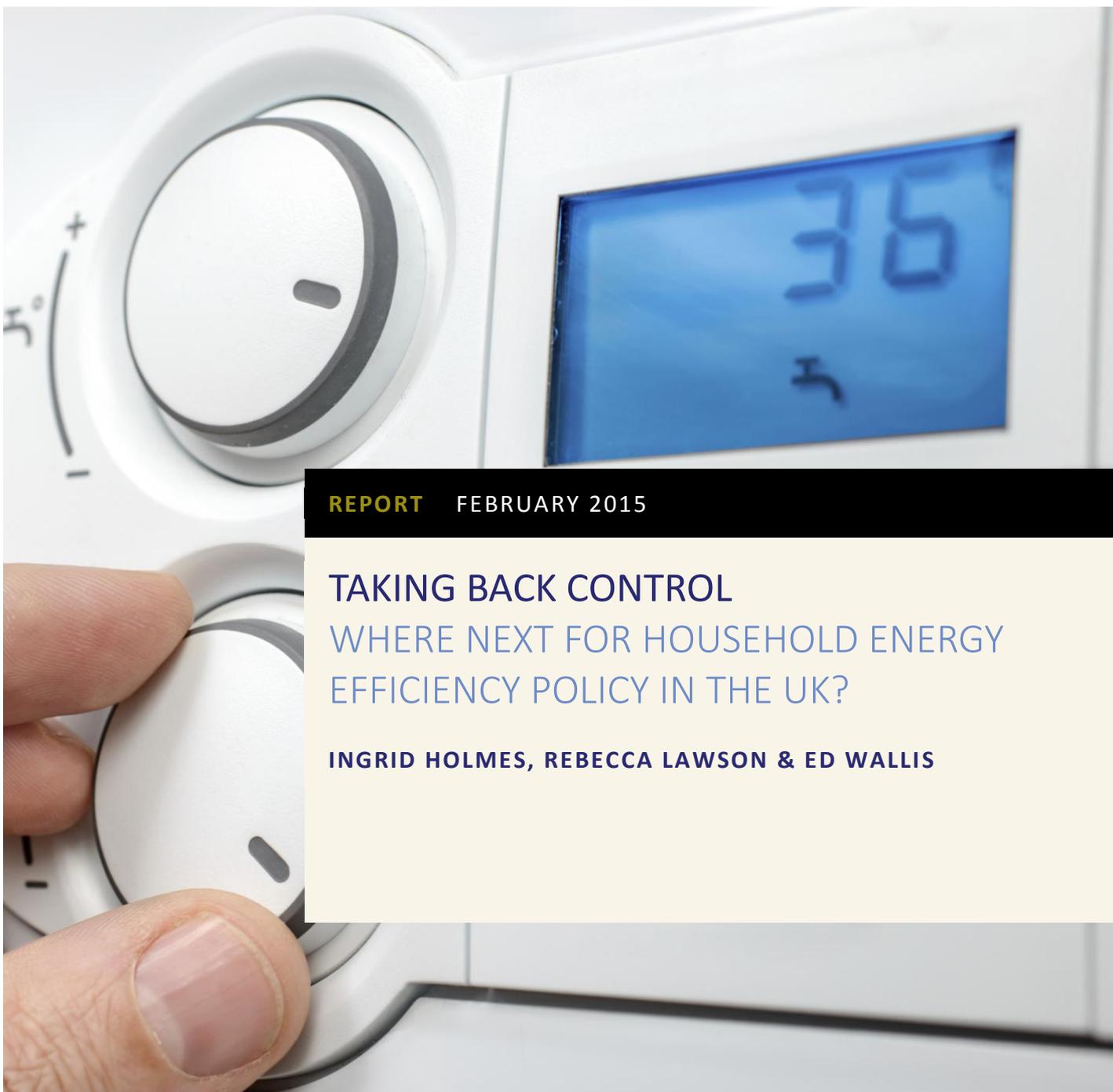




E3G

FABIAN
SOCIETY



REPORT FEBRUARY 2015

TAKING BACK CONTROL
WHERE NEXT FOR HOUSEHOLD ENERGY
EFFICIENCY POLICY IN THE UK?

INGRID HOLMES, REBECCA LAWSON & ED WALLIS

Copyright

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 2.0 License.

You are free to:

- > Copy, distribute, display, and perform the work.
- > Make derivative works.

Under the following conditions:

- > You must attribute the work in the manner specified by the author or licensor.
- > You may not use this work for commercial purposes.
- > If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.
- > For any reuse or distribution, you must make clear to others the license terms of this work.
- > Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

© E3G and the Fabian Society 2015

Acknowledgments

The analysis included in this report was informed by a Steering Group, with whom we held discussions on three occasions in 2014, and who commented extensively on the draft.

We gratefully acknowledge and thank for their support: Keith Allott; William Baker; Brenda Boardman; Andrew Burke; Natan Doron; David Hall; Jenny Holland; Sunny Hundal; Laurence Janta-Lipinski; Zoe Leader; Rob Moore; Guy Newey; Ian Preston; Will Rivers; Greg Shreeve; Peter Smith.

We also gratefully acknowledge the financial support of the European Climate Foundation and WWF-UK.

REPORT FEBRUARY 2015

TAKING BACK CONTROL
WHERE NEXT FOR HOUSEHOLD ENERGY
EFFICIENCY POLICY IN THE UK?

INGRID HOLMES, REBECCA LAWSON & ED WALLIS

CONTENTS

EXECUTIVE SUMMARY	6
1. A new story on energy efficiency	6
2. Build on public attitudes	6
3. Make the case for energy efficiency as a national infrastructure priority	7
4. Raise current levels of ambition to create a sense of national mission	7
5. Press the reset button on the Green Deal	7
6. Support low income households with grants, incentivise the better off	7
7. Introduce new regulation of building energy performance to drive long-term demand and supply chain investment	8
CHAPTER 1 INTRODUCTION	9
CHAPTER 2 WHERE DO WE GO NEXT? PUT THE HORSE BEFORE THE CART	12
CHAPTER 3 WHAT DO WE KNOW ABOUT PUBLIC ATTITUDES TO EFFICIENCY?	14
CHAPTER 4 CAN THE UK AFFORD IT? WHAT PUBLIC ATTITUDES TELL US ABOUT ADDRESSING THE COST QUESTION	16
4a. The need to increase private sector investment in efficiency	16
4b. The case for energy efficiency as an infrastructure priority	17
4c. Why aren't we thinking of energy efficiency as a major infrastructure priority already?	18
CHAPTER 5 LEARNING FROM WHERE WE HAVE COME FROM ... TO KNOW WHERE WE NEED TO GO TO	19
5a. The task of raising ambition	19
5b. How the Green Deal measures up – the need for a reboot	21
5c. Using the 4E framework to address the failures of today through new approaches going forward	22
CHAPTER 6 CHOICES & TRADE-OFFS	26
6a. Supporting low income households	26
6b. What types of incentives should be used for higher income households?	27
6c. Is the Golden Rule a help or a hindrance?	28
6d. Who should bankroll a rebooted Green Deal?	29
6e. Regulation of building energy performance	29
CHAPTER 7 WINNING THE POLITICAL CASE	31
ANNEX 1 A BRIEF HISTORY OF UK ENERGY EFFICIENCY POLICY	33
The pre-Green Deal story	33
What was it supposed to do?	34
What has it done?	34
Where are we compared to what needs to be done	34

ANNEX 2 PROPOSALS FOR A SIGNIFICANT NEW NATIONAL PLAN	36
About E3G	37
About the Fabian Society	37

EXECUTIVE SUMMARY

Consensus is building across the political spectrum around the need for a permanent solution to the problem of increasingly unaffordable energy bills in the UK. While some have suggested that green policies are to blame for the increasing costs, the main drivers have in fact been rising energy imports and price pressure due to increasing global energy demand. Indeed, the Coalition Government's cut to the Energy Company Obligation to support energy efficiency has hindered rather than helped manage these impacts. Energy prices are still relatively low in the UK compared to many European countries, but the UK has some of the most inefficient housing stock in Europe. As such, it simply takes more energy to keep our homes warm compared to elsewhere in Europe and this drives up bills.

This report outlines a number of steps the next government should take to address this challenge and get a grip on energy bills once and for all.

1. A new story on energy efficiency

Economic ('saving money') and environmental ('going green') arguments have failed to drive sufficient progress. We need a new politics of energy efficiency, focussed on putting people in control of their place in the world: their homes, their local environment and their family finances. This would directly address the sense of powerlessness people feel about their energy bills. It's both a deeply conservative narrative, in that it talks of a spirit of duty and care to provide for our families and protect our neighbourhoods, and deeply progressive, as it invests in all of our futures.

2. Build on public attitudes

This report draws together existing public attitudes research to show how a new energy efficiency narrative can go with the grain of householders' concerns. The main findings suggest:

- > One big national story is better than lots of separate initiatives
- > The environment matters as part of the big national story but won't on its own drive individual action
- > Trust must be built into the architecture of the scheme
- > A roadmap with milestones is key to galvanising action

-
- > Individual households see energy efficiency differently depending on their social and financial circumstances

3. Make the case for energy efficiency as a national infrastructure priority

In its inaugural National Infrastructure Plan, published in 2010, the government did set energy efficiency as one of its priorities, but then seemed promptly to forget all about it. Yet the scale of investment needed is comparable to the level of investment needed for other major infrastructure priorities and the value case is high. In value for money assessments, an ambitious household energy efficiency programme outperforms road and rail investment and as such energy efficiency could be considered an effective driver of growth.

4. Raise current levels of ambition to create a sense of national mission

The task of getting buy-in to deliver a major energy efficiency programme should not be underestimated and the next government must show clear leadership to get the public on board. It will require a clear framework consisting of a well-coordinated, sustained and coherent public information campaign backed by substantial public investment and underpinned by clear regulatory standards.

5. Press the reset button on the Green Deal

The Green Deal is not currently fit for purpose and is in need of major reform. It is perceived as too complex by consumers and the focus now needs to be on making the policy fit for mass consumption:

- > Shift from a measures-based approach to a holistic 'whole house' approach
- > Streamline the incentives schemes into single package offerings for consumers.
- > Community group and local authority-led schemes are increasingly the logical choice to lead on area-based delivery.

6. Support low income households with grants, incentivise the better off

Low income households should receive 100 per cent grants. For high income households, the focus of subsidies should be on persuading householders to act through providing information on the financial benefits of retrofitting and by offering a one-off cash incentive for action. For social housing landlords, aggregated pay-as-you-save schemes should be made available. Access to low cost loans and regulation should be the main driver of investment in the private rented sector.

7. Introduce new regulation of building energy performance to drive long-term demand and supply chain investment

Even if improved, financial incentives and encouragement alone are unlikely to be enough to deliver the scale of retrofit required to refurbish the nation's building stock and tackle the cold homes crisis. Strong, enforceable minimum standards on efficiency in homes, to be phased in over a 10 year period, would underpin demand and generate a clear, consistent message about the direction and required radical nature of change. This approach will have the benefit of delivering certainty of outcome, reducing cost to government and driving innovation within the supply chain.

A suggested roadmap for the introduction of minimum efficiency standards to apply on the sale or rental of domestic properties (with exemptions, as appropriate, for listed/very hard to treat properties) would be:

- > from 2018-2019 no home may be rented out unless it meets EPC E or above;
- > from 2020 no home may be rented out unless it meets EPC D or above;
- > from 2020 no home may be sold unless it meets EPC E or above; and
- > from 2025 no home may be sold unless it meets EPC C or above.

In a testing fiscal climate, the next government is going to need all the levers and allies at its disposal to deliver an ambitious energy efficiency agenda. Businesses are often crying out for the certainty that government action can bring. Using smart regulation in this way can driver consumer demand and create opportunities for the supply chain and business investment to scale up, driving further demand and growth in the real economy.

CHAPTER 1

INTRODUCTION

Consensus is building across the political spectrum around the need for a permanent solution to the problem of rising energy bills in the UK.¹ The UK experience of energy price rises over recent years (see Figure 1a) is not unique: across Europe this situation is being replicated. So what is driving this trend? Contrary to what some politicians say, the primary cause is not green policies. In fact, rising energy imports and price pressure due to increasing global energy demand² have had a far more significant effect. During 2003-2013, the rise in retail gas prices was the primary driver of energy price increases in the UK (see Figure 1b). Regardless of these facts, with wages largely stagnating, energy bills have been at the centre of recent political rows both about the cost of living and the UK's commitment to meeting its climate change obligations.

One of the deep ironies of the current public discourse on energy prices in the UK is that in fact they are among some of the lowest in Europe, particularly when assessed on the basis of purchasing power parity between countries.³ While British voters are not yet quite as up in arms as some of their European counterparts,⁴ the issue is high on the public agenda. So much so that Ed Miliband, leader of the opposition, promised a Labour government would freeze energy prices in the next parliament. The snap reaction from political opponents, industry players and media commentators was outrage, calling it a return to 'old' Labour socialism or warning the lights would go out. But critics underestimated just how popular the policy was: a YouGov poll conducted for *The Sunday Times* shortly after found that 63 per cent supported the plan to freeze gas and electricity prices for 20 months, with only 26 per cent against.

Despite general popular support for this move, the Prime Minister David Cameron's reaction was – reportedly – to promise to "get rid of all the green crap" to reduce energy bills. In partial fulfilment of this pledge, the Energy Company Obligation levy placed on energy bills – and the

¹ There have been recent minor reductions – EDF announced it will shave £9 off its average annual household gas bill and British Gas £37 but nonetheless the general trajectory is upward. Recent cuts have been driven by political pressure to pass on wholesale gas price savings to customers. See <http://newsroom.edfenergy.com/News-Releases/EDF-Energy-cuts-standard-gas-price-by-1-3-333.aspx> and <http://www.britishgas.co.uk/products-and-services/gas-and-electricity/reducing-energy-bills.html>

² This is in turn driven by the increasing global population and a desire by those in industrialising countries to have the same living standards as those in developed countries.

³ For example a comparison of residential gas prices in the EU-15 in 2012 found the UK had the lowest prices of all; average residential electricity prices the UK was 12 of 15 countries assessed. See http://www.vaasaett.com/wp-content/uploads/2013/05/European-Residential-Energy-Price-Report-2013_Final1.pdf

⁴ For example in 2013 the Bulgarian government was ousted after civil action driven by discontent over inaction over falling living standards and rising energy prices http://www.nytimes.com/2013/02/22/world/europe/22iht-bulgaria22.html?_r=0

main source of grant funding for the Britain's energy efficiency programme - was cut⁵. In taking this action the government reduced the average household dual gas and electricity bill (estimated as £1300 per year) by a mere £35⁶ – but at the same time took a significant step backwards on addressing the nationwide issue of rising energy bills.

Figure 1 (a). Household energy bills in the UK 2001-2013.⁷

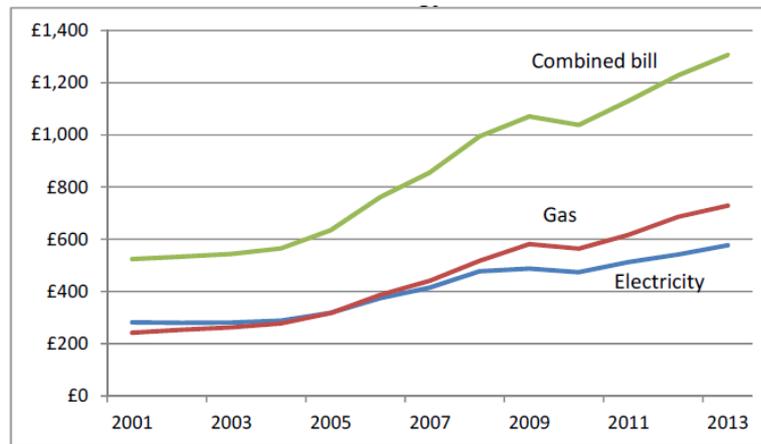
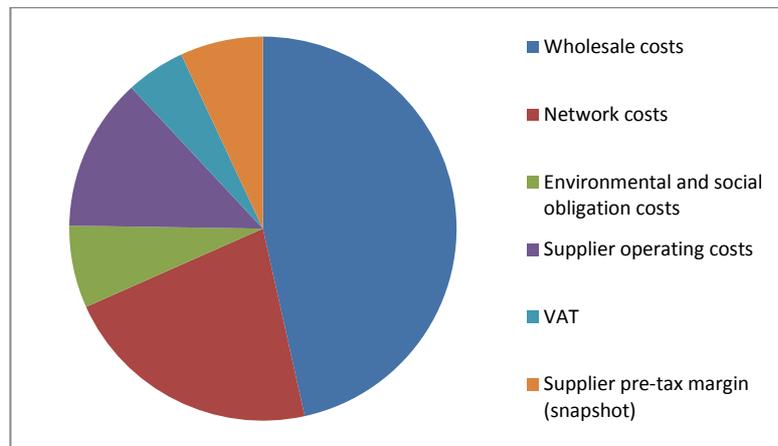


Figure 1 (b). Breakdown of household energy bills in the UK 2014.⁸



⁵ For a summary see <http://www.energybillrevolution.org/wp-content/uploads/2014/07/ACE-and-EBR-fact-file-2014-06-ECO-and-the-Green-Deal.pdf>

⁶ <https://www.gov.uk/government/news/govt-action-to-help-hardworking-people-with-energy-bills>

⁷ Source: DECC Domestic Energy Bill Estimates https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/295244/Revisions_to_DECC_domestic_energy_bill_estimates.pdf

⁸ Source: Ofgem <https://www.ofgem.gov.uk/ofgem-publications/86804/assessmentdocumentpublished.pdf>

The reason this was a mirage in terms of reducing our energy bills is due to the fact the UK has some of the most inefficient housing stock in Europe. While our energy prices are still relatively low compared to many European counterparts, quite simply it takes more energy to keep our homes warm because of leaky roofs, wall, floors and windows and our tendency as a nation to gravitate toward cheap but energy inefficient white goods and appliances⁹.

Not surprisingly then a year on from this high profile political spat about energy bills (and despite efforts to “cut the green crap”) they are still a significant financial concern for many UK households. Polling undertaken in 2014 shows that one-third of people polled now cite electricity and gas bills as their major spending worry (ahead of mortgage/rent and food bills). Two-thirds think there is little they can do to reduce these bills.¹⁰ Additional polling undertaken compounds these findings – with three-quarters of polling respondents saying they thought the government should be doing more to reduce energy bills, but at the same time have low trust in politicians (12 per cent) and energy suppliers (14 per cent) to actually deliver this.¹¹

These polling statistics perhaps start to explain why the Green Deal – the UK government’s flagship energy efficiency programme aiming to tackle the UK’s energy bill crisis – has had such a slow start. While over £30m worth of ongoing applications are now in the Green Deal Finance Company’s (GDFC’s) system,¹² this is a far cry from the £7bn in annual investments originally envisaged. Average Green Deal investments are less than £3500: much less than is need to significantly improve the energy performance of properties. In addition, the number of homes reached by the scheme thus far is a fraction of 1 per cent.¹³ Given that buildings are the third largest source of greenhouse gas emissions in the UK - with emissions coming mainly for heating, lighting and use of appliances - government still has a very long way to go to develop UK household energy efficiency policies that will start to make significant in-roads to reducing energy use and carbon emissions from homes.

⁹ Discussions with appliance manufacturers in 2013

¹⁰ Behaviour Change and Forum for the Future (2014) Big Energy Vision Launch Pack

¹¹ YouGov (2014) Energy, Politics and the Consumer

¹² GDFC website see www.tgdfc.org

¹³ 28/10/2014 GDFC breaks through landmark of £25m ongoing plans. 7045 plans are moving through the system as of this date.

CHAPTER 2

WHERE DO WE GO NEXT? PUT THE HORSE BEFORE THE CART

So how do we capture people's imaginations about energy efficiency? The traditional ways of marketing it have been to appeal to people's rational economic self-interest – 'saving money' or broader environmental citizenship – 'going green'. But neither of these narratives has proved strong enough to support the scale of take up we need, as the polling cited above and commissioned for a campaign called the Big Energy Vision. The Big Energy Vision approach is interesting because it is built around actually addressing people's concerns around energy costs – and aims to empower them to understand how their own actions can help them get back in control of their energy bills.¹⁴ This idea of control is powerful because it seeks to address directly the sense of powerlessness many people feel about rising living costs in general – and rising energy costs in particular – by promoting a set of actions focused around three simple themes. These are: use less, waste less and pay less. As such, it is seeking to move beyond traditional efficiency focused effort to look at the role of decentralised energy, energy control systems, supplier switching and so on.

In a world that seems increasingly out of control - whether from more frequent extreme weather events, the rise of Islamic State and increasing political instability in the Middle East, or the relentless global economic crisis - bringing a focus back to the local and increasing our power to effect small but significant changes there is very appealing. And nothing is more local than the homes we live in.

The new politics of energy efficiency must capture this and focus on putting people in control of their place in the world: their homes, their local environment and their family finances. It's both a deeply conservative narrative, in that it talks of a spirit of duty and care to provide for our families and protect our neighbourhoods, and deeply progressive, as it invests in all of our futures.

The approach of the Big Energy Vision (which is a commitment from some of the UK's biggest businesses and charities to help householders to make smarter choices) has a huge amount to commend it. But what happens to those who already can't afford to heat their homes sufficiently and so don't have a choice to use less energy? Or those who are already running households on such tight budgets that they can't afford the energy control or microgeneration technology or even the additional upfront cost of a superefficient appliance? Another campaign called the Energy Bill Revolution has identified these affordability issues and is focused on the need to grip the challenge of making UK homes warmer in a way that is inclusive and affordable for everyone. In making its case, the Energy Bill Revolution Alliance -

¹⁴ The Big Energy Vision, see <http://www.energycontrol.co.uk> is an initiative is coordinated by Forum for the Future and Behaviour Change. Partners include Argos, B&Q, John Lewis, National Trust, Citizens Advice etc.

which consists of over 200 children's and older people's charities, environment groups, health and disability groups, trade unions, consumer groups, businesses, politicians and public figures - has very effectively shone a light on the fact that the UK's housing stock is some of the least efficient in Europe. The result is that in the UK, more than one in eight households live in fuel poverty.¹⁵

The fact that other European countries with colder climates than ours have managed to effectively insulate homes and improve standards indicates the technology is available and is not the issue. The real issue is that it is simply not being deployed at the speed and scale needed to address the dual threats of the UK's cold homes crisis but also the global climate crisis. In the UK – the third biggest economy in Europe – 26,000 people die of the cold each year, with at least one-third of these deaths due to people living in cold homes.¹⁶ Why might this be? Despite the UK's size, in terms of GDP per capita the UK is 11th among the 28 Member States.¹⁷ This supports the picture painted by both the Energy Bill Revolution and Big Energy Vision's analyses: a significant proportion of households can't afford it¹⁸ and another significant proportion don't know how to go about doing it.¹⁹

Any reboot of the UK's household energy efficiency policies, if it is to be successful, will need to respond to the important issues raised by both these campaigns. And the time to think about this is now. Ahead of the general election on 7 May, significant public attention will be on the issue of what a newly elected government will do to help households better manage the gap between cost of living increases and wage increases - with a particular focus on how they will help households manage the impact of rising energy prices.

¹⁵ According to the new definition of fuel poverty in England. See data in https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199833/Fuel_Poverty_Report_2013_FINALv2.pdf

¹⁶ Analysis for the Energy Bill Revolution. See <http://www.e3g.org/docs/Energy-Bill-Revolution-Campaign-Briefing.pdf>

¹⁷ Eurostat data

¹⁸ See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/319280/Fuel_Poverty_Report_Final.pdf

¹⁹ See polling at http://www.behaviourchange.org.uk/wp-content/uploads/2014/10/Big-Energy-Vision-launch-pack_FINAL1.pdf

CHAPTER 3

WHAT DO WE KNOW ABOUT PUBLIC ATTITUDES TO EFFICIENCY?

To be successful in accelerating improvements in the energy efficiency of UK homes, it will be essential that any new government looks at householders' concerns and works to address them right from the outset of any public policy redesign. Too often in policymaking, public attitudes are considered as an add-on at the end of the process. The existing Green Deal household energy efficiency programme itself provides an example of just such an approach – with a focus on policy mechanisms not on how this might appeal to the consumers it is targeted to. In considering how the Green Deal can be improved and more ambition achieved, there is a need to turn this around and start from what consumers currently think and how 'sticks' and 'carrots' might encourage them to do more on energy efficiency.

Over recent years some good data has been gathered by a variety of organisations including the Fabian Society, YouGov, Ipsos MORI, the Great British Refurb Campaign, IPPR, Behaviour Change, Oxford's ECU and UKERC, to name a few.²⁰ From this, there starts to emerge a clear picture of what is needed to deliver an effective policy framework. Emerging themes are as follows.

One big national story is better than lots of separate initiatives - A big national scheme with a clear purpose and timeline that draws together disparate initiatives on energy use (and possibly incorporating the low carbon transition) would make a rebooted Green Deal energy efficiency programme appear more legitimate as well as more attractive to people. Previous research highlights the need for government to articulate a clearer sense of why energy efficiency should be a national priority. The importance of energy bills being likely to rise in future was seen as an important tool in getting the public onside with support for more ambitious household energy efficiency policy and explaining the motivation behind the scheme.

The environment matters as part of the big national story but won't on its own drive individual action - Environmental benefits are rarely the primary motivation for people being willing to take action on reducing energy usage or taking up efficiency measures. But people

²⁰ Research commissioned by Behaviour Change, six groups undertaken by Real World Planning, Oct 2013; Research commissioned by Behaviour Change, YouGov survey of 1,962 adults, Feb 2014; Climate Change and Sustainable Consumption: What do the public think is fair? (Doron and Horton, 2011); Kirklees Warm Zone Scheme: End of project process evaluation report; Individual pro-environmental behaviour in the household context (Longhop, 2013). Ipsos MORI research for Department of Energy and Climate Change – Homeowners' willingness to take up more efficient heating systems (2013); Cardiff University/Ipsos MORI research for UKERC – Transforming the UK energy system: Public values, Attitudes and Acceptability (2013)

do find it useful to understand that reducing emissions from inefficient housing is a key government motivation as it builds trust behind drivers of the programme.

Trust must be built into the architecture of the scheme - With trust in politicians and in energy companies at all all-time low, the success of a rebooted energy efficiency programme will be contingent on who delivers it, the motivations behind the scheme and motivations/incentivisation of those involved in delivering it. Levels of trust in the scheme and its providers will be a very important indicator of likely take-up, and is one of the reasons the big national story will be important. However, while the government should participate in the branding and promotion of the scheme, it shouldn't necessarily deliver it. People are more positive about smaller local providers delivering energy efficiency schemes than big energy providers, whom people tend to distrust. Subcontracting a programme to a few large companies will not work. Instead a framework needs to be created to empower a range of trusted groups including local authorities, charities and community groups to manage and deliver local refurbishments programmes – perhaps in partnership with larger companies rather than led by them.²¹ Within this framework, the government branding and accreditation of providers is viewed as important in helping householders lower risk by helping them to distinguish between 'cowboy' providers and trusted ones.

A roadmap with milestones is key to galvanising action - People need to know what the plan is. As well as having a big national story about upgrading the UK's housing stock, the public will need to know how the government will achieve this. Thus having clear milestones - for example through the number of homes that will be tackled per year and expected depth of retrofit - increases the public's view of the credibility of the scheme. The idea of minimum mandatory requirements for energy efficiency refurbishment is also helpful – so long as property owners are given enough time and sufficient support to meet those standards.

Individual households see energy efficiency differently depending on their social and financial circumstances – While the headline national story will be important to motivating action, attention needs to be paid to the fact not all householders will have the same initiative, motivations, interest or capacity to respond. Age, gender, tenure type, marital status, level of education, having children or not are all indicators of different levels of engagement with and openness to energy efficiency improvements. While most people will respond to the idea of 'getting back in control of their energy bills' as a good thing, actually turning that response into action will require more targeted local campaigning to suit various local demographics and energy efficiency refurbishment packages that suit the pockets and the aspirations of those who are targeted.

²¹ This also has the advantage of enabling integration of energy efficiency programmes with other related services that are delivered locally such as income maximisation advice, public health, NHS services, urban and rural regeneration programmes

CHAPTER 4

CAN THE UK AFFORD IT? WHAT PUBLIC ATTITUDES TELL US ABOUT ADDRESSING THE COST QUESTION

4a. The need to increase private sector investment in efficiency

One of the key issues holding back the public policy debate on household energy efficiency is the issue of cost. As noted above, it is deeply ironic that in responding to Ed Miliband's proposal to freeze energy prices, the snap reaction from David Cameron was to cut the main source of grant funding for the UK's energy efficiency programme. This exacerbated the already declining rate at which insulation was being installed into homes. In 2013/2014 loft insulation installations fell 87 per cent, cavity wall insulation rates fell 46 per cent and solid wall insulation rates fell 30 per cent on the previous year's levels.²² Lost among these political rows was the fact that one of the most effective ways to address rising energy prices in the UK would be to increase the energy efficiency of the housing stock. In effect, political expediency led the government to cut off its nose to spite its face.

Yet we do need to think through how to best manage the cost of delivering energy efficiency – and whether extra charges on energy bills are the right route to stimulating investment by people in their homes. Latest estimates of the cost of delivering an energy efficiency investment programme in the UK indicate investment exceed £100bn over 20 years²³ - this cannot be funded exclusively by the public purse, so galvanising private investment will be key to success.

Regulation is a highly effective tool for changing behaviour and could drive significant private investment with a minimal cost to the UK Treasury. But regulation is a tool that politicians have generally steered clear of for creating demand for investment in efficiency - for fear of being accused of being too 'nanny state'.²⁴ Yet businesses often cry out for the certainty that government action can bring. For example in October 2012 50 businesses and other organisations published an open letter to George Osborne, calling for a specific target for restricting carbon emissions from power generation in order to provide companies and investors with long-term confidence in the direction of government policy.²⁵ So it would be

²² See <http://www.energybillrevolution.org/wp-content/uploads/2014/07/ACE-and-EBR-fact-file-2014-06-ECO-and-the-Green-Deal.pdf>

²³ Cambridge Econometrics & Verco (2014) Building the Future.

²⁴ The notable exception being the private rented sector.

²⁵ See http://www.fabians.org.uk/wp-content/uploads/2015/01/InItTogether_WebFinal.pdf

unwise, given the urgency of the challenge and constraints on public spending, for policymakers to ignore the power of regulation to mobilise private sector and drive up investment levels. The government is going to need all the help it can get.

4b. The case for energy efficiency as an infrastructure priority

The least cost energy is the energy that is not used. Yet in the public policy discussions about renewing and decarbonising the UK's energy supply, there is a continued failure to look in a systematic way at the cost of providing energy services through demand side as opposed to supply side investments. This point is important because of its implications for government spending priorities. In its inaugural National Infrastructure Plan, published in 2010, the government did set energy efficiency as one of its priorities, but then seemed promptly to forget all about it.²⁶ A recent study by Cambridge Econometrics and Verco estimates an energy efficiency programme with the ability to systematically address the cold homes crisis in the UK will cost in the region of £126.7bn over 20 years – with a contribution of around £53.5bn from the public purse.²⁷

This scale of investment is far beyond the reach of the operational spending budget of the Department for Energy and Climate Change (the traditional fiscal 'home' of energy efficiency policy). But it is comparable to the level of spending for other major infrastructure priorities. For example in July 2013 the government announced a £50bn Action for Roads programme that includes a commitment of £15.1bn to expand the existing strategic road network to 2021 and plans to also add 52 new roads and expand both of motorway capacity.²⁸

The value case for an ambitious household energy efficiency programme compared to roads or even rail is high. The analysis by Cambridge Econometrics and Verco indicates a £126.7bn investment programme would tax revenues of the order of £1.27 for every £1 invested by government, meaning the programme would pay for itself within 10 years. This, along with the £3.20 in increased GDP for every £1 invested by the government, gives a benefit:cost ratio that is ranked 'high'²⁹ and compares favourably to another flagship investment scheme for the UK - High Speed Rail 2, which is ranked 'medium'.³⁰ In this context it becomes clear that energy efficiency could be an attractive driver of growth. Despite this, energy efficiency is not currently part of the political discussion on investment priorities. While this remains the case, ambition is likely to be capped.

²⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/188329/nip_2010.pdf

²⁷ Undiscounted prices. Investment also delivers a 19 per cent reduction in gas imports by 2035.

²⁸ The current government has stated it will make a 5-year settlement to the Highways Agency for the period 2015/16-2020/21 to undertake road expansion works. See

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/212590/action-for-roads.pdf

²⁹ At 2.27:1. See Cambridge Econometrics & Verco (2014) Building the Future.

³⁰ In the range of 1.6-1.9. See value for money assessment

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3651/hs2-economic-case-value-for-money.pdf

Again, polling data would suggest this lack of ambition is not in line with public sentiment. A 2013 poll showed 57 per cent of respondents believed energy efficiency should be the government's top infrastructure priority, ahead of new roads (15 per cent) and power stations (15 per cent). The last time a British government made a public value case for modernising the UK housing stock as part of a rolling investment programme was in the 1980s. Under the Conservative government led by Margaret Thatcher, a number of 'Enveloping Schemes' took place across the UK.³¹ These schemes renewed the external fabric of properties (roofs, windows, garden walls etc), with the work undertaken and paid for by central and local government, sometimes with a small contribution from householders, as a means of maintaining the housing stock for another generation.

Thirty years later there is a strong case to again look at the state of the existing UK housing stock and put in place a major housing infrastructure investment programme focused on creating jobs and driving growth across the UK and makes our housing fit for the next generation. In doing this householders can be assisted to meet the challenges posed by rising energy costs and 'do their bit' to get the economy moving, improve the UK's energy security and address climate change.

4c. Why aren't we thinking of energy efficiency as a major infrastructure priority already?

The current framework for assessing energy efficiency as spending rather than investment is a reflection of the historical approach to driving energy efficiency uptake - in buildings in particular - which has focused on using grants. This has worked well for ensuring relatively low cost measures such as loft or cavity wall insulation are rolled out. But as the costs - and also the broader value case for ramping up investment in energy efficiency - increase there is a strong case for reviewing this public balance sheet treatment. Instead of spending, should energy efficiency not be considered compared to other capital expenditure priorities?

In terms of public policy, at its heart this is an issue of whether the benefits of energy efficiency are significantly recognised to place it on a level playing field with supply side investments such as gas infrastructure and power generation assets and recategorised as such. This would open the door to public policy makers thinking about delivering this through a set of incentives and regulation to drive investment - just as happens with supply side investment through regulated rates of return of grid investment or feed-in-tariffs on power generation. The case for reviewing the status of energy efficiency - and case for reforming market structures to give it equal treatment with supply side measures - hinges on the broader macroeconomic benefits that arise from prioritising energy efficiency investments in the economy. These benefits are increasingly well understood - but also quantified. They include delivering lower cost greenhouse gas reductions; reduced energy imports; high quality job creation; energy security gains; and health benefits.³²

³¹ <http://www.jrf.org.uk/sites/files/jrf/HR698.pdf>

³² See Holmes & Mohanty (2012) The macroeconomic benefits of energy efficiency; Copenhagen Economics (2012) Multiple benefits of investing in the efficient renovation of buildings: impact on public finances; IEA (2014) Capturing the multiple benefits of energy efficiency; Verco & Cambridge Econometrics (2014) Building the future: the economic and fiscal impact of making homes more energy efficient.

CHAPTER 5

LEARNING FROM WHERE WE HAVE COME FROM ... TO KNOW WHERE WE NEED TO GO TO

Despite the recent failings of the Green Deal and ECO, energy efficiency policy in the UK has had some notable wins. During 2008-2013 the UK's energy efficiency policies combined with price rises have helped drive a 10 per cent decline in electricity use and 14 per cent decline gas use in British homes,³³ a brief history is set out in Annex 1. Despite this progress it is now widely accepted that given the social and economic challenges presented by energy price rises, government policies need to be ramped up. This view is echoed by the Committee on Climate Change (the statutory body tasked with assessing progress to meeting the carbon budgets set out under the Climate Change Act), who have concerns about how the UK will meet its 4th carbon budget (2023–2027). It notes in its 2014 report to parliament that there has been mixed progress in implementation of energy efficiency policies, with more effort needed to ensure installation of cost-effective measures such as cavity wall and loft insulation is maximised. It also noted the UK is on the cusp of needing to make significant choices about the future of energy efficiency policies as opportunities for low cost options are exhausted³⁴ - and in October 2014 stated that efforts to improve energy efficiency should focus on shifting fuel poor homes to EPC band C by 2025-2030.³⁵

5a. The task of raising ambition

The task of raising ambition should not be underestimated. Research undertaken by Behaviour Change in 2012 gives good insights into what householders will need to be presented with to motivate them to engage with a major UK investment programme. Behaviour Change tested the responses of six mini-focus groups³⁶ to proposals for a significant new national plan (see Annex 2). The core elements of the Plan were that it was a major national refurbishment scheme over 10 years that provided:

- > An assessment and advice on what to do;
- > A smart meter;

³³ Using temperature adjusted mean estimates for household energy consumption taken from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/295244/Revisions_to_DECC_domestic_energy_bill_estimates.pdf

³⁴ See http://www.theccc.org.uk/wp-content/uploads/2014/07/1911_CCC_PR2014_ES.pdf

³⁵ <http://www.theccc.org.uk/wp-content/uploads/2014/10/CCC-FP-letter-final-revised5.pdf>

³⁶ Representing a range of age groups, with and without children, living in rented and owned property and from three regions of England.

-
- > Access to finance through the Green Deal;
 - > Subsidies for higher cost measures such as Solid Wall Insulation;
 - > Cash back for early adopters of the programme;
 - > Accredited suppliers;
 - > Requirement to meet minimum standards after 10 years before home could be rent or sold.

While most³⁷ of these elements have been included in the UK's Green Deal scheme, crucially, they were not presented in this coherent way. The response of the focus groups to this Plan - including the minimum energy performance requirements - was overall positive. Acceptance of the Plan seemed to happen fairly easily, with people saying they felt it was serious and as such needed to be taken seriously. Key drivers for this were its national reach and the fact it would last for 10 years. This meant people felt it would be something they would engage with and talk about, with even those that disliked the idea feeling it needed to happen. Passive responses to energy efficiency became active ones – with people shifting from a mindset of 'I can't because ...' to 'How?'. Being compulsory (i.e. implying that minimum standards would be introduced) made a big difference to the level of engagement and response from people. Some accepted the need to do something readily. Others had concerns about whether selling or renting homes would become more difficult – although these were ameliorated by the 10 year time line. There was also some scepticism that complete compliance can be achieved – for example refurbishing the homes of elderly people and of course among a minority there was simple outrage at the idea of being told what to do.³⁸

These responses are important as the debate over who should pay for energy efficiency improvements in the UK unfolds. While some funding will be needed to help those low income households that would never be able to afford to undertake major refurbishment work (the main 'ask' of the Energy Bill Revolution) among higher income owner-occupied properties and the private rented sector households some element of compulsion in the right context (alongside incentives and risk reduction measures for householders) would motivate them to take action to fund improvements to enhance the energy efficiency of their homes. This research seems to indicate that new regulation to drive demand will be important to enable the private sector to engage with the financing and delivery challenge but financial incentives and other measures are also needed to soften any backlash to using regulation to drive uptake.

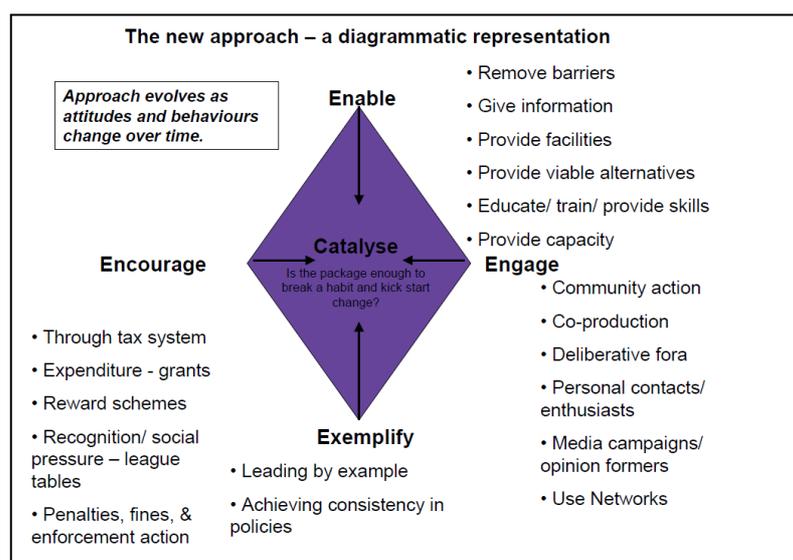
This along with messages from research that set out the need for strong communication and government backing for a programme, help to address financial barriers and so on may, to

³⁷ The exceptions were those focused on providing real time information on energy use (smart meters) and an element of compulsion to the programme (requirements for minimum standards across the board, which research shows is an important motivator).

³⁸ With a range of 'bans' from drink driving to smoking to incandescent lightbulbs there is always a minority that do not agree with new regulation. However each of these interventions followed a period of a public debate and a clear rationale for action that meant the majority accept and support intervention.

some, seem a bit like ‘gold-plating’. Yet the investment (whether public or private) needed to upgrade the UK’s housing stock is very significant - and influencing spending priorities at this scale will require bringing about a sea change in our attitudes to energy use in buildings. In this context, the 4Es framework developed by DEFRA – and borne of very rigorous research and testing undertaken to understand how to shift behaviour onto a more sustainable footing – outlines best practice for influencing behaviour to achieve sustainable outcomes (see Figure 2).

Figure 2. The 4Es approach for encouraging behaviour change.



5b. How the Green Deal measures up – the need for a reboot

The Green Deal was a world first: a highly innovative policy response to a challenge set of social and environmental issues. However, the first 18 months of its operation have revealed serious teething problems. The stop-start nature of grant funding aside, analysis by Bioregional/Association for the Conservation of Energy³⁹ reports that the Green Deal scheme is perceived as too complex by consumers. The focus now needs to be on moving beyond the Green Deal to create an ambitious new energy efficiency programme tailored to and fit for mass consumption. Simplifications are urgently needed. There needs to be a focus on selling a retrofit package to householders in a way that is easy to understand. In turn this will require improving the assessment process and quality of information provided and streamlining access to incentives such as ECO/cashbacks/feed-in-tariffs/renewable heat incentives.⁴⁰ An area-based approach to deploying energy efficiency would be beneficial. Experience with the Warm Zones model deployed by National Energy Action across England, Scotland’s Area Based Approaches and the Renesco model deployed in Latvia all argue that having the capacity to inform and provide support to communities and individuals to help them understand the

³⁹ See Bioregional & Association for the Conservation of Energy (2013) Retrofitting the Green Deal

⁴⁰ These are incentives to support energy efficiency measures and microgen such as solar PV available currently under four different government schemes.

nature of the investment they are undertaking (or facilitating in the case of social investment) is critical to securing high levels of uptake.

Given the state of public trust in energy companies, the idea of community group and local authority-led schemes becomes increasingly compelling as a logical choice to lead on area-based delivery.⁴¹ The aspiration of larger local authorities to lead on the roll out of such schemes (e.g. Birmingham Energy Savers) is well known, but what they lack is the internal capacity and access to financing to scale up such ambition. Scotland already uses area-based approaches, primarily led by local authorities bidding into a central pot to deliver. Taking an area-based approach, while requiring sustained house-to-house marketing also creates opportunities for better value for money in terms of purchasing and delivery energy efficiency measures.^{42,43} The Energy Saving Trust found that bulk purchasing through area-based approaches resulted in 30 per cent reductions in the cost of individual measures. The Energy Efficiency Partnership for Homes identified a 20 per cent-30 per cent reduction in the cost of solid wall insulation when multiple properties are treated together.

5c. Using the 4E framework to address the failures of today through new approaches going forward

Exemplify – communicating and achieving consistency in policies

- > A reboot of the Green Deal is an opportunity to streamline and build a more effective narrative around how the UK will use public policy to address energy affordability and climate change. This should include a focus of clarifying the exact aims of the programme at central and decentralised level and a clear identification of its roles in addressing fuel poverty and cutting CO2 emissions. The focus should be on integrated solutions (insulation, solar, smart meters and so on) that work for actual households needs - rather than the traditional focus on deploying individual measures to meet policy targets.
- > A clear timeline is needed. Preliminary research indicates a 10-year timeline for a national energy saving scheme is needed to galvanise and engage consumers to deliver public policy priorities. This needs to be combined with incentives for early adopters and the promise of regulation – for example legislation stating that homes failing to meet an agreed energy efficiency standard cannot be rented out or sold by 2025 (after 10 years). The balance between incentives and regulation needs to be carefully managed and is discussed later.

⁴¹ Platt, R, Aldridge, J, Washan, P & Price, D (2013) Help to Heat.

http://www.ippr.org/assets/media/images/media/files/publication/2013/11/Help-to-heat_Nov2013_11562.pdf

⁴² http://www.energybillrevolution.org/wp-content/uploads/2012/02/Energy-Bill-Revolution_full-report.pdf

⁴³ EST (2009) from IPPR report

-
- > Communication is key to getting public buy-in. Successful programmes run elsewhere have had a strong communications element.⁴⁴ This spreads the word but also creates legitimacy. National government-led and local authority-led communications programmes should be coherent (carrying the same narrative and messaging) but clearly come from distinct institutions to reinforce the idea that taking action is necessary. This in particular would help address a key barrier identified by the government's Green Deal Tracker Survey, which found around one-fifth of those surveyed are not interested in the Green Deal because they feel they doing enough on energy efficiency already.

Engage – the importance of working with communities and using networks

- > Programmes need to suit local circumstances: the building stock of the UK is very heterogeneous and average incomes vary markedly between regions. One option would be for national government to require local authorities begin to work with partners to draw up energy efficiency roll-out plans that are tailored to local conditions. This will drive additional significant benefits in terms of consumer engagement, information provision and cost savings. As such the current centralised delivery approach could continue but should be complemented with a shift to area-based decentralised delivery to boost consumer engagement with the programme.
- > One route forward would be to set up tendering processes to invite local authorities and community groups but also social housing providers and other entities (commercial and not-for-profit) to bid to deliver area-based energy efficiency schemes. By ensuring delivery is led by those closest to the community being targeted, support can be provided to build demand by engaging and helping consumers to make the appropriate decisions on retrofits and access suitable financing options. Providers should be required to state as part of the tender how they will deliver a regional contribution to meeting national targets on addressing fuel poverty, saving energy and carbon as well as how results will be measured and reported.
- > There would be value in creating capacity to give central government oversight of the programme and assist local authorities with delivery, as needed. This new capacity could have responsibility for translating nationally set targets into local delivery and impacts. Key tasks could include:
 - managing the tender of contracts for delivery of energy efficiency programmes;
 - supporting local authorities, community groups and others who may lack capacity as they bid for these contracts;
 - resolving any tensions that may arise in terms of the compatibility of support measures with State Aid rules; and

⁴⁴ Examples include the Warm Zones Scheme in the UK but also the KfW House programme in Germany and the Kredex Scheme in Estonia.

-
- providing householders with an additional point of contact and advice about how they can improve the energy performance of their homes including the financing options and incentives open to them.

Enable – removing barriers and providing information

- > The government's Green Deal Tracker Survey found the most common barrier to uptake of the Green Deal is the cost of improvements (cited by 40 per cent of respondents). This is not surprising given the large numbers of households (roughly one in eight currently) living or at risk of fuel poverty. It indicates regulation - at least in the private rented sector - and access to grant funding will continue to be a key component of a successful programme.
- > The ability of the government to improve access to affordable finance through offering access to low cost loans⁴⁵ will be important. But in addition consideration should be given to modifying the Green Deal's co called 'Golden Rule' (which states that Green Deal loan repayments must be lower than the cost of energy saved) to allow homeowners to opt of the rule and access top-up finance. Thought should be given to whether safeguards should be put in place to protect against 'subprime' Green Deal loans. This is where, for example, the cost of implementing difficult to treat efficiency measures such as solid wall insulation, could outstrip the value of a property in areas where house prices are very low. As such statutory restrictions on a cost to property value may be required.
- > In an effort to further streamline the consumer's journey from enquiry to action, consideration should be given to allowing Green Deal advisers to also operate as Providers and the safeguards needed to address any conflict of interest.

Encourage – through use of a range of incentives and enforcement action

- > As discussed, for low income groups full grants will be needed to enable them to undertake works. For higher income groups a combination of cashbacks/grants and low cost loans will be needed. Other incentives to drive demand could include stamp duty. These options are discussed in more detail later.
- > For most householders, their home is the biggest investment they will ever make. For this reason the quality of work will make or break the programme and householders will need to be assured that the work done to their homes to improve their efficiency is good quality and that if something goes wrong, there is money available to help. Government accreditation of service providers is therefore likely to continue to be important for reassuring consumers and guarantee schemes to insure work will be key retaining consumer confidence.
- > Supporting this, more building checks are needed to improve enforcement of efficiency standards in Building Regulations. Technology innovation can assist in this enforcement process as can on-the-spot random auditing of Green Deal Providers with the threat of being stuck off the accredited list of providers if improvements are

⁴⁵ In its Green Paper the Labour Party has committed to provide up to 1,000,000 interest free loans

found to be substandard. Further thought should also be given as to whether existing quality assurance schemes such as the NICEIC warranty programme for insulation work provide sufficient protection for consumers in respect of defective or poor quality installation work. It may be that an expanded, comprehensive Green Deal Insurance Scheme is required.

CHAPTER 6

CHOICES & TRADE-OFFS

Designing an effective national energy efficiency programme will require a careful balance between compulsion and incentives to be drawn. The politics of delivering such a scheme in a time of austerity are challenging and have been made more difficult by the failure of the Green Deal, which has reinforced existing perceptions that efficiency is a good idea on paper but too hard to deliver in practice.

6a. Supporting low income households

It is clear that the current suite of financial incentives has been unsuccessful in driving demand at the pace needed – with the rate of retrofit in the UK having actually fallen since the Green Deal was introduced in 2013. This indicates that the transition from a grants based to pay-as-you-save loan based model has been too sudden and more thought needs to be given to how public funding can be better targeted to drive uptake in the interim period before regulation kicks in for a rebooted energy efficiency programme.

Universal access to low cost loans to undertake refurbishments would be an effective way to build support and social legitimacy for the programme (by building public acceptance of regulation). But given that around 40 per cent of households have an income of less than £19,000 per year (with their major source of income coming from social security benefits) and a further 20 per cent have an income of less than £30,000 per year,⁴⁶ grants will also be needed. For low income owner-occupied households, 100 per cent grants will be needed for works to be undertaken that will bring the energy performance of their homes up to acceptable levels (EPC C at a minimum, as recommended by the Energy Bill Revolution and adopted by the Labour Party in their Green Paper).⁴⁷ Among higher income owner-occupied households low cost loans should be made available along with grants that are linked – as they are in Germany in the often-cited ‘KfW House’ Programme – to the level of energy efficiency improvement undertaken. There is also a case to be made to link them to income level and to make them a time-limited ‘use it or lose it’ offer to encourage uptake.

Working with social housing landlords it may be possible to develop aggregated and simplified pay-as-you-save loans for the sector. For example, providing funding direct to support social landlord’s investment plans would allow them to commit to and deliver large scale retrofit works with the costs, reduced by grants, recovered through rents. Trials of such an approach carried out by the social housing provider Gento suggest that it has significant potential to unlock large amount of energy savings in this sector.⁴⁸ Such changes will likely require a review

⁴⁶ Data taken from Table A39 - Income and source of income by gross income quintile group, 2013 (released 2 December 2014)

⁴⁷ See <http://www.yourbritain.org.uk/agenda-2015/policy-review/policy-review/an-end-to-cold-homes-labour-s-energy-efficiency-green-paper>

⁴⁸ <http://www.gentogroup.com/media/48249/The-Energy-Saving-Bundle-Report-2013.pdf>

and removal of current legislative requirements limiting the amount and circumstances in which landlords can recover sums through increases in rents.

Recognising constraints on public spending, other outcome-based procurement models such as the *Energiesprong*, currently being trialled in the Netherlands, may also deliver better results for the social housing sector at a lower cost to the government⁴⁹. The approximately 300,000 mass-produced renovations taking place (which come with a 40-year builders' guarantee) under the *Energiesprong* have been financed from the estimated €18bn of energy savings they will deliver each year and have delivered a scale that can attract large construction companies into the market and therefore drive cost reductions.⁵⁰

Finally, it is arguable that access to low cost loans and regulation should be the main driver of investment in the private rented sector, which consists of ostensibly business investments, with grants avoided altogether.

6b. What types of incentives should be used for higher income households?

For the higher income households, the focus of subsidies should be on persuading householders to act through providing information on the financial benefits of retrofitting and by offering a one-off cash incentive for action. Particular care should be taken with this group to address concerns over equity, especially in the face of rising energy costs. Options include cashbacks/grants and low cost loans to more innovative approaches such as stamp duty or council tax rebates.

Cashbacks are a useful tool to lever upfront private capital investment and have proved popular – the Green Deal Home Improvement Fund being closed early during 2014 due to oversubscription. However, such schemes tend to be short-lived and do not provide confidence to industry for planning long-term investments. They also represent a direct cost to government, which is challenging in the current economic climate. Cashbacks also exclude those who do not have access to funds to cover the upfront costs.

Grants are more equitable and, compared to subsidised loans, can be cheaper for governments to provide. However, a grant based model would require a greater level of capital to be found upfront and care needs to be taken in balancing how these funds are used to drive early uptake among the more affluent with support available for low income homes. Grant levels need to be justified with a clear focus on how time-limitations will be used to maximise uptake and public value in terms of market creation effects.

Low cost loans - Loans provided by the GDFC are competitive for the type of non-secured product on offer, but - as GDFC itself has acknowledged - there are cheaper means of finance available such as mortgages or personal funding. This lack of equality of access to low cost finance will slow the uptake of energy efficiency under a rebooted programme. Universal access to low cost finance should become a core feature of a rebooted scheme. This would

⁵⁰ <http://www.theguardian.com/environment/2014/oct/10/uk-looks-to-dutch-model-to-make-100000-homes-carbon-neutral-by-2020>

follow the model used in Germany where low cost loans offered via a partnership between state bank KfW Bankengruppe and retail banks has delivered 2.1 million ‘KfW House’ energy efficiency retrofits between 2001-2011.⁵¹ In future, such loans are to be subsidised in Germany via a dedicated Energy Climate Fund (which collects revenues from the sale of carbon credits in the EU ETS). The UK could consider a similar recycling structure.

Rebates on stamp duty and council tax could also be used in combination with low interest loans to boost demand with a near zero additional annual cost to the government. A variable stamp-duty based scheme would see house buyers receive a discount if a property is above a given energy efficiency standard or pay a higher rate if performance is poor. Thus the incentive would impact at the point of sale – a time when the majority of home renovations take place – strengthening the link between efficiency and house price value. Analysis commissioned by the UK Green Building Council (UKGBC) showed that such a scheme could deliver between 135,000 and 270,000 additional retrofits per year and contribute £404m – £807m to GDP a year at a near zero annual direct cost to government. This reform would build on changes to stamp duty introduced by George Osborne in 2014, which saw cuts in lower stamp duty bands paid for by those in the highest band.⁵² Introducing variable council tax rates for the most efficient properties could potentially deliver even greater numbers of additional annual retrofits (518,000 and 1,481,000) and contribute £1.5bn-£4.4bn to GDP at near zero cost to government.⁵³ In using such an approach, significant effort would be required to ensure that vulnerable households were protected against potential negative impacts, either by provisions within the scheme or by complementary policies.

6c. Is the Golden Rule a help or a hindrance?

The type of loan on offer also needs careful consideration. A low cost loan lasting 20 years will impact less on monthly household finances than one lasting 10 years – but at the same time have much higher costs for the provider. These costs can be addressed through reducing the length of loans to 10 years, but will break the Golden Rule⁵⁴ (since it pushes up monthly repayments – perhaps meaning in the short term consumers pay back more than they save on their energy bills). As such consideration should be given to providing customers with a choice to opt out of the Golden Rule restrictions would strike a better balance between consumer protection and driving demand.⁵⁵ If this approach is adopted, it may also be necessary to build in protections into a relaxed regime to avoid the risk of so-called ‘sub-prime’ loans arising. This

⁵¹ http://www.wec-policies.enerdata.eu/Documents/cases-studies/Financing_energy_efficiency_buildings.pdf

⁵² In the 2014 Autumn statement changes to Stamp Duty deliver cuts to 98% of those who would in the past of paid the tax, paid for by purchasers of homes in the highest band. See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/382324/Stamp_Duty_15.pdf

⁵³ <http://www.ukgbc.org/press-centre/press-releases/energy-efficiency-incentives-would-boost-green-deal-and-construction-ind>

⁵⁴ This rule states that anyone taking out the Green Deal should be able to save more per month in energy costs than they pay out on the Green Deal loan.

⁵⁵ There would also be value in revisiting the assumptions about energy price increases for those who opt in <http://www.publications.parliament.uk/pa/cm201415/cmselect/cmenergy/348/34806.htm>

could be achieved, for example, by introducing restrictions on the ratio of the cost of efficiency measures to the value of a property.

6d. Who should bankroll a rebooted Green Deal?

With the GDFC finally having passed the barrier of receiving £1 million loan applications a week and in recognition of the time and effort that has been dedicated to establishing the model, there are strong arguments in favour of the GDFC retaining its role as the provider/administrator of pay as you save loans.⁵⁶ However, as discussed above consideration should be given also subsidising the loans offered – as happens in Germany - to ensure universal access to low cost finance. Alternative private sector-led options include banks factoring energy performance into mortgage rate offers to start to move the market. In Switzerland, big lenders such as UBS offer highly efficient MINERGIE classified homes lower mortgage rates in recognition of their energy saving value and in the United States there is an established market in energy efficiency improvement mortgages where borrowers can include the cost of efficiency improvements to their mortgage, in recognition that the energy savings can then be used towards repaying the loan.⁵⁷

6e. Regulation of building energy performance

Even if improved, financial incentives and encouragement alone are unlikely to be enough to deliver the scale of retrofit required to refurbish the nation's building stock to sufficient level addressed the UK's fuel poverty and CO2 emission reduction challenges. Integrating financial support within a clear and complementary framework of regulation and information is likely to be significantly more effective in driving the shift in attitudes needed.⁵⁸ Strong, enforceable minimum standards on efficiency in homes, to be phased in over a 10 year period, would underpin demand and generate a clear, consistent message about the direction and nature of change. This approach will have the benefit of delivering certainty of outcome, reducing cost to government and driving innovation within the supply chain.

Such an approach has already been used for zero carbon homes. In that case, the previous Labour government committed in 2006 that, from 2016, all new homes would be 'zero carbon' and introduced the Code for Sustainable Homes, a code against which the sustainability of new homes could be rated. This commitment was affirmed in the 'Building a Greener Future: Policy Statement in 2007' which proposed progressive tightening of building regulations to achieve the 2016 goal, first by 25 per cent in 2010 and then by 44 per cent in 2013.

Applying a similar approach, a suggested roadmap for the introduction of minimum efficiency standards to apply on the sale or rental of domestic properties (with exemptions, as appropriate, for listed/very hard to treat properties) would be:

⁵⁶ <http://www.tgdfc.org/media/green-deal-finance-company-breaks-1-million-per-week-barrier-in-record-applications/>

⁵⁷ <https://www.ubs.com/ch/en/swissbank/private/mortgages/special-offers/eco.html> and http://www.energystar.gov/index.cfm?c=mortgages.energy_efficient_mortgages

⁵⁸ <http://www.green-alliance.org.uk/resources/Seven%20steps%20to%20reducing%20energy%20bills.pdf>

-
- > from 2018-2019 no home may be rented out unless it meets EPC E or above;
 - > from 2020 no home may be rented out unless it meets EPC D or above;
 - > from 2020 no home may be sold unless it meets EPC E or above; and
 - > from 2025 no home may be sold unless it meets EPC C or above.

Scotland is actively considering the introduction of such standards which have already been legislated for in California.⁵⁹ Tying the requirements to sale or rental would capitalise on a trigger point when people are most likely to be improving their homes, minimising disruption. It also places the burden on those who can most afford it: those benefitting from ownership of housing assets.

There are opportunities to link wider market drivers to delivering energy efficiency policy outcomes by ensuring that doing the right thing for the environment also makes sense financially. For example, new Financial Conduct Authority obligations for lenders to scrutinise prospective borrowers' household spending more closely, including spending on energy bills, may help to build deeper connections between energy efficiency performance and the mortgage market. This could be capitalised on to persuade lenders to work with government to build attainment of minimum energy efficiency performance standards into their lending criteria, with completion of a mortgage being made conditional upon improvements being made to bring the property up to a required EPC rating. This could also act as a driver for new financial products such as the energy efficiency mortgages discussed above.

⁵⁹ <http://www.scotland.gov.uk/Publications/2011/03/22093051/1>

CHAPTER 7

WINNING THE POLITICAL CASE

There has been much consternation about how rapidly environmental concerns were allowed to slip of the political agenda in the wake of the financial then economic crisis in the UK. What was once discussed as the defining challenge for a generation of politicians from all parties quickly came to be viewed as a distraction from the real business of securing an economic recovery. As Ed Miliband recently admitted, climate change just isn't as fashionable as it used to be.

The received wisdom may be that the environment is not a political priority, but people do care about the environment. It's just that the popular understanding of it is different to the political one. Indeed, pro-environmental sentiment provided one of the highest profile political news stories of this parliament: the huge public opposition to the coalition's botched attempt to sell-off the nation's forests. Recent research by the Fabian Society for the report *Pride of Place* found that people tend to think of the environment in terms of the place they live and the people they live there with – the local environment of their estates, streets, parks and natural spaces – not carbon emissions and climate change.⁶⁰ The report argued that it is only by restoring faith in the power of collective action in a specific locality that we can restore the momentum environmental politics needs. People need to feel able to effect change in their own backyard before we can expect them to change the world.

Nothing is more local than the homes we live. But we lack power to effect change even there, because of a disjointed market and lack of financial capability. This is the new politics of energy efficiency: putting people in control of their place in the world; their homes, their local environment and their family finances. It's both deeply conservative, in that it talks of a spirit of duty and care to provide for our families and protect our neighbourhoods, and deeply progressive, as it invests in all of our futures.

So what we need most now from our political leaders is to set a clear direction of travel, to show people why this matters, so that we bind people into a sense of common endeavour. The government needs to enable people to take control of their lives, to take pride in the places they live, to keep their bills down and make their contribution to a sustainable future for all of us.

All political debate currently takes place within a financial straightjacket. But while the Labour party has previously intimated that it may give itself slightly greater leeway on investment spending on infrastructure than the Conservatives, all political parties are committed to a very tight fiscal settlement for the coming parliament. However, even with this consensus there are choices. The government's decision to allow the British taxpayer to subsidise the French nuclear energy industry at Hinkley Point shows that money can be found to support the energy choices our political leaders make.

⁶⁰ <http://www.fabians.org.uk/wp-content/uploads/2014/06/Pride-of-Place.pdf>

With over £100bn in planned in public investment in infrastructure in the UK over the next parliamentary term, it is arguable that political leaders are missing a trick in not including energy efficiency in their list of stated priorities⁶¹. This simple shift in prioritising energy efficiency as core infrastructure investment instead of marginal departmental spending would in a single move shift the debate beyond pure environmental reasoning - and as such beyond the Conservatives “cut the green crap” mantra and Labour’s “bills not bears” messaging⁶². By bringing together ideas of economic and environmental sustainability – in the form of ‘taking back control’ – it becomes possible to credibly argue that safe and warm homes are about all of us and all of our futures.

People are looking for leadership. The new government, whomsoever it may be in May 2015, needs to set a clear vision for the UK’s future that is both economically prosperous, socially just and environmentally sustainable. It then needs to set clear goals to work in partnership with the private sector and create the market certainty necessary to achieve them. It needs a consistent message to the public that communicates a clearer sense of why energy efficiency is important, how it can be achieved and must focus on modernising homes and putting people back in control of their energy bills and environment. While opinion polls show environmental concerns are well down people’s political priorities, people do respond to a sense of common purpose: that ‘we’re all in it together’.

⁶¹ HM Treasury Investing in Britain’s future June 2013

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209279/PU1524_IUK_new_template.pdf

⁶² For example recent announcements on energy efficiency at the Labour party conference suggest that the case for energy efficiency in the party may have been won, but it is not prepared to provide significant new money, with new commitments funded through the redistribution of existing efficiency budgets.

ANNEX 1

A BRIEF HISTORY OF UK ENERGY EFFICIENCY POLICY

The pre-Green Deal story

The UK is regarded in Europe as a leading innovator of energy efficiency policy in buildings. As far back as 1992 the UK government created the Energy Saving Trust to promote sustainable and efficient energy use in several sectors including the household sector. This followed in 1995 with the introduction of the Home Energy Conservation Act requiring local authorities to deliver a 30 per cent saving in energy use by 2010 – which drove substantive improvements in social housing. Policies such as Warm Front⁶³ and Decent Homes⁶⁴ have been critical to the success of local authorities in raising standards in social housing. A succession of obligations was then placed on energy companies to deliver improvements both in social and private housing. This began with the Energy Efficiency Standards of Performance (2002-2005) and the Energy Efficiency Commitment (2005-2008), which focused on delivering low cost measures such as cavity wall and loft insulation, efficient boilers and boiler lagging and prioritised lower income households. Delivery of more difficult and expensive interventions such as solid wall insulation were rolled into a new policy called the Community Energy Saving Programme, which was created in 2009, lasted to 2012 and focused on whole-house solutions. The Carbon Emission Reduction Scheme (2008-2012) then followed and also focused primarily on low income households but widened the number of measures to include not just energy saving but also microgeneration technologies.⁶⁵ The costs of the supplier obligation were borne by energy suppliers, who recouped the costs through charges spread across all customers.

With the costs of the installed measures rising, there was increasing concern about the political acceptability of continuing to pass on the costs of energy efficiency improvements energy company customers. Similarly, with improved standards of energy performance in the social housing sector here were increasing calls to refocus energy efficiency policies to the private sector and to think of new ways of getting those of benefitted from energy efficiency measures to also pay for them. From this the idea of the Green Deal was born: customers benefitting from energy efficiency measures would no longer simply received grants and

⁶³ This policy was live during 2002-2011 and focused on providing heating and insulation to the UK's poorest households

http://webarchive.nationalarchives.gov.uk/20121205174605/http://www.decc.gov.uk/en/content/cms/funding/warm_front/warm_front.aspx

⁶⁴ This policy is live until 2016 and has a series of decent home aims that include but also go wider than providing insulation <https://www.gov.uk/government/policies/improving-the-rented-housing-sector--2/supporting-pages/decent-homes-refurbishing-social-housing>

⁶⁵ See a history of these programmes at <https://www.ofgem.gov.uk/environmental-programmes/energy-companies-obligation-eco/previous-energy-efficiency-schemes>

discounts but instead install measures and then pay back the cost of the measures through their energy bills.

What was it supposed to do?

The Green Deal never had clear targets embedded in the policy framework, but various speeches by ministers indicated the scale of ambition initially envisaged. Building on earlier initiatives such as CERT, CESP and Warm Homes and bolstered by rising energy prices, the Green Deal was supposed to transform the nation's attitudes to energy use in the home, creating a massive new market for household retrofits. Secretary of State for Energy and Climate Change Chris Huhne announced the programme would deliver £7bn pa in energy efficiency investment. Minister for Climate Change Greg Barker later stated 14m homes were to be transformed to 2020. The burgeoning demand created was then supposed to transform local building contractors and plumbers to form the core of the energy efficiency workforce. But from initial announcement of the policy to the actual start date the level of ambition declined.

What has it done?

In its January 2015 report on progress with the Green Deal, DECC stated that 1.3m energy saving measures have been installed in 1m properties. 97 per cent were delivered through the ECO. Over 14,700 cashback vouchers cumulatively worth £16.3m – the majority to cover boiler replacements – were paid out.⁶⁶ A later and generous revamping of the cashback scheme – marketed as the Green Deal Home Improvement Fund – indicated higher incentives work – with £54.3m being disbursed from June to December 2014. Under the scheme incentives for carrying out solid wall insulation increased from £650 to £4000; room in roof insulation up from £220 to £1000; double glazing increased from £320 to £650.⁶⁷ However, the boom and bust nature of the scheme – which opened but then closed within days both in June and again in December due to demand that outstripped supply – is cause for concern (as discussed below).

Where are we compared to what needs to be done?

Notwithstanding the surge in demand in the middle of last year, the Committee on Climate Change's July 2015 "Meeting Carbon Budgets – 2014 Progress Report" to parliament notes that with the switch from the grant-based CERT, CESP and Warm Homes approaches to market based delivery of energy efficiency under the Green Deal, there has been a marked drop off in uptake of energy efficiency measures. This has resulted in a slowdown in the number of lofts and cavity walls insulated (650,000 below the Committee on Climate Change's indicator level of 6.3m; cavity wall insulation at 2.1m below the Committee on Climate Change's indicator level of 5m). Solid wall insulation fell from 82,000 in 2012 to 29,000 in 2013 (13,000 less than that predicted by the government).⁶⁸ Progress in replacing boilers has been good (7.7m as

⁶⁶ See

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/396963/Monthly_Statistical_Release_-_Green_Deal_and_ECO_in_GB_Jan_2015_Final.pdf

⁶⁷ <https://gdcashback.decc.gov.uk/>

⁶⁸ ECO Impact assessment set out in Committee on Climate Change report to Parliament in 2014

opposed to the expected 5.9m), but penetration of the most efficient appliances represents only 1 per cent of the stock. These impacts have been exacerbated by the 2014 cuts to ECO levels, which further reduced demand.⁶⁹ The government's revamped cashback the Green Deal Home Improvement Fund looked set to mitigate this impact in the short term but has had a highly volatile impact on the market. Of the £120m made available under the rebooted Green Deal Home Improvement Fund, £25m was allocated in June – with cashbacks worth up to £7600/home on offer.⁷⁰ In July 2014 £60m in claims were made in just 2 days: the government then shut the scheme because of surging levels of demand.⁷¹ On December 7th the scheme opened again but within 4 days the £24m allocation for solid wall insulation was filled and had to shut.⁷²

This type of approach to market creation runs counter to everything business and industry consistently asks for from governments trying to create the conditions for such new markets to thrive. Such a boom and bust approach is the very antithesis of providing the stable signals and certainty to allow investment and training to happen that will enable supply chains to scale up. As noted above it carries echoes of the mistakes made by the previous government with the Low Carbon Buildings Programme, where a stop-start approach to grants for microgeneration led to major supplier disruptions, and more recently with the current government, which attempted to retroactively reduce the value of feed-in-tariffs for solar PV, again causing major supply chain disruption and loss of jobs.⁷³

The continuing uncertainty around the future of the GDFC was further exacerbated when funding arrangements with the Green Investment Bank lapsed due to lack of drawdown of capital.⁷⁴ In November 2014 the government stepped in to provide a £34m funding package to keep the entity going.⁷⁵

Going forward government needs to avoid repeating these mistakes if industry is to be able to position itself to credibly deliver a more ambitious energy efficiency investment programme in the UK.

⁶⁹ Committee on Climate Change report

⁷⁰ <http://www.telegraph.co.uk/finance/personalfinance/energy-bills/10962196/Households-clear-out-new-7600-per-home-Green-Deal-cashback.html>

⁷¹ <http://www.eaem.co.uk/news/green-deal-home-improvement-fund-shut-down-due-demand>

⁷² <https://www.gov.uk/government/news/gdhif-second-release-funding-fully-allocated-for-solid-wall-insulation>

⁷³ <http://www.businessgreen.com/bg/news/2145266/decc-forecasts-solar-job-cuts-wake-feed-tariff-cuts>

⁷⁴ <http://www.businessgreen.com/bg/news/2372079/green-deal-finance-company-warns-investors-it-could-be-wound-up>

⁷⁵ <http://www.tgdfc.org/media/new-funding-package-in-prospect-for-gdfc/>

ANNEX 2

PROPOSALS FOR A SIGNIFICANT NEW NATIONAL PLAN

(These were developed for Behaviour Change in 2012 and used to support dialogue with mini-focus groups and gain behavioural insights on what might motivate people to undertake energy efficiency improvements. The analysis was later used to inform the development of the Big Energy Vision initiative.)

A major new national plan is soon to be announced to bring all Britain's homes up to modern standards of energy efficiency.

Over the next 10 years, work will be needed in every home in the country in order to make them fit for the future, affordable to heat and as cosy and comfortable as possible.

The key points of the plan are:

- > Every home will have a smart meter fitted, so you can monitor in real time your energy usage, discover where you're wasting money and get accurate (not estimated) bills.
- > You can get your home assessed by an accredited expert who will advise you on what change you could make (e.g. insulation, new boiler, modern lighting, advanced heating controls) and how much money you could expect to save.
- > You can choose to get this work done at no upfront cost via the new Green Deal scheme, which allows homes owners and renters to pay for improvements over time through the savings on their energy bills.
- > Subsidies are available to reduce the installation costs for hard-to-treat home such as older houses that need solid wall insulation.
- > A new accreditation scheme will make it easier to find companies (both national and local) that you can trust to do the work well.
- > You can install energy-generating equipment like solar panels and get paid for the electricity you supply to the grid.
- > A cashback scheme (offering £350 per household on average) and council tax reductions will reward people who make the changes first.
- > New government policies that make it easier and more affordable for owners and renters to take action lie at the heart of this plan. It will be delivered in partnership with local councils, businesses (including builders, plumbers, energy companies and retailers), housing associations and charities.
- > After 10 years, homes will have to meet minimum levels of efficiency in order to be rented or sold.

About E3G

E3G is an independent, non-profit European organisation operating in the public interest to accelerate the global transition to sustainable development. E3G builds cross-sectoral coalitions to achieve carefully defined outcomes, chosen for their capacity to leverage change. E3G works closely with like-minded partners in government, politics, business, civil society, science, the media, public interest foundations and elsewhere.

E3G
47 Great Guildford Street
London SE1 0ES
Tel: +44 (0)20 7593 2020
Fax: +44 (0)20 7633 9032
www.e3g.org

About the Fabian Society

The Fabian Society is Britain's oldest political think tank. Since 1884 the society has played a central role in developing political ideas and public policy on the left. It aims to promote greater equality of power and opportunity; the value of collective public action; a vibrant, tolerant and accountable democracy; citizenship, liberty and human rights; sustainable development; and multilateral international co-operation.

Through a wide range of publications and events the society influences political and public thinking, but also provides a space for broad and open-minded debate, drawing on an unrivalled external network and its own expert research and analysis. Its programme offers a unique breadth, encompassing national conferences and expert seminars; periodicals, books, reports and digital communications; and commissioned and in-house research and comment.

The Society is alone among think tanks in being a democratically-constituted membership organisation, with almost 7,000 members. Over time our membership has included many of the key thinkers on the British left and every Labour prime minister. Today we count over 200 parliamentarians in our number. The voluntary society includes 70 local societies, the Fabian Women's Network and the Young Fabians, which is itself the leading organisation on the left for young people to debate and influence political ideas.

The Society was one of the original founders of the Labour party and is constitutionally affiliated to the party. We are however editorially, organisationally and financially independent and work with a wide range of partners from all political persuasions and none.

Fabian Society
61 Petty France
London SW1H 9EU
www.fabians.org.uk

This report, like all publications of the Fabian Society, represents not the collective views of the Society but only the views of the author.