

Seven steps to reducing
energy bills
how greater ambition on
home energy efficiency
can bring down the cost
of living



“green
alliance...”

The current debate about social and environmental levies on energy bills ignores the potential for improved energy efficiency to bring down the cost of living and tackle climate change.

Politicians should be focused on increasing the numbers of energy efficient homes, rather than debating the cost of protecting the most vulnerable against energy price rises.

We make the case here for simple, focused policy changes which could significantly increase consumer action on retrofit, and deliver substantial energy bill reductions.

What is the problem?

High energy bills are the top consumer concern

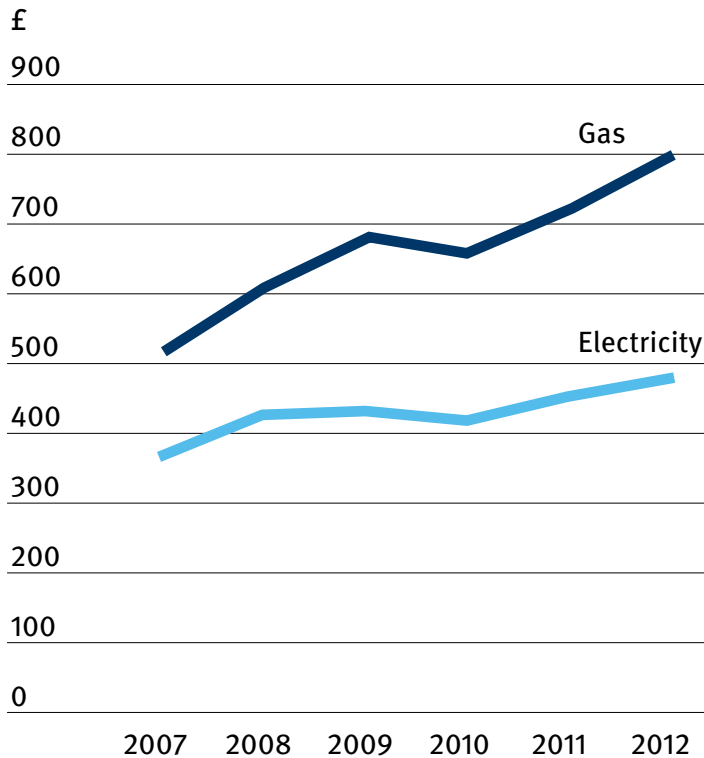
Energy bills are the household expense that most concerns UK consumers. In 2012-13 the average household spent £1,267 on energy.

This financial burden will increase significantly in the coming years, driven by rising energy costs. Price increases by energy companies during October 2013 mean that average annual bills will rise to almost £1,500.

Fuel poverty is becoming more acute, with low income households disproportionately impacted by rising energy costs. According to government figures, in 2011 there were 569,000 households which spent more than 20 per cent of their income on energy. With an average income of £6,338, they face energy costs of £1,983.

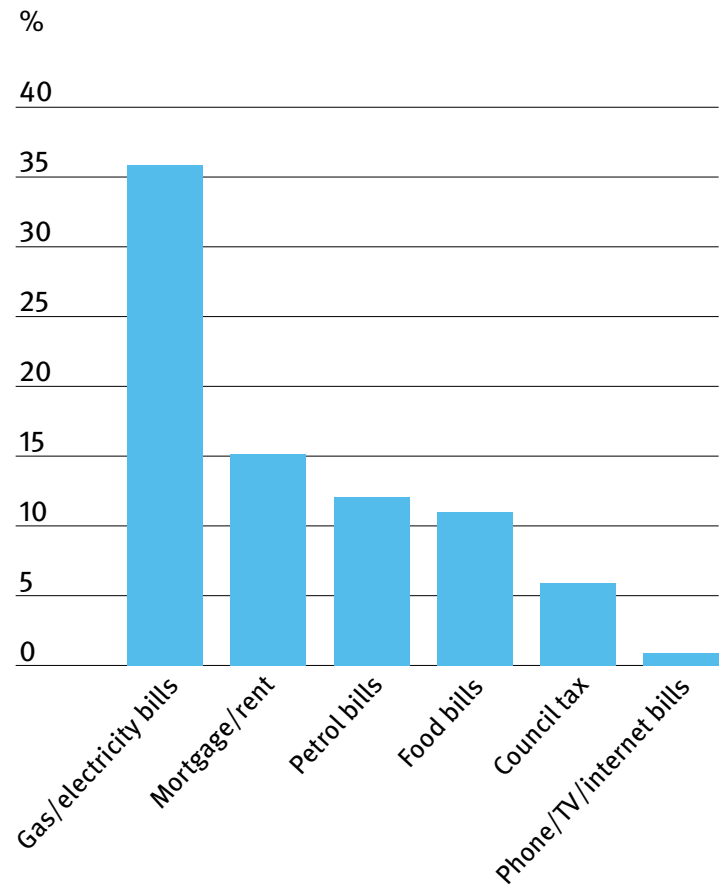
The cost of energy is rising and consumers are worried

Average UK annual domestic standard electricity and gas bills 2007-12



Responses to the question:

“Thinking about your household spending, which one, if any, of the following costs are you currently most worried about?”



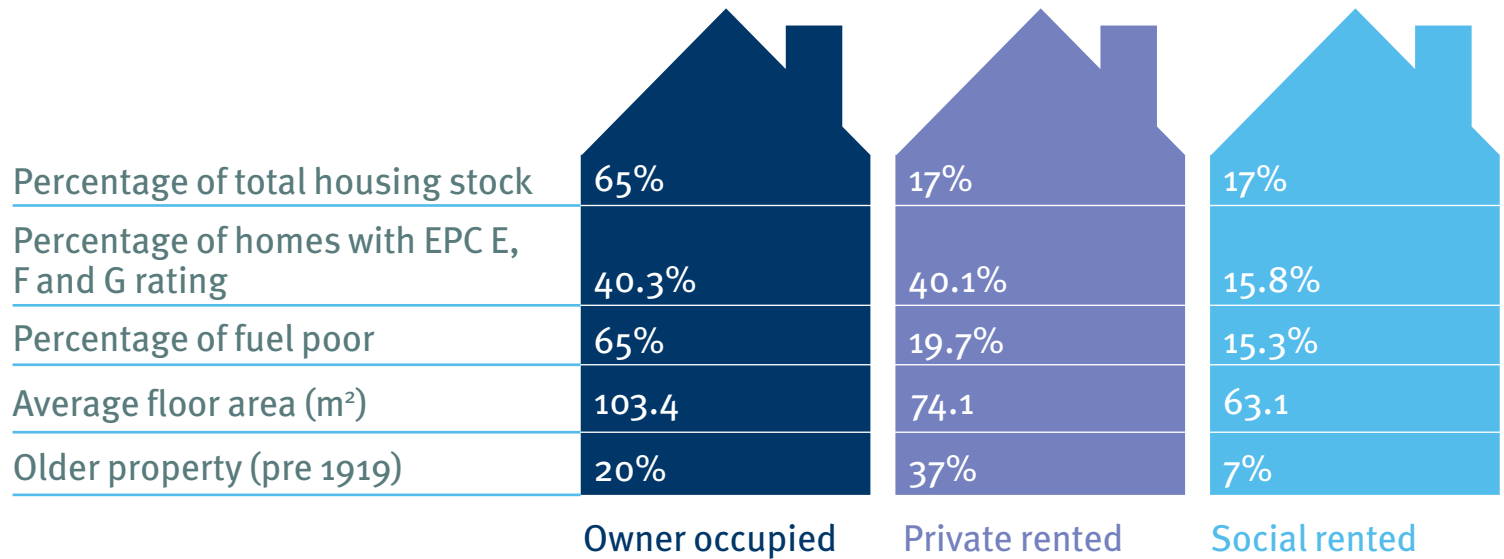
Poor energy efficiency causes high energy bills

The UK's housing stock has extremely poor energy efficiency. More than one in three homes are in the worst performing E, F and G Energy Performance Certificate (EPC) bands.

The least energy efficient homes are privately owned, and these properties tend to be larger and older than social housing. However, fuel poverty is found across all tenures.

Basic energy efficiency improvements will result in significant energy bill savings for all households.

What's the potential?



Potential annual savings from simple measures

Loft insulation: **£180**

Cavity wall insulation: **£140**

Solid wall insulation: **£460** (internal) and **£490** (external)

The government relies on consumer demand for energy efficiency retrofit to bring bills down

The government wants to improve 14 million homes for energy efficiency by 2020, with the Green Deal as the principal tool.

Policy focuses on encouraging householders to retrofit their homes. Minimum standards apply to the social housing sector and have been proposed for private rented properties, but no standards exist for owner occupiers, who make up 65 per cent of the housing market.

Funding, via the Energy Company Obligation (ECO), is available for expensive measures and low income or vulnerable householders. However, the government is clear that significant public subsidy will not be made available to support retrofit. By contrast, the German development bank KfW receives a €1.5 billion a year subsidy from the government for cheap energy efficiency loans.

Existing UK government home energy efficiency initiatives

Green Deal

A loan scheme to fund energy efficiency improvements. Loans are attached to properties rather than individuals, so the current occupant is responsible for repayments, and are repaid via electricity bills.

Energy Company Obligation (ECO)

A levy on consumer energy bills to subsidise high cost measures and improvements for low income or vulnerable households.

Decent Homes standard

Sets minimum heating requirements for social housing.

Minimum Energy Efficiency standard

Set through the 2011 Energy Act, this will apply to private rented accommodation.

From 2016: landlords will be unable to refuse reasonable requests from tenants to improve energy efficiency.

From 2018: properties with an EPC rating of F or G will be barred from the rental market.

But consumer demand for retrofit is low

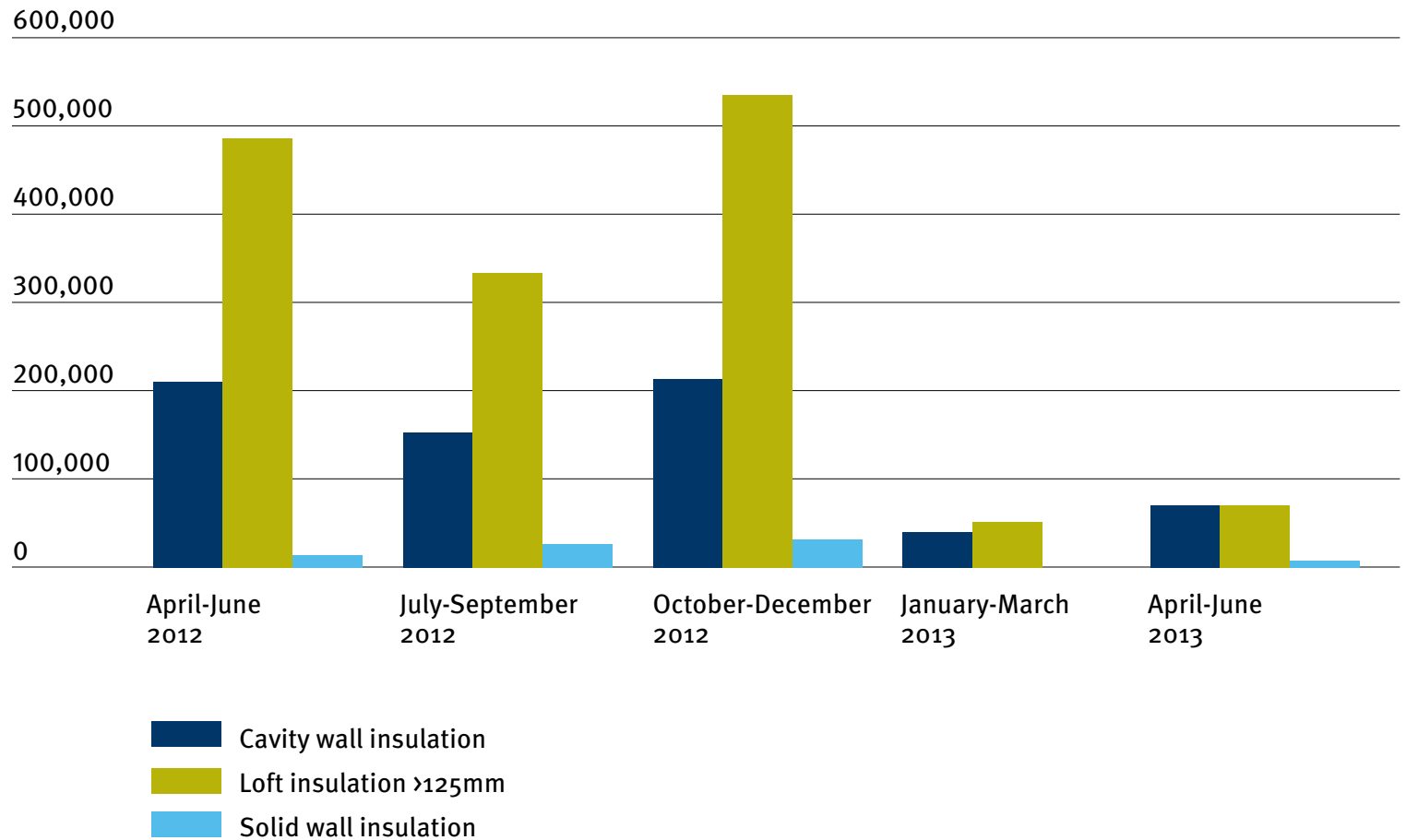
Understanding of how energy efficiency improvements can reduce energy bills is very low among consumers, who have been encouraged to focus on energy company profiteering.

Most retrofit activity in the UK has been driven by subsidy. There has been a sharp drop in activity following the ending of the previous government schemes, CERT and CESP, in 2012 and the introduction of the Green Deal and ECO in 2013.

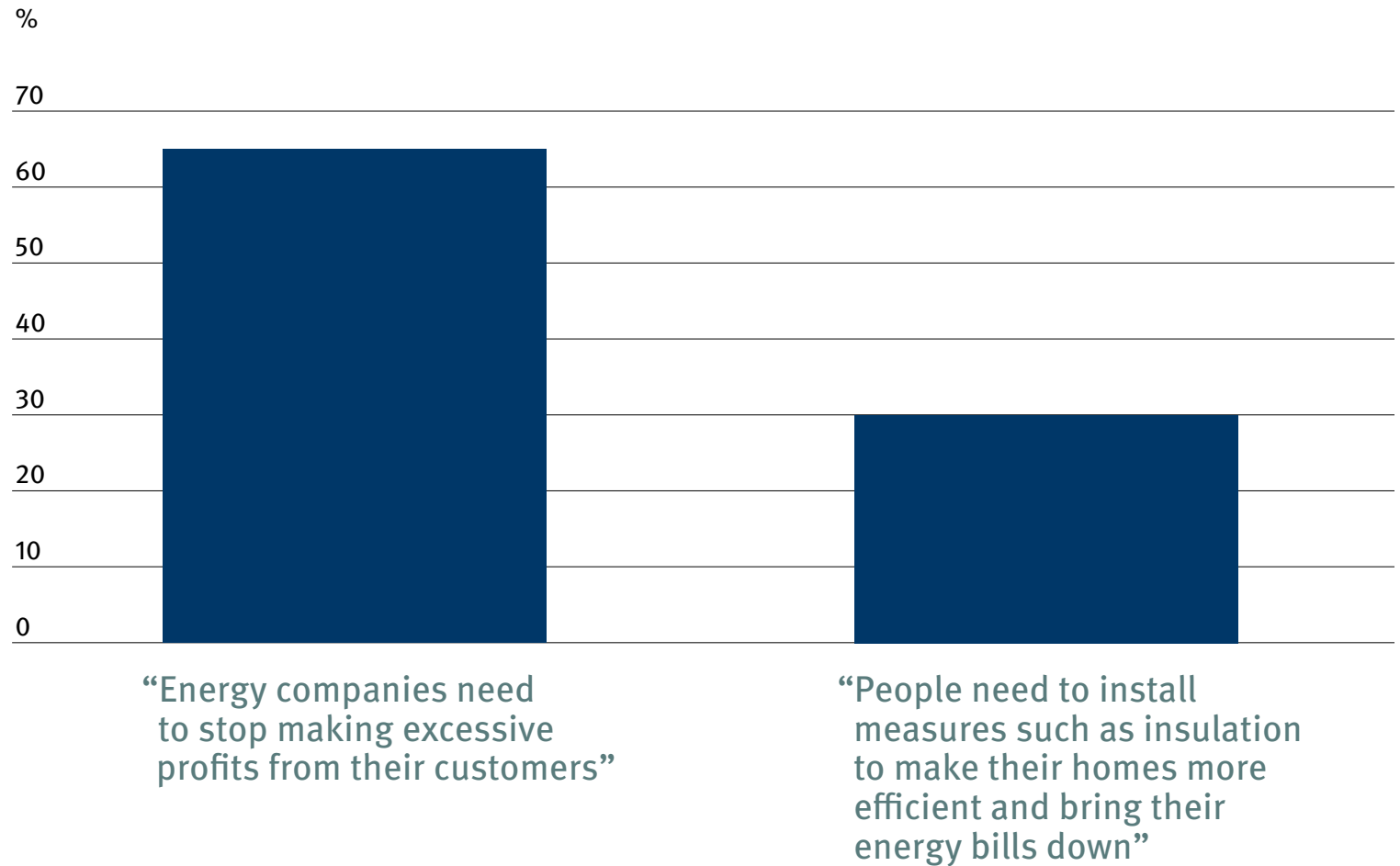
Initial uptake of the Green Deal has been extremely low, reinforcing fears that the market will develop too slowly to benefit significant numbers of households.

The falling rate of insulation installations

Household insulation installations 2012 and 2013



How consumers think energy bills should be reduced



The UK's massive potential for home retrofit isn't being realised

There is still considerable potential for easy tasks such as loft insulation. Nearly a third of UK lofts are under-insulated.

The greatest potential for energy bill reductions lies in expensive measures such as solid wall insulation or more complex retrofits that make multiple improvements to a property. Very little is being achieved in these areas.

In an environment of low consumer demand, industry will struggle to deliver retrofit at significant scale. 5,504 insulation installers lost their jobs during the first six months of 2013.

Insulation in numbers

Easy wins

6.4 million

700,000 easy-to-treat cavity walls and 5.7 million lofts in the UK that still need insulating

£2.06 billion

Cost of installing these measures

230,000

Loft and cavity wall insulation installed during first six months of 2013

24 years

The time it will take to insulate the remainder at this rate of progress

More complex operations

7.7 million

Solid walls in the UK that remain to be insulated

£77 billion

Cost of installing these measures

5,000

Solid wall insulation installed during first six months of 2013

770 years

The time it will take to insulate the remainder at this rate of progress

How is retrofit currently
being delivered?

Some local programmes are in place but they are patchy and under-powered

There are pockets of energy efficiency retrofit activity at a significant scale around the country, mostly driven by local authorities or social landlords.

Some innovative delivery models are being trialled, involving public, private and charitable partners.

But the impact of these existing schemes is likely to be small, as they only reach limited numbers of properties.

Scheme	Target number of retrofits	Timescale
Birmingham Energy Savers	60,000	2013-20
Warm Up North	50,000	2013-18
Sussex Energy Saving Partnership	17,000	2014-17
Leeds City Region Green Deal	12,000	2014 onwards

ECO aims to spur the market

The Energy Company Obligation (ECO) is the principal government funding mechanism for energy efficiency, supported by a £200 million Green Deal support fund during 2013-14.

The government has estimated it will cost £1.3 billion per year to deliver ECO. The largest proportion of this (c£760 million) will go to reducing the cost of expensive measures such as solid wall insulation. The remainder will go towards retrofit measures for low income or vulnerable households.

ECO is intended to work alongside Green Deal loans and other sources of borrowing to part finance retrofit wherever possible. In this way, the government believes the costs of meeting carbon targets will be kept as low as possible.

How ECO works

The biggest energy companies have responsibility for meeting set targets, recouping the cost of doing so via consumer energy bills.

ECO strand	Target and cost	What it delivers
Carbon Emissions Reduction Obligation Available to all households, supporting solid wall insulation, hard to treat cavity wall insulation and other heat loss reducing measures delivered alongside them.	Target: 20.9 MtCO ₂ reduction in lifetime carbon emissions. Projected annual cost: £760 million	Reduces cost to householders of expensive retrofit measures
Carbon Saving Community Obligation Supports full range of insulation measures for all households in areas selected using Indices of Multiple Deprivation.	Target: 6.8 MtCO ₂ reduction in lifetime carbon emissions Projected annual cost: £190million	Area based programmes targeting low income and hard to reach communities
Carbon Saving Community Obligation: rural and low income areas Supports full range of insulation measures for low income households in rural areas.	15% must go to rural and low income obligation	Reduces heating costs for low income and vulnerable individuals
Home Heating Cost Reduction Obligation (Affordable Warmth) Supports any measure that lowers heating costs for low income private households (ie in receipt of certain benefits).	Target: £4.2 billion reduction in estimated lifetime space and water heating costs. Projected annual cost: £350 million	

ECO is under pressure

The vast majority of retrofits carried out in 2013 have been funded by ECO: just over 300,000 measures by 30 September. By contrast, just 481 measures have been installed using Green Deal loan finance.

To date only £2.1 million has been claimed from a potential Green Deal cashback pot of £125 million and 95 per cent of the vouchers have been for boiler replacements.

If ECO is used as the main way to pay for measures installed in private homes, the cost of delivering it will spiral beyond DECC's £1.3 billion estimate.

There has been poor progress on more complex measures

To date ECO has mainly paid for straightforward measures such as loft insulation and boiler replacements. Little progress has been made in more complex and expensive areas such as insulating hard to treat cavity walls or solid walls.

ECO progress after nine months (a third of the way through)



■ DECC's estimate of measures necessary to meet 2015 ECO targets

■ Installed under ECO 30 September 2013

Continued funding support for energy efficiency is essential

While public demand for energy efficiency remains low, continued funding support is essential. There is pressure on the government to cut the cost of ECO. While a range of options exist for delivering it more cheaply, reducing short term cost at the expense of long term effectiveness would be counter productive.

There are several possibilities for how retrofit support could be funded. Currently, it is a levy on consumer energy bills. But ECO could be paid for from general taxation, shifting the burden from bill payers to taxpayers. Alternatively, funding retrofit programmes using revenues from the Carbon Price Floor and the Emissions Trading Scheme, as has been advocated by the Energy Bill Revolution, would enable ambitious programmes that do not require additional funding from consumer bills.

Reforms are possible to the current scheme that would maintain its two main benefits: to make expensive measures more cost effective; and to help low income and vulnerable householders improve their energy efficiency.

Why aren't energy efficiency policies working?

The government doesn't accept that it needs to generate more consumer demand

The Green Deal is primarily an enabling mechanism to ensure retrofit can be paid for at no up front cost to householders.

Research shows that there are numerous inter-related barriers preventing consumers taking up energy efficiency measures. But the Green Deal only addresses one: access to finance.

International analysis demonstrates that voluntary retrofit programmes lead to low levels of take up. The government has nevertheless been clear that it will not support the Green Deal with additional measures.

The government isn't listening to its own insights

The government's Behavioural Insights Team has identified three characteristics of home energy use which policy needs to overcome:

Social norms

Individuals are heavily influenced by what those around them do, meaning they will not seek out energy efficient options when no-one else is.

Discounting the future

People 'discount' the future and focus on the short term, preferring a smaller reward today than a larger reward over a longer period of time.

Sticking to defaults

People tend to go with the flow of preset options, or defaults, rather than seeking out alternatives that could save them money. So they are more likely to stick with the current efficiency level of their home.

The government has no mechanism in place to mobilise local delivery

The government has recognised the importance of local delivery in successful retrofit programmes. The funding made available by DECC to launch the Green Deal was structured to encourage delivery partnerships between local authorities and charities.

The government has also issued guidance under the Home Energy Conservation Act (HECA) requiring local authorities to identify and report on cost effective residential energy efficiency improvements and potential delivery partnerships.

Severe cuts in local authority budgets have made delivery of statutory responsibilities highly challenging. Local authorities have no strong mandate or funding for energy efficiency, meaning most do not make it a priority.

Why local schemes work

The government's previous energy efficiency scheme, CERT, highlighted the effectiveness of area-based activity with prominent local authority involvement, because:

It helped to create new social norms.

Word-of-mouth provided reassurance and peer pressure.

Local authority endorsement established credibility and increased uptake.

2012 Home Energy Conservation Act requires local authorities to report on:

- 1. Local energy efficiency ambitions and priorities.**
- 2. Local programmes that take advantage of central government finance schemes to improve residential energy efficiency.**
- 3. Cost effective measures being undertaken to deliver street by street retrofit in partnership with local organisations.**
- 4. Time frame for delivery and delivery partners.**

What would a more
effective energy efficiency
policy look like?

Seven steps to build consumer demand and scale up local delivery



Step 1

Politicians need to give industry and consumers the confidence to invest in energy efficiency

Delivering 14 million retrofits by 2020 needs a major overhaul of Britain's infrastructure. Yet the government is relying on a retrofit market to mushroom in an environment of limited householder demand and weak policies.

Significant industry investment will be required to build consumer demand and drive down retrofit costs. This investment will be inhibited if political commitment to the Green Deal and ECO is not reinforced.

Enabling development of a retrofit market will require political leaders to make the case for public action on energy efficiency. Policy continuity will also be essential to give industry confidence in the long term. At a minimum this should mean retaining a pay-as-you-save mechanism supported by targeted subsidy.

Step 1

Action

All parties should publicly make the case for energy efficiency as the best way to reduce bills and commit to ambitious policies for delivery.

Increase demand at the
national level

Step 2

Ensure owner occupiers are acting

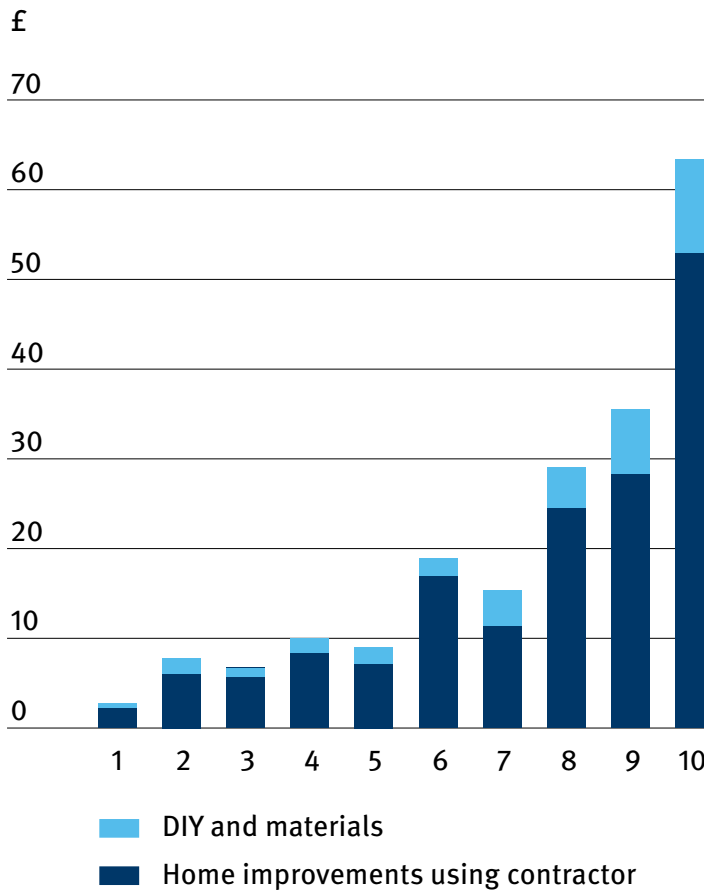
Owner occupiers represent the largest tenure (65 per cent of homes) with the worst average home energy performance. Proposals have been previously considered by government to introduce an energy performance (consequential improvement) requirement via the building regulations.

This approach would require householders to make energy efficiency improvements during renovation projects, up to ten per cent of the project's value. It has been effective in a scheme by Conservative-led Uttlesford District Council, which has enforced a similar requirement via the planning process since 2006.

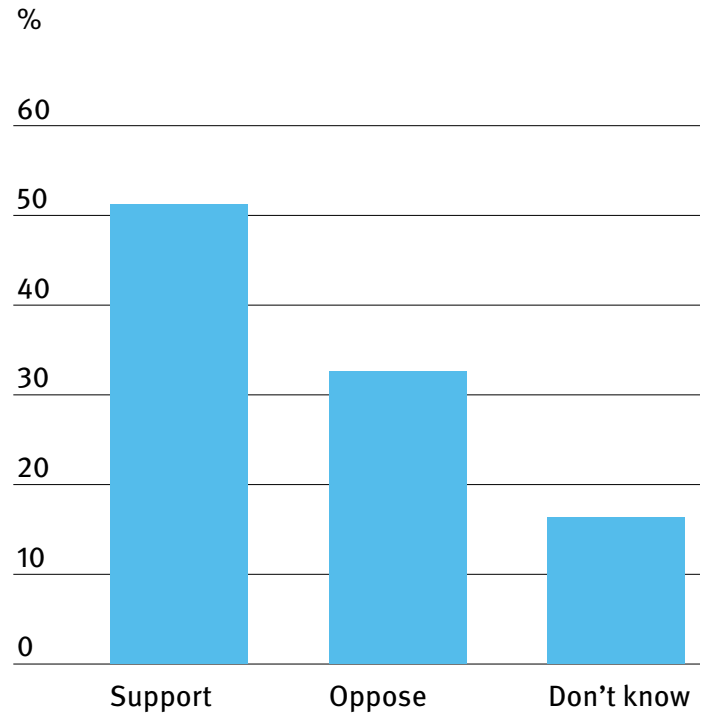
Householders are continuing to invest in renovation, demonstrating existence of a significant able-to-pay market. Energy Saving Trust research indicates that this approach could reach nearly four million households over three years. Independent polling also demonstrates support for an energy efficiency requirement from a majority of householders.

Householder support and the power to act

2011 UK weekly spend on home alterations and improvements by gross income decile



Householder support for an energy efficiency requirement during renovation projects



Step 2

Action

The government should require owner occupiers to improve energy efficiency when renovating their homes.

Step 3

Create more stringent obligations for private landlords

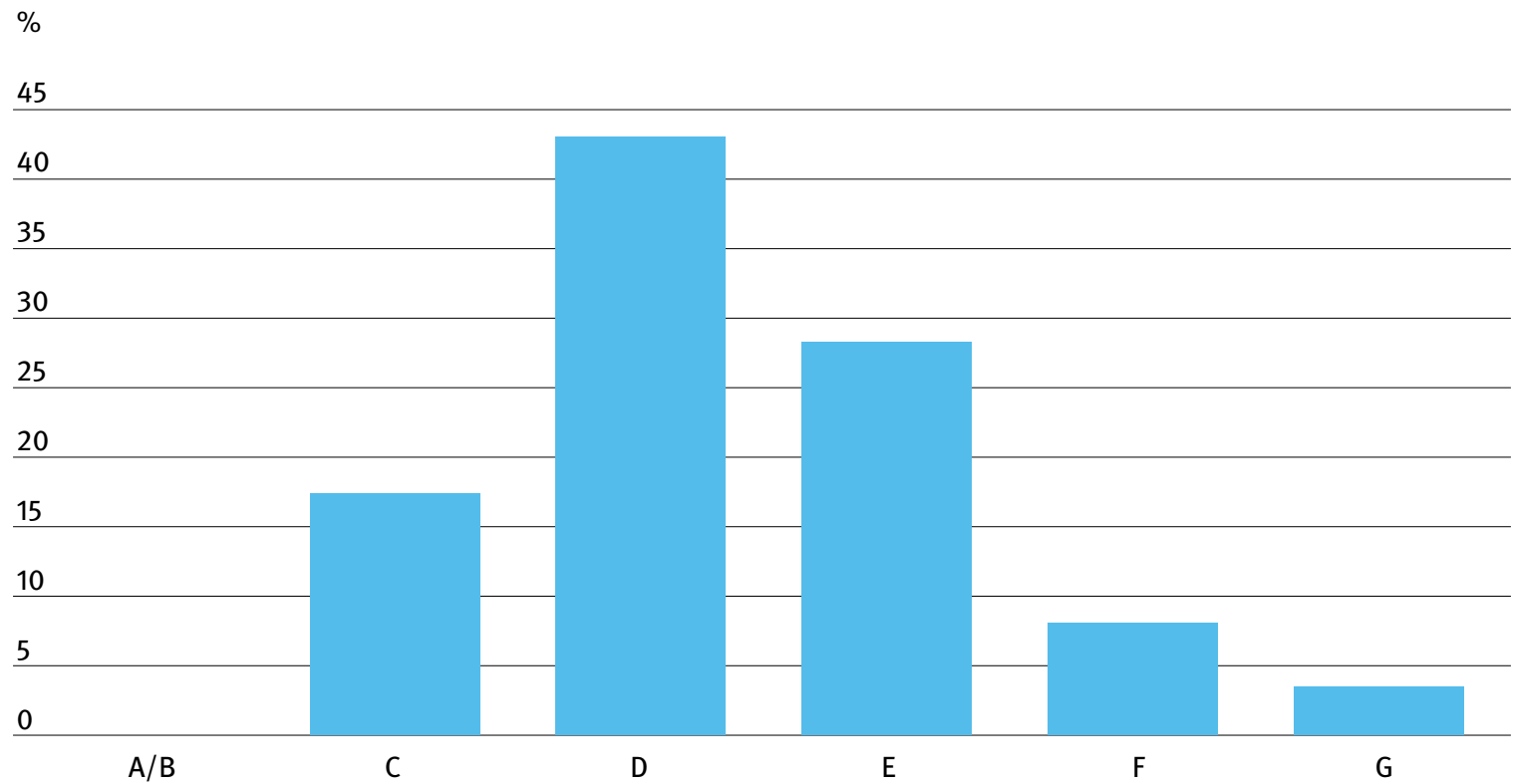
The 2011 Energy Act contains provision for Minimum Energy Efficiency standards for private rented homes, but impacts are likely to be limited.

From 2016 no reasonable energy efficiency request from tenants can be refused. Yet the short tenure of many renters (32 per cent of private renters have lived at their current address for less than one year) will make enforcement complicated.

From 2018 all rented stock must be rated at least an EPC E. This will not influence the vast majority of properties: nearly 90 per cent of private rented stock is already EPC E or above. Setting a clear expectation that these requirements will be tightened over time will ensure deeper levels of retrofit and encourage landlords to proactively retrofit buildings with poor energy performance.

Nearly 90 per cent of private rented homes are EPC band E or above

Private rented properties by Energy performance Certificate (EPC) band, 2011



Step 3

Action

The government should bring forward powers set out in the Energy Act at earliest opportunity.

This should be accompanied by increasingly demanding standards with a clear timescale for introduction.

Step 4

Provide financial incentives for owner occupiers

Current financial incentives for private householders are structured as one off Green Deal cashback offers. But this is not stimulating demand.

Financial incentives for retrofit will be most effective when linked to other major costs being incurred or other home renovations being undertaken. Two potential mechanisms to achieve this are variable stamp duty and variable council tax, with the incentive varying according to a home's energy rating.

This approach would create a tangible link between a property's energy rating and its market value, which will create a firm incentive for home owners to make improvements.

How variable stamp duty would work

The stamp duty paid when a home changes ownership would be tied to the property's Standard Assessment Procedure (SAP) rating. Homes with higher SAP scores (ie with better energy performance) would attract lower stamp duty. Offering a retrospective stamp duty rebate for improvements within the first 12 months of ownership would take advantage of people's tendency to renovate a newly purchased home.

Despite the recession, stamp duty receipts from residential sales have risen from under £3 billion in 2008-09 to over £4 billion in 2010-11. With the housing market picking up, there is scope to introduce this flexibility.

The UK Green Building Council estimates this mechanism could potentially increase retrofits by 1.6 million up to 2020.

Step 4

Action

The government should introduce a fixed financial incentive for owner occupiers linked to home energy performance.

Scale up local delivery

Step 5

a. Maintain ECO's ambition and increase its flexibility

The current targets for ECO should not be weakened. The level of ambition for carbon emissions reduction is already low at just under 28 MtCO₂. In contrast, the scheme which preceded it, CERT (2008-12), required savings of 293 MtCO₂.

There should be a more flexible approach to how the carbon target can be delivered. Assumptions for how much solid wall insulation (SWI) will be installed under ECO may prove to be over ambitious given current levels of activity. Establishing a credible trajectory for SWI would enable minimum delivery targets to be set and increased over time. A portion of the carbon target currently reserved for high cost measures (CERO) could then be reallocated to the fund for vulnerable householders (CSCO), which would be cheaper to deliver.

More flexible approaches have been proposed for ECO to deliver area based programmes prioritising the fuel poor. The Low Income Low Efficiency Area (LILEA) should be trialled to assess the extent to which it is a more efficient way of reaching large numbers of vulnerable households (see slide 45).

Step 5

b. Reduce the complexity of delivering ECO retrofits

Reducing some of ECO's administrative and procedural complexity will reduce the cost of meeting the targets.

The requirement for a survey of every property's energy performance before any measures can be installed adds cost. This could be addressed by allowing average or deemed energy performance scores per measure for each property type. Setting a minimum threshold, above which this approach could be applied, would also incentivise large scale programmes.

It is time consuming and difficult for energy companies to identify and verify people receiving particular benefits. Even if they can be identified, customers must be willing and able to share sensitive personal information with their energy supplier. It is particularly difficult in rural areas: so far, only 24 measures have been installed under the rural sub-obligation. This could be addressed by involving the Department of Work and Pensions in advance to verify which householders are eligible for ECO.

Reform options to make ECO more cost effective

Principal options for reforming ECO

Would it improve cost effectiveness?

Extend current ECO deadline beyond March 2015 and increase targets proportionally, alongside additional pro rata targets.

Likely.
Extending the deadline could make meeting the targets cheaper, provided that installation costs come down during this period in response to greater consumer demand for retrofit. This could also enable smoother transitions between ECO periods, avoiding the spikes in costs associated with a 'hard' deadline.

Reallocate a portion of the carbon target from the fund for high cost measures (CERO) to help low income and vulnerable households (CSCO)

Likely.
It would reduce the absolute cost of ECO while maintaining its decarbonisation trajectory. It could also help to install measures in more fuel poor households. This decision should only be taken once a suitably ambitious solid wall insulation minimum target has been identified within CERO, to ensure appropriate funding remains in place.

Allow lower cost measures to count towards the CERO target

Possibly.
This could only be effective if introduced alongside a solid wall minimum target within CERO. Otherwise, it would result in bill payers subsidising cheap measures (such as loft insulation) that could be paid for by other means, while destroying demand for solid wall insulation.

Simplify the process for identifying individuals and households eligible for the CSCO and Affordable Warmth

Definitely.
The current system is complex and difficult to administer. Interventions to simplify these requirements would reduce costs without compromising impact.

How the Low Income Low Efficiency Area approach tackles fuel poverty

Measures are provided to all houses in certain geographical locations based on a combination of property and income based proxies. Regional fuel poverty statistics show that, in some postcode areas, almost 50 per cent of households are in fuel poverty.

This approach would reduce administrative costs and create economies of scale from installing energy efficiency measures into multiple properties in an area. It would also increase demand by removing the stigma of individual households being singled out for support.

Step 5

Action

Establish a minimum delivery threshold for SWI within the Carbon Emissions Reduction Obligation and allow the remainder of the carbon target to be delivered under the Carbon Saving Community Obligation (CSCO).

Simplify how eligible individuals and properties are identified for CSCO and Affordable Warmth. Specifically, to allow average or deemed energy scoring in place of individual assessments, and to involve the Department of Work and Pensions in verifying eligible households.

Trial the LILEA approach for CSCO and Affordable Warmth.

Step 6

Use planned economic development spending to support retrofit roll-out

The government has identified Local Enterprise Partnerships (LEPs) as major drivers of growth and it will make multi-billion pound funding pots available to them. LEP-led growth and investment strategies are currently being formulated. Some prioritise retrofit but many do not.

Retrofit is an acknowledged driver of economic growth. The government's energy efficiency policies between 2000-10 produced real annual GDP growth of 0.1 per cent, from a combination of increased business investment and increased consumer spending. Guidance from government will be necessary to ensure that LEPs understand the scale of the economic opportunity from energy efficiency opportunity and act on it.

Some LEPs have already created infrastructure funds that successfully mobilise private capital to co-invest in retrofit: 41,000 buildings were refurbished using the government's Growing Places Fund. Replicating this model across the country using funding guaranteed to 2020 could provide the long term certainty businesses need.

How to maximise EU funding opportunities

The UK will receive nearly €9 billion in EU Structural and Investment Funds for 2014-20, of which €6.2 billion has been allocated to LEPs. One funding stream, the European Regional Development Fund (ERDF), contains a minimum low carbon spending requirement.

The Greater Birmingham and Solihull LEP has proposed to allocate £9.75 million (nearly ten per cent) of its ERDF funding to physical improvements to building stock, prioritising hard to treat homes. EU money must be matched one to one by UK public or private sector money, helping to mobilise action by UK businesses.

Step 6

Action

The Treasury and the Department for Communities and Local Government should issue guidance to Local Enterprise Partnerships to prioritise retrofit programmes during negotiation of local Strategic Economic Plans and EU investment strategies.

Step 7

Strengthen links between energy efficiency and fuel poverty in local public health programmes

Fuel poverty is a major public health problem, with excess winter deaths almost three times higher in the coldest quarter of housing than in the warmest quarter. Energy efficiency is the most cost effective way to tackle it, according to the Hills Review, but the government's ambition is declining. It has set a new objective to manage rather than eradicate fuel poverty and has discontinued dedicated funding such as Warm Homes, Healthy People.

Since April 2013 Health and Wellbeing Boards (HWBs) have been responsible for determining local strategic priorities for public health. While some innovative local approaches to fuel poverty are being trialled, the vast majority of HWBs have not prioritised fuel poverty.

Government guidance to local authorities under the Home Energy Conservation Act (HECA) prioritises Green Deal with little focus given to fuel poverty. Consequently, 2013 local authority HECA reports give little emphasis to fuel poverty.

Combining energy efficiency and fuel poverty aims will create opportunities to foster strong local partnerships between local authorities, NHS groups, charities and other groups such as social landlords and businesses.

Using public health funding to support retrofit in Oldham

Warms Homes Oldham is a three way partnership between the local authority, social landlord and Oldham NHS Clinical Commissioning Group (CCG). It aims to reduce the burden of fuel poverty on health and social services.

Oldham NHS CCG pays £45,000 of the scheme's £200,000 set up and running costs. The CCG aims to save £250,000 of public health expenditure in its first year by lifting 1,000 homes out of fuel poverty.

Step 7

Action

The secretary of state for health should issue guidance to Health and Wellbeing Boards to develop clear strategies for managing fuel poverty and excess winter deaths.

DECC should update HECA guidance to local authorities reflecting the forthcoming changes to fuel poverty objectives and resources.

Improving energy efficiency is the most cost effective way to bring down home energy bills. Currently the retrofit market is being held back by lack of consumer demand and weak policies.

The simple interventions we have set out here would create new demand from private households and ensure that best use is made of ECO and other sources of public funding.

References by slide number

- 4 Department for Energy and Climate Change (DECC), 27 March 2013, 'Policies are putting a cushion between energy prices and household bills – Davey', press notice 13/031
See eg the British Gas statement that average bills for dual fuel customers will reach £1,444 <http://britishgas.presscentre.com/Press-releases/British-Gas-Household-Tariff-Changes-2ae.aspx> (17th October 2013)
DECC, 16 May 2013, *Fuel poverty detailed tables 2011, 10% measure*
- 5 DECC, 31 October 2013, *Average annual electricity bills by home and non-home supplier*; and DECC, 31 October 2013, *Average gas bills by home and non-home supplier*
Behaviour Change, February 2013, *The plan for energy, quantitative research results* (based on a poll of 1,962 adults)
- 7 Department for Communities and Local Government (DCLG), July 2013, *English housing survey headline report 2011-12*
Energy Saving Trust: www.energysavingtrust.org.uk/Insulation/Roof-and-loft-insulation, based on increasing insulation 0-270mm; and www.energysavingtrust.org.uk/Insulation/Solid-wall-insulation
- 8 Speech by Greg Barker MP, minister of state for energy and climate change, June 2011: www.gov.uk/government/speeches/greg-barker-speech-green-deal-and-big-society-event
German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety website: www.bmu.de/en/topics/climate-energy/transformation-of-the-energy-system/resolutions-and-measures/
- 11 DECC, July 2013, *Estimates of home insulation levels in Great Britain*
- 12 Behaviour Change, February 2013, *The plan for energy, quantitative research results*
- 13 Knauf Insulation, *The reality of the Green Deal*, www.knaufinsulation.co.uk/en-gb/more/green-deal-latest-news.aspx#axzz2kKW9J50l
- 14 DECC, July 2013, *Estimates of home insulation levels in Great Britain*
Cost calculations made by Green Alliance, using data from Energy Saving Trust website
- 16 Birmingham Energy Savers: www.energysaverspartnerships.co.uk/birmingham
Warm Up North: <http://warmupnorth.com/landmark-200m-energy-project-warms-up-north-east-households>
Sussex Energy Saving Partnership: www.westsussex.gov.uk/living/communities/energy_saving/latest_news.aspx
Leeds City Region Green Deal: www.leedscityregion.gov.uk/news/leeds-city-region-partnership-agrees-green-deal-sc
- 17 DECC, Calculation of ECO targets in the final impact assessment
- 18 Ibid
- 19 DECC, 19 November 2013, *Green Deal and ECO: monthly statistics (November 2013)*
- 20 Ibid
DECC, Calculation of ECO targets in the final impact assessment
- 21 www.energybillrevolution.org
- 23 Full range of barriers to energy efficiency are set out in the Cabinet Office Behavioural Insights Team's July 2011 report *Behaviour change and energy use*
The Regulatory Assistance Project (RAP), May 2011, *Residential efficiency retrofits: a roadmap for the future*
demonstrates the need for regulation alongside voluntary retrofit initiatives
- 24 Cabinet Office Behavioural Insights Team, July 2011, *Behaviour change and energy use*
- 25 DECC made £10 million available to local authorities during 2012-13 through its Green Deal Pioneer Places fund. Funding was allocated to local authorities based on a series of criteria including "innovative and local partnership approaches". All money was to be spent between 28 January-31 March 2013.
DECC, March 2013, *Guidance to English energy conservation authorities issued pursuant to the Home Energy Conservation Act 1995*
- 26 DECC, October 2011, *Evaluation of the delivery and uptake of the Carbon Emissions Reduction Target*
DECC, March 2013, *Guidance to English energy conservation authorities issued pursuant to the Home Energy Conservation Act 1995*
- 32 Energy Saving Trust case study, August 2007, *Energy in planning and building control: Uttlesford District Council's SPD on home extensions*
Energy Saving Trust, February 2011, *Trigger points: a convenient truth*
YouGov / *Sunday Times* survey results, polling 1,650 adults between 12-13 April 2012
- 33 Office for National Statistics, *Housing expenditure by gross income decile group, 2011*
YouGov / *Sunday Times* survey results, polling 1,650 adults between 12-13 April 2012
- 35 DCLG, *English housing survey headline report 2011-12*, Table 5: 'Length of residence in current home by tenure, 2011-12'
- 36 DCLG, *English housing survey headline report 2011-12*: Annex Table 16: 'Energy Efficiency Rating Bands by tenure 1996 and 2011'
- 39 UK Green Building Council, July 2013, *Retrofit incentives*
HM Treasury, table T15.3, 'Stamp duty land tax 2002-03 to 2011-12'
- 42 For background on LILEA see: Institute for Public Policy Research (IPPR), December 2012, *Energy efficiency: who pays and who benefits?*
- 44 Ibid
- 46 E3G, April 2012, *The macroeconomic benefits of energy efficiency: the case for public action*
DCLG, May 2013, *Growing places fund survey: an analysis of results*
- 47 Department for Business, Innovation and Skills (BIS), 23 September 2013, *Making European funding work better for the UK economy*, www.gov.uk/government/policies/making-european-funding-work-better-for-the-uk-economy
Draft Greater Birmingham and Solihull Local Enterprise Partnership EU Structural and Investment Fund Strategy, 7 October 2013
- 49 John Hills, March 2012, *Getting the measure of fuel poverty: final report of the fuel poverty review*
Many local authority HECA reports are available on the DECC website: www.gov.uk/government/publications/2013-home-energy-conservation-act-heca-reports/2013-heca-reports
- 50 *Inside Housing*, 13 September 2013, 'NHS backs UK's first three-way retrofit partnership', www.insidehousing.co.uk/eco/nhs-backs-uk%E2%80%99s-first-three-way-retrofit-partnership/6528476.article

Seven steps to reducing energy bills

This is an independent report. The views expressed are Green Alliance's own.

With thanks to the organisations and individuals who contributed to the development of this work: ACE, Age UK, Behaviour Change, Centre for Sustainable Energy, CBI, Consumer Futures, Environmental Change Institute, Future Climate, Gentoo, Groundwork, Kingfisher, Knauf Insulation, IPPR, Marksman Consulting, Martin Wheatley, National Landlords Association, Peabody, Rebekah Philips, ReEnergise, Transform UK, UK Green Building Council, University of Leeds, University of the West of England and Which?

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This work is kindly supported by:

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