11.3   | 11.0   |
| South West               | 9.7  | 9.7  |
| West Midlands            | 13.7   | 12.5   |
| Yorkshire and the Humber | 11.7   | 9.7  |

As we have previously argued, one of the strengths of the framework put forward by Professor Hills is that it allows – through the use of the fuel poverty gap - a better understanding of the extent to which households are suffering the problem of fuel poverty. By allowing for a detailed breakdown of the characteristics of the fuel poor, it may be possible we will be able to focus support on those who are suffering the greatest problem (i.e. those with the largest fuel poverty gaps).

By way of illustration, table A.2 shows the proportion of households captured by the LIHC indicator in 2010 broken down by household SAP rating (as an indication of energy efficiency) and also shows the proportion of the aggregate fuel poverty gaps associated with each group. The data shows the greatest proportion of the aggregate fuel poverty gap is accounted for by the households in the least efficient dwellings (particularly the F and G-rated properties).

*Table A.3: breakdown of fuel poor under 10 percent and LIHC definition by household energy efficiency rating (SAP 2009<sup>12</sup>)*

|  | 10 per cent<br>indicator<br>of fuel poverty<br>(%) | LIHC<br>indicator<br>of fuel<br>poverty<br>(%) | Total<br>fuel<br>poverty<br>gap<br>(£mn) |
|--|--|--|--|
|--|--|--|--|

<sup>12</sup> The Review calculated the fuel poverty gap based on SAP 05 data, but these numbers use SAP 09 data that has become available since the Review was published.

|        |      |      |     |
|--------|------|------|-----|
| B or C | 3.1  | 1.8  | 16  |
| D      | 29.9 | 30.3 | 188 |
| E      | 41.6 | 47.8 | 456 |
| F      | 17.4 | 14.7 | 275 |
| G      | 8.0  | 5.3  | 171 |

There are many other characteristics – both of the dwelling and the householder – that directly or indirectly contribute to the likelihood that a household is fuel poor under the LIHC indicator. A selection of these are:

**Tenure:** while owner occupiers represent the majority of fuel poor households, it is clear that they are under-represented with the group of fuel poor households compared to the population as a whole – i.e. owner occupiers make up 52 percent of fuel poor households compared to 67 percent of all households. Households in the private rented sector are over-represented – they make up 28 percent of the fuel poor compared to 16 percent of all households.

**Heating fuel:** households that are not connected to the gas grid tend to face higher energy prices and are therefore more likely to be fuel poor compared to households that have gas central heating. This is reflected in the fuel poverty statistics where off-grid households are over-represented in the population of fuel poor households - off-grid households make up 15 percent of the fuel poor compared to 13 percent of all households.

**Rural-urban split:** around one-fifth of fuel poor households under the LIHC indicator are in rural areas, which is broadly the same as the share of rural households with the population.

Figures showing the breakdown of the fuel poor under the LIHC indicator according to these characteristics (and selected others) can be found below.

### Detailed breakdown of households captured by the LIHC indicator in 2010

#### Tenure - LIHC indicator

|                       | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|-----------------------|---|---|
| Private rented sector | 22.1  | 28.2  |
| Owner occupiers       | 9.6   | 52.1  |
| Social sector         | 14.3  | 19.8  |

#### Vulnerability - LIHC indicator

|  | Proportion of households in this group that are in | Proportion of all fuel poor households that are in |
|--|--|--|
|  |  |  |

|                | fuel poverty (%) | this group (%) |
|----------------|------------------|----------------|
| Not Vulnerable | 9.0              | 20.1           |
| Vulnerable     | 13.6             | 79.9           |

### Income decile group - LIHC indicator (After Housing Costs equivalised income)

|   | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|---|---|---|
| 1 <sup>st</sup> decile group - lowest income                    | 44.6  | 36.2  |
| 2 <sup>nd</sup> decile group                                    | 44.0  | 35.6  |
| 3 <sup>rd</sup> decile group                                    | 33.3  | 27.0  |
| 4 <sup>th</sup> decile group                                    | *   | *   |
| 5 <sup>th</sup> decile group                                    | 0.0   | 0.0   |
| 6 <sup>th</sup> -10 <sup>th</sup> decile group - highest income | 0.0   | 0.0   |

\*Data suppressed due to small sample size.

### Dwelling type - LIHC indicator

|  | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|--|---|---|
| converted flat and non-residential purpose built | 15.4  | 5.0   |
| mid terrace                                      | 4.2   | 5.0   |
| end terrace                                      | 13.6  | 20.8  |
| semi detached                                    | 18.8  | 16.2  |
| detached   | 14.6  | 34.7  |
|  | 10.1  | 18.3  |

### Central heating and main fuel type - LIHC indicator

|     | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|-----|---|---|
| Gas | 11.6  | 77.7  |

|                    |      |     |
|--------------------|------|-----|
| Oil                | 12.1 | 4.1 |
| Solid              | 34.7 | 2.0 |
| Electricity        | 13.5 | 7.6 |
| Other              | 12.4 | 2.4 |
| No central heating | 27.2 | 6.2 |

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#### Rural-Urban split - LIHC indicator

|       | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|-------|---|---|
| Rural | 11.8  | 18.5  |
| Urban | 12.5  | 81.5  |

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#### Wall type - LIHC indicator

|                        | Proportion of households in this group that are in fuel poverty (%) | Proportion of all fuel poor households that are in this group (%) |
|------------------------|---|---|
| Cavity uninsulated     | 12.3  | 32.0  |
| Cavity with insulation | 7.4   | 22.7  |
| Other                  | 18.6  | 45.4  |

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## Annex D: The Warm Homes and Energy Conservation Act

An Act to require the Secretary of State to publish and implement a strategy for reducing fuel poverty; to require the setting of targets for the implementation of that strategy; and for connected purposes.

[23rd November 2000]

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

### 1 Meaning of "fuel poverty"

(1) For the purposes of this Act, a person is to be regarded as living "in fuel poverty" if he is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost.

(2) The Secretary of State (as respects England) or the National Assembly for Wales (as respects Wales) may by regulations—

(a) specify what is to be regarded for the purposes of subsection (1) as a lower income or a reasonable cost or the circumstances in which a home is to be regarded for those purposes as being warm, or

(b) substitute for the definition in subsection (1) such other definition as may be specified in the regulations.

(3) Before making regulations under subsection (2), the Secretary of State or the National Assembly for Wales shall consult—

(a) persons appearing to the Secretary of State or the Assembly to represent the interests of persons living in fuel poverty, and

(b) such other persons as the Secretary of State or the Assembly thinks fit.

(4) Regulations under subsection (2) shall be made by statutory instrument; and a statutory instrument containing such regulations made by the Secretary of State shall be subject to annulment in pursuance of a resolution of either House of Parliament.

### 2 Strategy relating to fuel poverty

(1) It shall be the duty of the appropriate authority to prepare and publish, before the end of the period of twelve months beginning with the relevant commencement, a strategy setting out the authority's policies for ensuring, by means including the taking of measures to ensure the efficient use of energy, that as far as reasonably practicable persons do not live in fuel poverty.

(2) The strategy must—

(a) describe the households to which it applies,

(b) specify a comprehensive package of measures for ensuring the efficient use of energy, such as the installation of appropriate equipment or insulation,

(c) specify interim objectives to be achieved and target dates for achieving them, and

(d) specify a target date for achieving the objective of ensuring that as far as reasonably practicable persons in England or Wales do not live in fuel poverty.

(3) The target date specified under subsection (2)(d) must be not more than fifteen years after the date on which the strategy is published.

(4) In preparing the strategy or any revision of the strategy, the appropriate authority shall consult—

(a) local authorities or associations of local authorities,

(b) persons appearing to the appropriate authority to represent the interests of persons living in fuel poverty,

(c) the Gas and Electricity Markets Authority and the Gas and Electricity Consumer Council, and

(d) such other persons as the appropriate authority thinks fit.

(5) The appropriate authority shall take such steps as are in its opinion necessary to implement the strategy.

(6) The appropriate authority shall—

(a) from time to time assess the impact of steps taken under subsection (5) and the progress made in achieving the objectives and meeting the target dates,

(b) make any revision of the strategy which the authority considers appropriate in consequence of the assessment,

(c) from time to time publish reports on such assessments.

(7) If the appropriate authority revises the strategy, it shall publish the strategy as revised.

(8) In this section—

“the appropriate authority” means—

(a) as respects England, the Secretary of State, and

(b) as respects Wales, the National Assembly for Wales;

“the relevant commencement” means—

(a) as respects England, the day on which this Act is passed, and

(b) as respects Wales, the day on which this section comes into force as respects Wales.

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(9) In relation to any time before the commencement of section 3(1) of the Utilities Act 2000, the reference in subsection (4)(c) to the M1Gas and Electricity Markets Authority and the Gas and Electricity Consumer Council shall have effect as a reference to the Director General of Gas Supply and the Director General of Electricity Supply.

### 3 Expenses

There shall be paid out of money provided by Parliament—

- (a) any expenses of the Secretary of State under this Act; and
- (b) any increase attributable to this Act in the sums payable under any other Act.

### 4 Interpretation, short title, commencement and extent.

- (1) In this Act “local authority” means—
  - (a) in relation to England, the council of a county, district or London borough, the Common Council of the City of London or the Council of the Isles of Scilly, and
  - (b) in relation to Wales, the council of a county or county borough.
- (2) This Act may be cited as the Warm Homes and Energy Conservation Act 2000.
- (3) Section 2 shall not come into force as respects Wales until such day as the National Assembly for Wales may by order made by statutory instrument appoint.
- (4) This Act extends to England and Wales only.



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