Written submissions received for the London Assembly's review into Fuel Poverty in London

Evidence Log – Fuel Poverty

Number	Organisation	Contact/Title
Sub-001	Ofgem	Lisa Taylor - *Consumer & Social Policy Manager*
Sub-002	London Borough of Brent	Andrew Davies - *Policy & Performance Officer*
Sub-003	London Borough of Richmond Upon Thames	Colin Coomber - *Energy Efficiency Co-ordinator*
Sub-004	Westminster City Council	Irene Fernow - *Energy Efficiency Commissioning Officer*
Sub-005	EDF Energy	DiegoSanchez-Lopez - *Corporate Policy & Regulation*
Sub-006	SSE	Alistair McGirr - *Public Affairs*
Sub-007	Carrilion Energy Services	Paul Redmayne - *Key Accounts Manager*
Sub-008	Islington Council	John Kolm-Murray - *Seasonal Health & Affordable Warmth Co-ordinator*
Sub-009	London Borough of Haringey	John Mathers - *Fuel Poverty Officer*
Sub-010	Age UK London	Gordon Deuchars - *Policy and Campaigns Manager*
Sub-011	Energy UK	Peter Kocen - *Public Affairs Manager*
Sub-012	National Energy Action	Peter Smith - *External Affairs Manager*
Sub-013	London borough of Newham	Toby Morgan - *Graduate Trainee Domestic Energy Efficiency Officer*
Sub-014	FPAG	Helen Coates - *Fuel Poverty Advisory Group for England*
Sub-015	Consumer Focus	William Baker - *Principal Policy Advocate*
Sub-016	London Councils	Liz Bartlett - *Policy and Project Manager*
Sub-017	LB Lambeth	Sophie Neuburg - *Energy Strategy Officer*
Sub-018	London Civic Forum	Deirdre McGrath - *Head of Civic Engagement*
Sub-019	Consumer Focus	William Baker - *Head of Fuel Poverty Policy*
Sub-020	PowerPrize Ltd	Efim Rabinovitch - *Managing Director*
Sub-021	Shimmer smart homes system and fuel poverty	Neil McClenaghan
Sub-022	Friends of the Earth	Quentin Given - *Major Campaign Coordinator, UK Climate Team*
Sub-023	University College of London	Sue Hogarth - *Public Health Specialty Registrar*
Sub-024	SavetheChildren	Kasia Muszynska - *Project Officer*
Sub-025	British Gas	Kelly Lee - *Energy Solutions Manager*
Sub-026	Federation Hills	Lizzie Clifford - *Policy Officer*
Sub-027	British Gas	Kelly Lee - *Energy Solutions Manager*

From: Lisa Taylor [mailto:Lisa.Taylor@ofgem.gov.uk]
Sent: 18 May 2011 13:30
To: Jo Sloman
Cc: Teodozja Kuncewicz; Kate Smith; Christopher Green
Subject: RE: Investigation into fuel poverty in London

Dear Jo,

My colleague Claire Tyler is now on maternity leave so i am replying to the letter sent by James Cleverly (attached).

Ofgem's principal objective is to protect the interests of consumers existing and future, wherever appropriate by promoting effective competition. We have several general duties, which relate amongst other things to the protection of vulnerable customers. In this regard we help Government meet their goal to eliminate fuel poverty as far as reasonably practicable among households in Great Britain.

The price of gas and electricity remains a key concern for customers. We are acutely aware that the required scale of investment needed to achieve a low carbon economy and security of supply over the next 10 to 15 years will have a significant effect on customers' bills which many customers are already struggling to afford. Ensuring that any price increases are fully justified and are in the best interests of present and future consumers, as well as ensuring that the costs of moving to a low carbon energy sector are not borne disproportionately by those customers least able to pay is a key concern for us.

Due to the specific nature of your questions we are unable to respond to your letter as we don't have London specific experience. However, we are responding to Professor John Hills call for evidence on Government's independent review into fuel poverty and we would be happy to send you a copy of our response if you wish.

This link is to a report on the range of measures suppliers undertook to assist their vulnerable and fuel poor customers in 2009-10, you may find this useful for your review.

Regards,
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Fuel Poverty and the impact it has on health

Health Partnerships Overview and Scrutiny Committee Task Group

February 2011

Membership:

Councillor Janice Long (Chair)

Councillor Margaret McLennan

Councillor Wilhelmina Mitchell Murray

Councillor Claudia Hector

Councillor Michael Adeyeye

Councillor Reg Colwill

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Chair's Foreword – Councillor Janice Long

As I write this foreword the UK is experiencing an extended cold spell for the second year running. It's currently -1° Celsius in Harlesden – bitterly cold, and has been for some days now. Whilst many of us can escape the bitter temperatures by retreating to our warm homes, for a significant number of people in Brent this just isn't possible because they are in fuel poverty.

In simple terms fuel poverty is "the inability to afford to adequately heat the home". There could be many reasons for this, including low income, the size of the home and under occupancy, the price of fuel and energy inefficient homes. Our task group has looked at the causes of fuel poverty and the impact that it is having on health in Brent. We've also investigated the work that is being done to tackle fuel poverty in our borough, with particular focus on how the local health service is involved in this work.

It has been demonstrated in various research projects that fuel poverty and its consequences can have a major impact on physical and mental health and well being. Fuel poverty affects how people are able to cope with COPD and other respiratory problems. Flare ups of these illnesses can be exacerbated by the general state of the home, such as cold homes, cleanliness, clutter, living in one room and other social factors such as diet. These are issues associated with poverty, not just fuel poverty. There are knock on effects on general life as people become more confined to their home, or one room. They go out less, exercise less and therefore their health and wellbeing can deteriorate.

Although there is much good work happening to address fuel poverty in Brent, the task group believes that more could be done particularly working with the local NHS. Engaging health services on this issue is crucial to make the links between fuel poverty and the impact on health. Reducing fuel poverty will benefit local people and all public service providers in Brent and the task group hopes that the local NHS will actively engage on fuel poverty initiatives in the future.

We've made a number of recommendations that relate to the local NHS – both North West London Hospitals NHS Trust and NHS Brent. The task group would like the local NHS to work with Energy Solutions, a local charity working to reduce fuel poverty, to develop a referral pathway for patients who are suspected of being in fuel poverty. One of the things that struck me during the review was the frontline staff, who are working with people in their homes, will come across people in under-heated, damp accommodation on a regular basis – people who are likely to be in fuel poverty. They need a place to refer those clients for appropriate advice and support and in Brent we have to come up with a way of making this happen. A referral pathway is the first step to take with this.

Throughout the review the importance of partnership working was stressed to the task group. Tackling fuel poverty cannot be the responsibility of one organisation – it has to be addressed in a collaborative way by the council, NHS, voluntary sector, housing landlords and the private sector. Experiencing the weather that we are currently reinforces my view that this is an issue that needs urgent attention if the health and wellbeing of many of our residents isn't going to be further affected.

Councillor Janice Long
6th December 2010

Executive Summary

It has been demonstrated in various research projects that fuel poverty and its consequences can have a major impact on physical and mental health and well being. Brent Council's Health Partnerships Overview and Scrutiny Committee established this task group to look at the effect that fuel poverty has on peoples' health in Brent.

Fuel poverty is "the inability to afford to adequately heat the home". A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel. In 2008, the number of households in fuel poverty in the UK was estimated to be around 4.5 million which is approximately 18% of all households. It has been difficult for the task group to quantify the number of households in Brent in fuel poverty. Data released by government has a significant time lag and by most estimates, likely to be below the true level of fuel poverty in the borough. Although the true amount of fuel poverty in Brent is uncertain, 20% has been a common figure that the task group has heard.

The impacts of fuel poverty on health and wellbeing are multiple. Fuel poverty and the affect of a cold home can lead to or exacerbate the following health conditions and social issues:

- Heart attack and stroke
- Chronic obstructive pulmonary disease (COPD) and respiratory infections
- Asthma
- Worsening arthritis
- Falls and other accidents
- Mental health problems
- Heat or eat choices
- Children's education can suffer as a result of asthma attacks or recurrent respiratory infections leading to days off school

Work is taking place in Brent to tackle fuel poverty. We are fortunate to have a local charity, Energy Solutions that works on fuel poverty issues in our borough. As well as providing fuel debt advice, Energy Solutions will carry out home visits to check whether people are eligible for grant funding to pay for fuel poverty mitigation measures, such as cavity wall insulation or loft insulation. The task group heard many positive things about Energy Solutions, but it is also aware of how stretched their resources are. Changes to grant funding allocations, which are detailed in the report, could lead to increased demand for Energy Solutions services – there will be less funding to spend on fuel poverty mitigation, meaning that more people could fall into fuel debt or suffer the health and wellbeing consequences of being in fuel poverty.

The task group's recommendations are split into four main areas –

- advice and information
- improving energy efficiency of the housing stock and reducing fuel bills
- working with landlords; and
- working with the NHS

Although there is good work happening to address fuel poverty in Brent, the task group believes that more could be done. Engaging the local NHS on this issue is crucial to make the links between fuel poverty and the impact on health. Reducing fuel poverty will benefit local people and all public service providers in Brent and the task group hopes that the local NHS will actively engage on fuel poverty initiatives in the future. Indeed, the task group believes that NHS investment in schemes to tackle fuel poverty could ultimately lead to cost savings if fewer people suffer ill health as a result of living in warmer homes. At this time of

unprecedented financial pressure, the task group believes that effort should be made to invest in ill health prevention to reduce spending on treatment.

In order for this to happen buy-in to fuel poverty work is needed from the top of the local NHS, as well as the council. The task group is recommending that the council works with partners to produce an affordable warmth strategy in order to develop a coherent and focussed plan to tackle fuel poverty in the borough. In addition to this, the Local Strategic Partnership will be encouraged to take up fuel poverty as one of its areas of work to bring together the council, the local NHS and voluntary sector to work through ways to better use resources to tackle this problem.

There are two other areas where the task group hopes action can be taken. The first is in relation to a comprehensive referral network for people in fuel poverty. The task group was told that many frontline NHS and council staff see people in their homes who are likely to be in fuel poverty. Knowing where to refer those people for help is crucial. The task group is recommending that partners work with Energy Solutions to try and put in place a comprehensive referral network so that staff can confidently refer people they suspect of being in fuel poverty to a place where they will receive informed advice and guidance.

Secondly, the task group is keen that the council does all it can to encourage landlords to ensure their properties are as fuel efficient as possible. This doesn't just require enforcement, but can be done in other ways. The task group has recommended that the council continues to require landlords to provide properties with at least a D rating under the Energy Performance Certificate system before it is used for temporary accommodation or housing for people placed by the council. The task group wants the council to demonstrate its commitment to improving the standard of accommodation in Brent, starting with the private sector accommodation it uses.

Above all the report makes clear that tackling fuel poverty cannot be the responsibility of one organisation – it has to be tackled in a collaborative way by the council, NHS, voluntary sector and private sector. The task group hopes that organisations in Brent can work together to address this issue that is having such a detrimental impact on the lives of many local people.

Recommendations

The task group's recommendations are:

Recommendation 1 – The task group recommends that Energy Solutions and Brent Council's Voluntary Sector Team work with advice providers in Brent to develop a consistent and co-ordinated fuel debt advice service in Brent.

Recommendation 2 – The task group recommends that Brent Council's Housing Policy Team works with Energy Solutions and local RSLs to help broker an agreement for Energy Solutions to be compensated for providing fuel debt advice for housing association tenants in Brent.

Recommendation 3 – Recommendation 3 – The task group recommends that officers in the council's Environmental Projects and Policy Team work with Energy Solutions to monitor the emerging funding and policy environment in relation to fuel poverty, so that Brent is able to respond to new funding opportunities if they become available post April 2012.

Recommendation 4 – The task group recommends that the council does not arrange for installation of pre-payment energy meters in its properties or properties used for temporary accommodation and instead refers the tenants and residents that request this service to Energy Solutions for advice on energy efficiency and fuel debt.

Recommendation 5 – The task group recommends that officers in the council's Environmental Projects and Policy Team works with officers from NHS Brent and North West London NHS Hospitals Trust to resurrect the planned fuel poverty and health campaign and implement this in Brent.

Recommendation 6 – The task group recommends that the council continues to require landlords to provide properties with at least a D rating under the Energy Performance Certificate system before it is used for temporary accommodation or housing for people placed by the council. This standard should be enforced even if pressure on private sector properties increases as a result of changes to housing benefit rules, and if the council needs to use properties outside of Brent to place people.

Recommendation 7 – The task group recommends that Brent Private Tenants Rights Group presents the findings from its mystery shopping of landlords to the appropriate overview and scrutiny committee to see if the council should be taking additional action as a result of this work.

Recommendation 8 – The task group recommends that NHS Brent and GPs work to include a question on fuel poverty in their screening of over 75s, to help track the extent of the problem and to refer them to appropriate advice. This could be done on a trial basis and if successful rolled out across the borough.

Recommendation 9 – The task group recommends that staff from NHS Brent and North West London NHS Hospitals Trust work with Energy Solutions, supported by the council, to develop an appropriate referral pathway for patients who are suspected of being in fuel poverty. The referral pathway should involve as wide a range of organisations as possible and could build on the Hot Spots scheme that already exists in Brent. Energy Solutions should be appropriately funded by the NHS for facilitating a referral network.

Recommendation 10 – The task group recommends that North West London NHS Hospitals Trust investigates the possibility of running fuel poverty advice sessions with Energy Solutions at their respiratory clinics. Energy Solutions should be funded to carry out this work.

Recommendation 11 – The task group recommends that Brent Council, with partners, develop an affordable warmth strategy for Brent to enable the borough to develop a coherent and focussed plan to tackle fuel poverty within existing resources.

Recommendation 12 – The task group recommends that Brent Council considers the feasibility of undertaking a stock condition survey in order to produce a more accurate picture of fuel poverty in the borough and a basis from which to chart measures put in place to tackle it.

Recommendation 13 – The task group recommends that Brent's Local Strategic Partnership hosts a fuel poverty event to begin to address the wider issues outlined in this report and to promote the partnership approach involving the council, NHS and voluntary sector to bring more people out of fuel poverty.

Introduction

Brent Council's Health Select Committee (now known as the Health Partnerships Overview and Scrutiny Committee) established a task group to look at the effect that fuel poverty has on peoples' health in Brent. It has been demonstrated in various research projects that fuel poverty and its consequences can have a major impact on physical and mental health and well being. There are also specific factors in Brent that led members to select this topic, such as the high proportion of housing in the private rented sector (where the proportion of households in fuel poverty is highest), the relative deprivation of the borough, particularly income deprivation and the general health inequalities that exist in Brent – there is a nine year difference in life expectancy between males in Harlesden in the south of Brent and Northwick Park in the north. Members were interested to know how fuel poverty contributes to health inequalities in Brent.

This work is part of a wider scrutiny project in North West London that is looking at the relationship between housing and health inequalities. Funding has been provided by the Centre for Public Scrutiny to support this work, and Brent's report will be used in a tool kit to assist other councils carrying out housing and health inequalities scrutiny reviews. The other boroughs taking part in this work, and their work areas were:

- Health and the Built Environment – Hounslow and Hammersmith and Fulham
- Fuel Poverty/Energy Efficiency – Brent and Ealing
- Overcrowding – Kensington and Chelsea and Westminster
- Overcrowding and its impact on children's educational – Hillingdon

Given that this was part of a wider review looking at the links between housing and health, it was important that fuel poverty was picked up as an issue.

Review methodology

In order to carry out their review the fuel poverty and health task group:

- Carried out a review of literature and discussions with housing and health providers on the links between fuel poverty and health;
- Reviewed the means (i.e. grants and income maximisation advice) currently available to both residents and landlords to promote energy efficiency and reduce fuel poverty, of the various agencies involved, and what the take up of these services are;
- Reviewed fuel poverty and affordable warmth strategies currently in place and best practice examples;
- Discussed fuel poverty and health with local energy agencies;
- Held discussions with housing departments and providers on the actions used to promote energy efficiency in social and council housing, and how private sector households in fuel poverty are targeted and reached;
- Discussed with GPs and local health service providers referrals to advice on fuel poverty and affordable warmth. They also considered hospital admissions data for illnesses connected to cold homes and fuel poverty, including the costs to the health service of these admissions;
- Consulted with residents by carrying out a survey to learn more about the effects of fuel poverty on peoples' health and wellbeing.

The task group interviewed the following people during their work:

- Jeff Bartley, Environmental Projects and Policy Manager
- Matt Sheen, Energy Solutions
- John Palmer, Sustainability Manager, North West London Hospitals NHS Trust

- Tony Hirsch, Head of Housing Policy
- Jacky Peacock, Executive Director, Brent Private Tenants Rights Group
- Maria Buxton, Respiratory Physiotherapist Consultant, North West London Hospitals NHS Trust
- Margaret Magee, Annalisa Tonge, Monica Bowles and Sandra Henry – Short Term Assessment, Rehabilitation and Reablement Service, North West London NHS Hospitals Trust
- Perry Singh, Assistant Director Housing Needs/Private Sector Housing and Phil Mitchell, Head of Enforcement Service, Private Housing Services
- Simon Bowen, Acting Director of Public Health

Task group membership

The task group members were:

- Councillor Janice Long (chair)
- Councillor Margaret McLennan
- Councillor Wilhelmina Mitchell Murray
- Councillor Claudia Hector
- Councillor Michael Adeyeye
- Councillor Reg Colwill

The task group was supported by Andrew Davies, Policy and Performance Officer.

National Context

Definition of Fuel Poverty

In simple terms, fuel poverty is "the inability to afford to adequately heat the home"[1]. A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel. However, it is worth noting that there is some debate about the most appropriate definition of fuel poverty, dependent on which version of income is used to calculate prevalence. For example, the Greater London Authority has found that when using a 'residualised' measure of income (a measure of income which excludes housing costs) the incidence of fuel poverty in London rose to 24% or 760,000 households in 2008, which is considerably more than the government's 'full income' definition which gives a rate of 10%.[2] Despite the different definitions when the task group refers to fuel poverty it is talking about households spending 10% of their income on fuel (which is the government's definition).

Number of households in fuel poverty

In 2008, the number of households in fuel poverty in the UK was estimated to be around 4.5 million, a rise of around 0.5 million from 2007. This represents about 18% of all households. The UK figure is based on latest figures for England and Scotland, along with extrapolated estimates for Wales and Northern Ireland, which are both based on earlier figures.[3]

[1] National Energy Action definition
[2] 'Fuel Poverty in London: Figures and Tables illustrating the challenge of tackling fuel poverty', Greater London Authority, September 2008, p16
[3] Annual report on fuel poverty statistics 2010 – Department of Energy and Climate Change

Table 1 - Fuel Poverty in England and the UK

Fuel poverty (millions of households)	1996	1998	2001	2002	2003	2004	2005	2006	2007	2008
England (all)	5.1	3.4	1.7	1.4	1.2	1.2	1.5	2.4	2.8	3.3
Vulnerable households	4	2.8	1.4	1.2	1	1	1.2	1.9	2.3	2.7
UK (all)	6.5	4.75	2.5	2.25	2	2	2.5	3.5	4	4.5
Vulnerable households	5	3.5	2	1.75	1.5	1.5	2	2.75	3.25	3.75

What causes fuel poverty?

There are four main causes of fuel poverty. They are:

- Low income
- Size of home and under occupancy
- Price of fuel or the inability to access cheaper fuel
- Energy inefficient homes

Income

Given that fuel poverty is linked to deprivation it is unsurprising that there is a heavy concentration of fuel poverty amongst lower income households, with the lowest 30% of income households accounting for nearly 90% of fuel poverty in England. In recent years, increasing fuel prices have led to a gradual rise in the rate of fuel poverty amongst the higher income deciles. Historically households in these deciles were only fuel poor because of a very high modelled bill, through under occupying their dwelling, or having a very inefficient dwelling, price rises in recent years now mean that there are more fuel poor observed in the higher income deciles.

Size of home and under occupancy

The small number of occupants in a house compared to the size of a house often leads to fuel poverty. The government has identified that households in the worst degree of fuel poverty tend to occupy accommodation that is significantly large in area, especially single, elderly people. Under occupancy occurs mainly where children have left home or a spouse has died leaving one person in a house larger than necessary for their needs, but where they are often reluctant to move.

Impact of rising fuel prices

The biggest contribution to increasing fuel poverty between 2007 and 2008 was rising fuel prices. Although incomes nationally rose between 2007 and 2008, this rise was at a slower rate than between 2006 and 2007, possibly influenced by the economic slowdown. This is likely to continue into 2009, putting greater pressure on households to remain out of fuel poverty, particularly if the cost of energy continues to increase. Prices have risen at a rate well above that of income since 2004 and this has caused fuel poverty to rise from around 1.2m households in England to 3.3m in 2008.

Between 1996 and 2005, prices for domestic energy had risen more slowly than general inflation. However, between 2004 and 2009, annual price increases for energy outstripped general price increases. For example, in 2006 the RPI put general inflation at around 3% but domestic energy prices increased by nearly 25% contributing to the rises in fuel poor households. Fuel prices are also predicted to rise through 2010/11. For example, Scottish

and Southern Energy is upping its gas tariff by 9.4% for its 3.6 million customers from 1st December 2010, with other energy providers likely to do the same.[4]

Energy efficiency

In addition to raising household incomes and looking at the costs of energy bills, it is also very important to improve the energy efficiency of the home. Heat is lost from the home in a number of ways:

- 35% is lost from a standard home through walls.
- 25% is lost through roofs
- 15% through floors
- 15% through doors
- 10% through windows.

There are a number of measures that can be installed in the home to reduce heat loss and lower energy bills including:

- Draught proofing
- Cavity wall insulation
- Loft insulation
- Double/secondary glazing
- In addition, installing a high efficiency boiler and controls will also help to reduce costs.

Households living in private rented accommodation have higher likelihood of living in fuel poverty – 16% of households in private rented accommodation are in fuel poverty compared with 11% in other tenures. However, the housing tenure with the greatest number of people in fuel poverty is owner occupied housing. Two thirds of households in fuel poverty own their own home.[5] Fuel poverty is also more likely to affect older people. The charity National Energy Action (NEA) estimates that 50% of the fuel poor are over 60 years old.[6] Action to tackle fuel poverty should be aimed at older owner occupiers and the private rented sector in order to have the biggest impact.

Effects of fuel poverty

Fuel poverty has a number of detrimental effects which can't be understated. A low income household may try to maintain a comfortable temperature in their home, but could fall into fuel debt as a result. Being in debt to energy companies and dealing with the consequences of this can lead to stress for the individuals concerned.

Fuel poverty has a physical impact on the condition of homes if householders try to minimise their fuel bills. Inadequate heating can lead to some or all of the following problems:

- Condensation, dampness and mould growth
- Deterioration of the property
- Increased maintenance and repair costs
- Reduction of the asset value of the property

There is little doubt that cold housing is a health risk. The Marmot Review, "Fair Society, Healthy Lives", neatly summarises the importance of a warm home. The review says that

[4] The Guardian – 29th October 2010
[5] Fair Society, Healthy Lives – The Marmot Review
[6] National Energy Action presentation at Ealing Council – May 2010

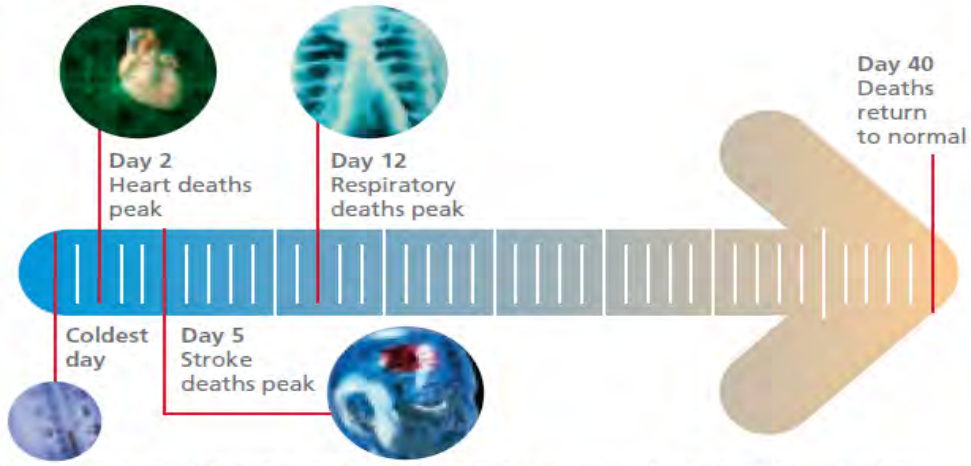
cold is believed to be the main cause of extra winter deaths that occur each year between December and March. Winter deaths continue to happen in the UK despite government policies to reduce the number of cold homes and prevent the risk of ill health due to cold among families with children, older people and those with a disability or long-term illness.[7] Between December 2008 and March 2009 there were 36,700 additional deaths in England and Wales.

Most winter deaths are unnecessary and preventable. Much colder countries than the UK, such as Finland and Russia, have lower levels of excess winter mortality. Compared with colder countries, at the same outdoor temperature living rooms in the UK are colder and bedrooms are less likely to be heated.[8]

The main illnesses associated with fuel poverty are cardio vascular disease and childhood asthma. North West London NHS Hospitals Trust reports that during the winter months (October to March) admissions for the illnesses associated with the cold are around 300 a month higher than the average during the summer months. Whilst not all of them will be connected to cold homes or fuel poverty, winter has the greatest proportional effect on respiratory disease.

The chart below shows what happens following a cold snap, and the impact it has on respiratory conditions in the days immediately following the coldest day in a given spell. As can be seen, the full impact of cold weather can take over a month to work itself through, with death rates only returning to normal levels 40 days after the coldest day.

Box 3: Cold weather death sequence



Source: Adapted from Donaldson GC, Keatinge WR. Early increases in ischaemic heart disease mortality dissociated from and later changes associated with respiratory mortality after cold weather in south east England. *Journal of Epidemiology and Community Health* 1997; 51(6): 643–8

The impact of illnesses and the social effects associated with fuel poverty are set out below:

- **Heart attack and stroke** - Blood pressure rises in the elderly following exposure to temperatures below 12°C. The risk of heart attacks and strokes increases with increasing blood pressure.

- **Chronic obstructive pulmonary disease (COPD) and respiratory infections** - Temperatures below 16°C are thought to lower resistance to respiratory infections.

[7] Fair Society, Healthy Lives – The Marmot Review
[8] Fuel Poverty and Health – A guide for primary care organisations, and public health and primary care professionals

Damp leads to growth of mould and fungi that can cause respiratory infections. The cold impairs lung function and is an important trigger of broncho-constriction in COPD.

- **Asthma** - Damp leads to growth of moulds and fungi that can trigger attacks. The cold impairs lung function and is an important trigger of broncho-constriction in asthma.

- **Worsening arthritis** - Cold, damp environments worsen the symptoms of arthritis.

- **Falls and other accidents** - A cold home increases the risk of falls amongst elderly people. There is also an increased risk of accidents due to loss of strength and dexterity in the hands.

- **Mental health problems** - Cold and damp housing has also been associated with increased mental health problems. Stress levels can increase due to fuel debt and other financial problems. People can become more socially isolated. Householders that are economising are less likely to socialise outside of their homes, while they may also be embarrassed to invite their friends into a cold, damp home. Such isolation can lead to depression and is also a risk factor for coronary heart disease.

- **Heat or eat?** - Choices may need to be made between spending on healthy food and on fuel bills, with the result being poor diets or a cold home. This can eventually lead to increased long-term health risks of cancer and coronary heart disease.

- **Children's education** - School days can be lost as a result of asthma attacks or recurrent respiratory infections, and in many cold homes only some rooms are heated, resulting in children not having a quiet space in which to concentrate on homework. This in turn can lead to reduced academic achievement and potentially excluding them from a range of life opportunities.

Research has been carried out which has shown that improvements in housing conditions have a positive impact on health and wellbeing, including lower rates of mortality, improved mental health and lower rates of contact with GPs. Significant improvements in health-related quality of life were found in a randomised controlled trial of home insulation, which concluded that targeting home improvements at low-income households significantly improved social functioning and both physical and emotional well-being (including respiratory symptoms). It has been argued that the decent homes standard has been one of local governments' biggest public health programmes in recent years, improving the thermal comfort of thousands of homes.[9]

Fuel Poverty in Brent

Housing is responsible for 30% of carbon emissions in Brent[10] and so improving energy efficiency is important for the environment as well as to improve living conditions and the health and wellbeing of local people. The housing stock in Brent is made up of the following tenures[11]:

- Owned outright – 25%
- Buying on a mortgage – 31%
- Renting from the council – 9%

[9] Professor Michael Marmot – LGA Conference November 2010
[10] Shaping the Future of Housing in Brent – Housing Strategy 2009-2014
[11] Mori, Place Survey, 2008-09

- Renting from a Housing Association/Trust – 12%
- Rented from a private landlord – 20%

The Marmot review identified households in private rented accommodation as being more likely to be living in fuel poverty, this issue is particularly important for Brent, which has a relatively high number of properties in the private rented sector. Additionally. 56% of households are either owner occupiers or in the process of buying their home, using a mortgage. People who own their homes can often end up in fuel poverty, particularly older people in large, under occupied homes. The decent homes standard that applies to council properties and RSL properties has led to an improvement in the fuel efficiency and comfort of these properties. In Brent, the vast majority of social housing meets the decent homes standard.

Fuel poverty is closely linked to deprivation. The risk of a household being in fuel poverty rises sharply as income falls.[12] Whilst areas of Brent are relatively affluent, parts of the borough continue to experience high levels of deprivation. Brent is ranked 53rd out of 354 boroughs in the Index of Multiple Deprivation (IMD) 2007 (1 = Most Deprived, 354 = Least Deprived). This means that Brent is in the 15% most deprived local authorities in the country. Brent is also the most deprived borough in North West London.

Income deprivation is a major issue in Brent which will be contributing to fuel poverty in the borough. Brent has one of the lowest average annual incomes compared to the rest of London. In 2009 the average household annual income for Brent residents was £31,430; this was a decrease from the 2008 figure of £33,026. Brent has the 3rd lowest average income levels in London and there are 21,504 households in Brent (20.4%) that have an average annual income of £15,000 or less.[13]

Specific data on fuel poverty in Brent has been published by the Department for Energy and Climate Change. The latest figures are from 2008. As can be seen in the table below, 12.7% of households in Brent are said to be in fuel poverty, the third highest in London. This has increased from 10.2% in 2006.

Table 2 - % of Households in Fuel Poverty (2008)[14]

Local Authority	% of households in Fuel Poverty
Newham	13.7%
Hackney	13.5%
Brent	12.7%
Haringey	12.7%
Islington	12.5%
Barking and Dagenham	12.1%
Waltham Forest	12.0%
Camden	11.9%
Kensington and Chelsea	11.7%
Westminster	11.6%

Although these are the official fuel poverty statistics, the task group heard from a number of witnesses that there could be as many as 20% of households in the borough affected and it is likely that this is an underestimation.

[12] Fair Society, Healthy Lives – The Marmot Review
[13] Brent Evidence Base 2010
[14] Department of Energy and Climate Change Fuel Poverty Statistics

Households with low SAP ratings

The Standard Assessment Procedure or SAP rating is used to give a measure of the overall energy efficiency of a dwelling. The higher the SAP rating the more energy efficient the dwelling will be. The information that Brent has on SAP ratings is a little out of date as a housing stock condition survey hasn't been carried out in the borough for some time. However, the Private Sector Housing Strategy: 2005-2010 contains comprehensive information on SAP ratings from 2003.

In 2003, the average SAP rating for Brent was 52. An estimated 7.4% of dwellings had a SAP of below 30. Owner-occupied (no mortgage) dwellings showed the lowest mean SAP rating, the highest being for RSL dwellings. However, according to the Brent Council Environment Report: 2005-2009, the SAP rating for BHP properties had improved to 65.[15]

Typically the older the dwelling, the lower the SAP rating. Dwellings built pre-1964 had an average SAP of around 50. The highest mean SAP is found in dwellings built post-1964. Most properties in the borough were built prior to 1964.

SAP ratings vary between different types of households. Households living in the least efficient homes (that is in a home with a SAP rating of 30 or less) tended to:

- live alone – 37.8% of the least efficient homes contain only one person, whereas only 27.5% of all households are single person households.
- be elderly – 31.9% of the least efficient homes only contain elderly people, 16.9% of all households are only older people.
- have special needs – 13.2% of the least efficient homes contain someone with a special need compared with 10.6% of all households.
- have low incomes – the average gross earned income of households in the least energy efficient homes is £17,355 compared with £23,028 for all households[16].

Energy Solutions have provided the council with estimated SAP ratings for private sector housing in Brent up to 2010. These do not differentiate between properties in the private rented sector and those that are owner occupied.

Table 3 – Estimated SAP ratings for private sector dwellings in Brent

Year	SAP Rating
April 2006	56
April 2007	58
April 2008	59
April 2009	59.4
April 2010	68

SAP ratings in the borough appear to be improving although there is a significant increase from 2009 to 2010 which is being investigated to ensure this is accurate, and if it is, to understand why there has been such an improvement.

[15] Brent Council's Environment Report: 2005-2009
[16] Brent Private Sector Housing Strategy: 2005-2010

Key Findings

Fuel Poverty Services in Brent

It has been difficult for the task group to establish a reliable figure for the number of people living in fuel poverty in Brent. Statistics on fuel poverty are either unreliable or out of date – the government has produced information (table 2 above), but although the data was released in 2010 it relates to 2006. Councils survey residents each year for NI 187 – "Tackling fuel poverty: Percentage of people receiving income based benefits living in homes with a low and high energy efficiency rating", but nobody interviewed by the task group thought that this data was robust or accurate. As many as 20% of Brent's population could be in fuel poverty and this may even be an underestimation of the problem. The survey carried out for the task group shows that over 30% of respondents consider themselves to be in fuel poverty (see appendix 2). The areas of Brent most likely to be affected by fuel poverty are likely to be the most deprived areas of the borough. However, there will be pockets of fuel poverty across Brent. For example, older people living in larger houses in the north of Brent that are under-occupied – in crude terms, "asset rich, cash poor".

The fuel poverty and energy action charity National Energy Action believe that there are four key steps to eradicating fuel poverty. They are:

- Income maximisation
- Price of energy
- Energy efficiency
- Working with landlords

The task group has investigated the efforts that are being made in Brent to eradicate fuel poverty, focussing on these four areas.

Income maximisation

Many people interviewed by the task group believed that raising income is crucial to tackling fuel poverty, especially for elderly people living on fixed incomes. If people are entitled to benefits they should be claiming them. However, around £4.5bn income related benefits went unclaimed by pensioners in the UK in 2008/09 and almost half of owner occupiers in the UK didn't claim the pension credit they are entitled to. [17] It has been suggested to the task group that an income maximisation project focussing on the over 75s would help some of the most vulnerable people in the borough to heat their homes adequately in winter.

Often people need advice to enable them to claim the benefits they're entitled to. Brent Council has contracted its fuel poverty advice work to Energy Solutions. Energy Solutions is based in Brent and has a charitable section which delivers energy advice and fuel poverty services to local residents and a separate consultancy business which delivers a range of professional services related to energy efficiency and sustainability across North West London. Housing and Community Care and Environment and Neighbourhood Services provide funding to Energy Solutions for their work on fuel poverty. There is one member of staff working full time on fuel poverty issues, plus one part time member of staff. Three other members of the staff provide additional administrative, strategic and fundraising/accounting support as required for the delivery of the fuel poverty services. Energy Solutions uses established links and partnerships to refer clients to the local Job Centre Plus or the DWP/Pension Service for a free benefit entitlement check to ensure their incomes are

[17] Joseph Roundtree Foundation Website – www.poverty.org.uk

maximised. This is an important part of the debt advice service. It is interesting to note that of those people on benefits who responded to the task group's fuel poverty survey only 21% had received a benefits entitlement check (see appendix 2).

Energy Solutions has established a fuel debt advice service for vulnerable people living in Brent. The service is open to residents of all tenure and occupancy types. Energy Solutions helps people to secure debt right offs, advocate on the client's behalf with utility suppliers where disputes around billing and metering arise and ensure people are on the most appropriate billing tariff for their circumstances. They will also help people switch from electric to gas heating – electric heating can be three times more expensive. Since April 2010 Energy Solutions has been in contact with over 500 residents about their fuel bills or energy use, carried out 217 home visits and secured over £23,000 of fuel debt write offs.

The task group was informed by Energy Solutions that attempts to work with other organisations that may provide fuel debt advice, such as the Brent Citizens Advice Bureau, had not been successful. Fuel debt advice is a specialist area of advice and Energy Solutions would be keen to engage other advice providers to work with them to provide a more co-ordinated and consistent service in Brent. The task group agrees with this and recommends that Energy Solutions works with Brent Council's Voluntary Sector Team to engage other advice providers on this issue and develop a co-ordinated fuel debt advice service for Brent.

Recommendation 1 – The task group recommends that Energy Solutions and Brent Council's Voluntary Sector Team work with advice providers in Brent to develop a consistent and co-ordinated fuel debt advice service in Brent.

Housing associations have been keen to take up the fuel debt advice provided by Energy Solutions for their tenants. However, to date, it has not been possible to agree a service level agreement to ensure that Energy Solutions are compensated for this work (Energy Solutions will not charge the client). Energy Solutions would like to develop an SLA with interested RSLs and the task group would encourage this. The task group recommends that the Housing Policy Team helps to broker an agreement between Energy Solutions and local RSLs for the provision of fuel debt advice for housing association tenants in Brent.

Recommendation 2 – The task group recommends that Brent Council's Housing Policy Team works with Energy Solutions and local RSLs to help broker an agreement for Energy Solutions to be compensated for providing fuel debt advice for housing association tenants in Brent.

Grant funding

When the task group began their work looking at fuel poverty in Brent, there were two main grants available to people wishing to improve the energy efficiency of their home:

- Warm Front provides grants for heating and insulation to people in receipt of certain qualifying benefits. Warm Front is a national scheme and operates with central annual budget which is allocated on a first come first serve basis.
- London Warm Zones provide insulation and heating and is available free to people classed as being in the "priority group". For all other clients, classed as the 'Able to Pay' (ATP), the scheme provides a range of energy efficiency services at heavily discounted rates. Warm Zones is 50% funded by EDF Energy under their CERT obligation funding and 50% by the GLA's Target Funding Stream (TFS). The Warm Zone grant allocation for Brent is spent each year and there is always a waiting list of people wanting heating and insulation measures. Energy Solutions has negotiated successfully with other west London boroughs in the scheme to spend their funding, where it is known there will be an underspend. Up to June 2010, 2,600 homes in

It is worth noting that neither Warm Front or Warm Zones are emergency services, should heating systems fail altogether. There is also a national shortage of heating and insulation installers which leads to a back log of improvement works.

Energy Solutions administer these grants in Brent. Most, but not all of the people advised by Energy Solutions live in the private sector, either in their own home or in rented accommodation. Referrals generally come from word of mouth although Energy Solutions target people living in the private rented sector and landlords to encourage them to take up the grants available for improvements to the home. However, despite this we know that take up of grants among tenants renting in the private sector is very low. Around 4-5% of the Warm Zones jobs carried out each year in Brent are in this sector, the rest carried out in properties owned by the occupier.

The Government's Comprehensive Spending Review confirmed that funding for Warm Front would be cut from £340m per year to £110m per year, although the scheme will run until 2012/13. This will obviously affect the amount of funding that will be available in Brent and will be detrimental to those in fuel poverty who are eligible for this grant, but will miss out on improvements to their home as a result of this reduction. Warm Zone funding will come to an end in April 2012. Energy firms will be expected to provide grant funding to replace reductions in Warm Front funding through the Energy Company Obligation and the introduction of the Green Deal in 2012 to improve energy efficiency and warmth of homes, but it is not clear how much money will be available. Energy companies are also required to put in place carbon reduction programmes, but this is different to alleviating fuel poverty.

There is a greater number of grants available to reduce carbon emissions rather than tackle fuel poverty. Bringing people out of fuel poverty can, in some cases, actually lead to higher CO2 emissions and it is not the same as carbon reduction. For instance, if a household is brought out of fuel poverty by increasing their income they may use more domestic energy because they can afford to do so. This will increase their CO2 emissions. This is why income maximisation work needs to dovetail with projects to improve the energy efficiency of homes in Brent.

The task group is concerned that Warm Zone and Warm Front funding won't be adequately replaced by the Green Deal, which is likely to be the major national energy efficiency scheme. Although energy suppliers will have separate obligations to fund programmes for the most vulnerable and fuel poor, exact details have not been decided nor is it clear how this will translate into borough wide schemes. Therefore, the task group recommends that officers, working with Energy Solutions, monitor this emerging situation so that Brent is able to respond to any funding sources that become available post April 2012 for domestic energy efficiency / fuel poverty projects.

Recommendation 3 – The task group recommends that officers in the council's Environmental Projects and Policy Team work with Energy Solutions to monitor the emerging funding and policy environment in relation to fuel poverty, so that Brent is able to respond to new funding opportunities if they become available post April 2012.

Price of energy

As stated above, the biggest contribution to increasing fuel poverty in recent years has been rising fuel prices. Fuel poverty dropped significantly from 1996 to 2004 (table 1) because of work done to help raise incomes (for example, the introduction of the minimum wage). Since then, fuel poverty has increased as fuel prices have risen significantly above the level of

inflation. Using different methods of paying for energy could help residents to save money and alleviate fuel poverty.

The task group was informed by a number of people interviewed that pre-payment meters were one of the most expensive ways to pay for energy, but they are common in the private rented sector in Brent. Unfortunately many are installed at the request of tenants to help them budget, perhaps unaware that they are more expensive than a normal meter. Nationally the number of people in fuel poverty using a pre-payment meter has fluctuated in recent years. In 2003 and 2004 the rate of fuel poverty was greatest amongst those paying for their electricity and gas by pre-payment meters. However, in 2005, fuel poverty rates amongst households using pre-payment meters were similar to those amongst households paying via standard credit for both gas and electricity. This remained the case in the period between 2005 and 2008 for electricity and in the period 2005 to 2007 for gas. In 2008, those households on gas pre-payment meters again had a slightly higher rate of fuel poverty (23 %) than those on standard credit (20%).[18]

Organisations such as Energy Solutions will work with residents to secure the most appropriate method of payment and try to reduce bills where possible, including switching away from pre-payment meter. The task group was told that pre-payment meters are not used in Brent Housing Partnership properties or private sector properties used by the council for temporary accommodation, but tend to be more widely used in privately rented HMOs so it is easier for tenants to split their fuel bills. The task group was pleased to learn that the council insists that properties have regular gas and electric meters when they are being used for temporary accommodation and hopes that this policy continues.

The energy supply industry and campaigning agencies disagree over the link between prepayment meter use and fuel poverty. The industry maintains that prepayment is simply one of a wide range of payment options – one that is appropriate and beneficial to certain consumers. Charities such as NEA take the view that a payment method that incurs additional costs and encourages rationing is a choice made out of necessity.[19]

Despite the conflict between the energy industry and campaigners we know that households paying for their energy by direct debit are less likely to be in fuel poverty than those paying by prepayment meter (just over 10% of households that pay for their energy using direct debit are in fuel poverty, compared to 23% for those using gas prepayment meter).[20] And whilst budgeting may be easier when using a pre-payment meter, the disadvantages such as the meter being set to collect arrears before fuel can be supplied, outweigh the benefits. The task group would like the council to advise tenants not to switch to pre-payment meters on budgeting grounds because of the cost, and to seek advice on paying for energy and income maximisation from Energy Solutions instead.

Recommendation 4 – The task group recommends that the council does not arrange for installation of pre-payment energy meters in its properties or properties used for temporary accommodation and instead refers the tenants and residents that request this service to Energy Solutions for advice on energy efficiency and fuel debt.

The fuel poverty survey results showed that only just over half of respondents had changed their energy supplier to reduce the cost of their bill, a relatively easy way of saving money by looking for the best deals on domestic energy. Additionally, more than 35% of respondents are not using the cheapest payment methods for their fuel – direct debit or online billing. Again, these are relatively simple ways of saving money that don't require significant

[18] Annual report on fuel poverty statistics 2010 – Department of Energy and Climate Change
[19] National Energy Action Website – Debt and Disconnection
[20] Annual report on fuel poverty statistics 2010 – Department of Energy and Climate Change

investment by council's or other statutory organisations – they are heavily advertised by the energy firms themselves. It is a concern that many people are still not taking advantage of the best deals available to reduce their energy costs.

Energy efficiency

One of the key aims of climate change mitigation work is to encourage households to change their behaviour and use less energy. Brent Council has been working with the Local Government Improvement and Development who have funded a scheme to provide energy meters to householders to enable them to monitor their energy consumption. By providing people with evidence of their energy use they are more likely to take action to reduce it. This device has helped participants reduced their energy consumption by around 15% because they are more energy conscious and recognise ways to save energy. The task group believes that behaviour change is as important as infrastructure improvements.

Brent council did have plans to run a campaign on the link between fuel poverty and health, to raise awareness of the issue. However, this is now on hold as the funding for this was to come from Performance Reward Grant, which has been removed by the coalition government. This task group is disappointed by this. Given that improvements to health benefit all public services the task group believes that health service partners as well as the council should consider running this campaign jointly. The campaign would have cost £??? to fund, and the council should work with local health partners to see if it can be resurrected, perhaps through the Health and Wellbeing Steering Group. The task group recommends that the council works with colleagues in the health sector (NHS Brent and North West London NHS Hospitals Trust) to resurrect the fuel poverty and health campaign and implement it if possible.

Recommendation 5 – The task group recommends that officers in the council's Environmental Projects and Policy Team works with officers from NHS Brent and North West London NHS Hospitals Trust to resurrect the planned fuel poverty and health campaign and implement this in Brent.

Improving the energy efficiency of the existing housing stock is huge and expensive problem. Around 90% of properties that will be standing in 2050 have already been built – therefore retro fitting existing properties is crucial to mitigate climate change and improve the energy efficiency of properties. There is a shortfall in grant funding to carry out all the improvements that are needed, whilst solutions to tackle hard to treat housing, such as external cladding, are prohibitively expensive for many households. Regeneration areas may benefit from energy efficiency measures, especially new build properties, but this will only account for a small proportion of properties in Brent. Retro fitting properties in the rest of the borough is a significant issue.

Many properties in Brent are not suitable for some of the more common energy efficiency measures particularly properties classified as "hard-to-treat". For example, homes with solid walls cannot be fitted with cavity wall insulation. There are also a large number of flats in the Brent, which often have flat roofs and therefore loft insulation cannot be installed. The task group was informed that around 60% of properties in Brent are classed as "hard to treat". Making changes to the fabric of privately rented homes to improve energy efficiency is not possible without the landlord's permission, which isn't always easy to obtain. There has been more progress in improving the energy efficiency of homes in the public sector then in the private rented sector. Brent Housing Partnership and RSLs have made significant investments in their properties under the Decent Homes Standard. Generally the public sector is more aware of its obligations to provide appropriate thermal comfort in homes than landlords in the private sector. However, the link between social housing and deprivation is well established, so whilst the energy efficiency of their properties may be higher than in the private sector, social housing tenants are vulnerable to rising fuel prices. Income

maximisation is important for social housing tenants to ensure they don't fall into fuel poverty.

Planning standards are generally focussed on carbon reduction rather than reducing fuel poverty. Planning regulations ensure that new build properties meet modern energy efficiency standards, but we know that new-build properties are in a considerable minority in the borough. Whilst it is important they meet the latest standards, new build properties will not resolve Brent's fuel poverty issues.

There are projects in Brent that are working with residents to give them advice on energy efficiency and refer them to appropriate support when needed. Brent Hot Spots, managed by Energy Solutions is a good example of this. Brent Hotspots aims to ensure more low income households in Brent have warm safe homes and can cope with the increasing cost of energy bills. Hot Spots is a cross-referral initiative which operates by engaging front line practitioners, such as the fire service, benefit agencies and social care agencies, as referrers of vulnerable and hard-to-reach households primarily into sources of energy efficiency assistance and advice, income maximisation and home safety services.

The task group was informed that Energy Solutions had tried to involve the local NHS in Hot Spots without success to date. This is unfortunate given the number of vulnerable people seen on a regular basis by health visitors, district nurses, GPs and hospital staff. Involving the NHS in Hot Spots would strengthen the links between energy efficient warm housing and better health and is something the task group feels should be pursued. It should be noted that in interviews with frontline health care staff they were often frustrated at not knowing where people could be referred for advice if they were unable to adequately heat their home. Involvement in Hot Spots could help to resolve this issue.

Fuel poverty is a priority for the Brent Private Tenants Rights Group. BPTRG are hoping to secure funding for a fuel poverty campaign coordinator. They are backing the approach and campaign used by Friends of the Earth, who are arguing for better use of Energy Performance Certificates in privately rented homes to raise awareness of energy efficiency and fuel poverty. Friends of the Earth are promoting the idea that any property rated F or G on their Energy Performance Certificate (i.e. the lowest energy efficiency rating) should not be rented privately, although for this to become law primary legislation from parliament would be required.

Brent Private Tenants Rights Group believe that only a small number of private sector tenants in Brent are aware of the grants that are available to them to improve their homes. Of the private tenants that do apply for grants, BPTRG believe that the majority are elderly and living in regulated tenancies (i.e. tenancies that have been running since before 1989). These people are not expecting to move and so are more likely to apply for the grants on offer. People with short hold tenancies may feel that it isn't worth applying because they won't be in the property long enough to receive the benefit. There are also fears over security of tenancy. Some tenants fear rent increases as a result of improvements to property, not realising that housing benefit will cover the rise in many cases.

Working with landlords

Brent's private rented sector has increased considerably in recent years. There are around 20,000 privately rented properties in Brent, which accounts for approximately 20% of properties in the borough. Working with landlords as a group has become more difficult due to the increase in the number of non professional landlords, who because of easy access to buy-to-let mortgages have been able to become landlords in far greater numbers.

Encouraging landlords to think about fuel poverty and the impact that this has on their tenants is a challenging issue and one that isn't unique to Brent. This situation isn't helped

by the fact that grant funding for fuel poverty related improvements are only available to the tenant and not to the landlord. It is the tenant's responsibility to apply for funding, but they need the landlord's permission to carry out any work on the property.

The task group was told that many tenants won't access the available funding for a variety of reasons, including:

- Tenants are worried about the consequences if they apply for funding and approach their landlord for permission to alter the property. They fear a rent increase, because of improvements that will be made to the property, or possibly eviction because they have suggested the property is substandard.
- Not all tenants are aware of the grants that are available to them.
- Tenants are unaware of their rights which are protected in legislation and won't approach their landlord about making improvements to their property.

There are separate incentive schemes that aim to encourage landlords to improve the quality of their property. Landlords can claim a £1,500 tax credit for work on their home via a scheme known as the 'Landlords Energy Saving Allowance (LESA). However, £1,500 isn't regarded as a big enough incentive and it relies on landlords declaring income from rented homes in the first place. Landlords don't personally benefit from any improvement in a way that owner occupiers do when they improve their homes, either though reduced energy bills or a warmer home. Take up of this offer is low across the country.

Specific work with landlords to address energy efficiency in the private rented sector is one of the council's Environmental Projects and Policy Team's objectives, but this work has been delayed because of the loss of PRG. This work will now begin in 2011/12.

Energy Performance Certificates are a requirement for all rented properties (except HMOs) and provide information on the energy efficiency of the property. An EPC has to be available for tenants to see before they move into a property, but often tenants will have to ask to see this. Brent Private Tenants Rights Group believe that very few landlords offer to show tenants the EPC prior to them accepting the property, and it is doubtful that many tenants know they have a right to see it. If the legislation around EPCs was rephrased so that landlords had to produce the EPC when advertising the property, prospective tenants would have a much better idea of the sort of property they will be renting and the likely energy bills.

The task group was encouraged that the council insists that properties used for temporary accommodation are rated at least D on their Energy Performance Certificate. However, as pressure for affordable private sector accommodation increases as changes to benefit rules take hold, the council may feel that it has to compromise on this to secure accommodation for homeless families and for families that can no longer afford to remain in their current rented property. However, the task group believes that the council needs to be setting standards for private landlords to adhere to and recommends that the D rating remains a condition of use for homeless accommodation in the private rented sector, to ensure landlords maintain their properties with a reasonable level of thermal comfort. This should be the case even if the council uses properties outside of Brent because of the impact of the changes to the housing benefit rules.

Recommendation 6 – The task group recommends that the council continues to require landlords to provide properties with at least a D rating under the Energy Performance Certificate system before it is used for temporary accommodation or housing for people placed by the council. This standard should be enforced even if pressure on private sector properties increases as a result of changes to housing benefit rules, and if the council needs to use properties outside of Brent to place people.

It is Trading Standards responsibility to enforce the EPC regime, but the task group was informed that they don't regard it as a priority. Brent Private Tenants Rights Group would like to start mystery shopping landlords to see if they have their EPC. If a landlord can't produce an EPC they could be reported to Trading Standards because they are breaking the law. The task group supports BPTRG in this work and hopes that the council is able to support this initiative. The task group recommends that once BPTRG has carried out their mystery shopping it reports the results to the appropriate overview and scrutiny committee for members to consider the findings and decide whether the council should be taking more action, via Trading Standards, against landlords for not having Energy Performance Certificates.

Recommendation 7 – The task group recommends that Brent Private Tenants Rights Group presents the findings from its mystery shopping of landlords to the appropriate overview and scrutiny committee to see if the council should be taking additional action as a result of this work.

Enforcement is an issue in Brent, as the number of privately rented homes has increased but the number of enforcement officers has fallen. All of the work Private Housing Services does is reactive as they do not have the capacity to carry out proactive work around energy efficiency and thermal comfort. Around 900 referrals are received by Brent Private Housing Services each year, the majority of them connected to cold and inadequate heating.

Local authorities have the power to tackle deficiencies in properties, including poor insulation and ventilation. The 2004 Housing Act gave councils the powers to tackle poor housing, setting out statutory minimum standards that are required in the private sector. Additionally, the Housing Health and Safety Rating System helps evaluate the potential risks to health and safety from deficiencies identified in dwellings.

The task group is realistic about enforcement services – it does not anticipate the council being able to invest extra resources into Private Housing Services to enable proactive enforcement for hazards in the private rented sector. This is not feasible in the current financial climate where spending on services is to reduce. However, as the enforcement service is reactive it is important that tenants are aware of their rights, that they are able to report perceived hazards to the council and that they are able to seek advice from organisations such as Energy Solutions. Enforcement is important, but it is not going to be the solution to all fuel poverty issues in Brent.

Fuel Poverty and health

There is a great deal of evidence that that fuel poverty has a detrimental impact on health. National Energy Action states that people living in fuel poor households are likely to suffer from a number of serious health and wellbeing issues, such as heart attack and stroke, COPD and respiratory infection, asthma, worsening arthritis and they are more likely to suffer falls and other accidents in the home.[21] Fuel poverty and cold homes is also thought to contribute to mental health problems, children's absence from school because of increases in asthma and illness, which obviously has an impact on educational attainment. Child poverty is also an issue associated with cold homes, because of the link to general poverty.

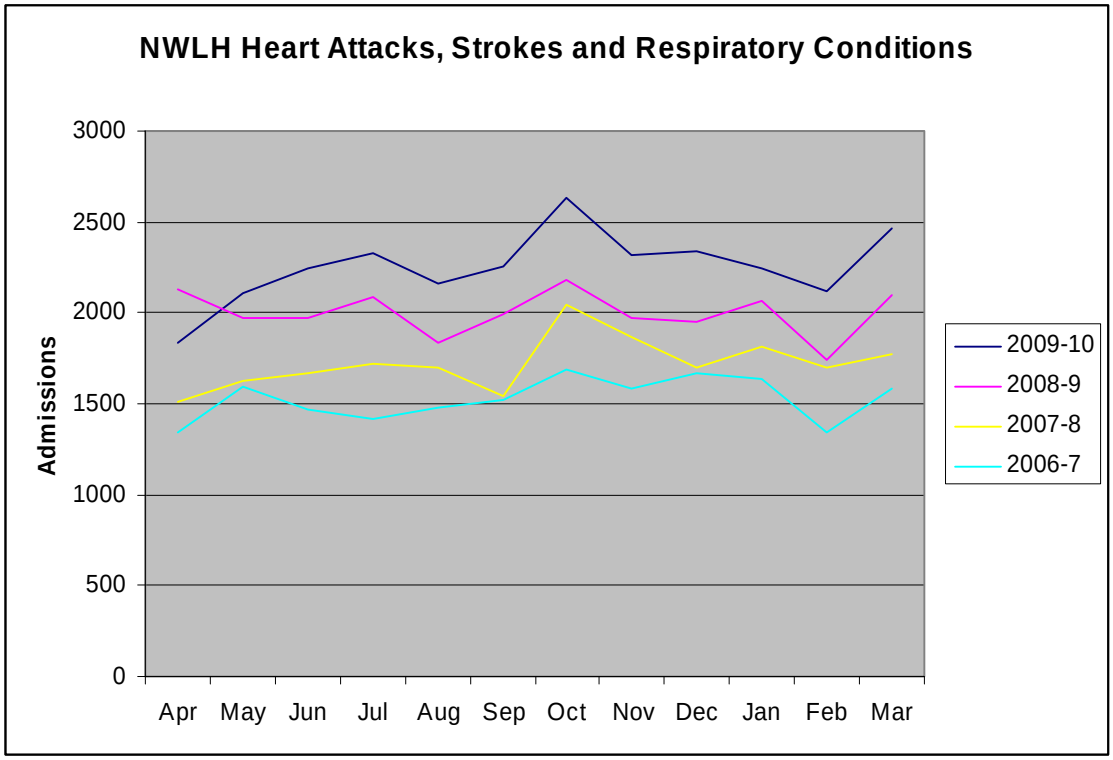
The task group heard a range of views about the relationship between fuel poverty and ill health. The group spoke to a Respiratory Physiotherapist from North West London NHS Hospitals Trust during their work. Her view was that COPD and other respiratory problems are not normally caused by the cold, but that temperature affects how patients are able to cope with those diseases. Flare ups can be exacerbated by the general state of the home,

[21] National Energy Action presentation at Ealing Council – May 2010

such as the temperature, cleanliness, clutter, living in one room and other social factors such as diet – i.e. issues associated with poverty, not just fuel poverty. There are knock on effects on general life as people become more confined to their home, or one room. They go out less, exercise less and therefore their health and wellbeing can deteriorate. The Respiratory Physiotherapist believes that damp conditions in the home are worse for respiratory conditions then cold, but both are symptoms of fuel poverty. What is difficult to assess is whether flare ups of respiratory conditions that result in hospital admission are as a direct results of temperature (hot or cold), although it is likely to be a contributing factor.

An important point was made to the task group by the Respiratory Physiotherapist - the majority of her patients are living in homes that aren't helping their condition, i.e. they're cold and damp and they are also living in the most deprived parts of Brent. This is further anecdotal evidence of the link between deprivation and ill health. A large proportion of patients also smoke, which is the single largest preventable cause of death and illness, responsible for over 80,000 deaths per year in England.[22] The health impact of fuel poverty needs to be seen in the context of the borough's deprivation and other factors that influence health and wellbeing, such as smoking.

Data from North West London NHS Hospitals Trust shows that admissions from heart attacks, strokes and respiratory infections to NWL Hospitals peak in October and March (see graph below). During the winter months (October to March) admissions for the three illnesses associated with the cold are around 300 a month higher than the average during the summer months. When the human body cools down, the blood thickens. As a result it becomes harder to pump leading to issues such as stroke and heart attack. How many of the people admitted are living in fuel poverty is unknown, but it is striking that there is such an increase during winter months.



As mentioned earlier in this report, excess winter mortality rates in the UK are worse than a number of European counties that experience colder winters – the only exception to this is

[22] Brent Tobacco Control Strategy 2010-2013

Ireland (see Table 4 below). There will be many reasons for this, but fuel poverty is likely to be one of them. European countries could be more prepared for winter, including having adequate insulation in homes, so that people are living in warmer conditions than in the UK.

Table 4 – Excess winter mortality as % increase over non-winter deaths[23]

Country	**Excess winter mortality as % increase over non-winter deaths**
Ireland	21%
England	**19%**
Wales	**17%**
Scotland	**16%**
Mean	16%
Austria	14%
Belgium	13%
France	13%
Denmark	12%
Netherlands	11%
Germany	11%
Finland	10%

Data on excess winter deaths in Brent has been published by the Association of Public Health Observatories. As Table 5 below shows, excess winter deaths in Brent are below the England value. Although this is encouraging (and could be the result of having a lower proportion of older residents than other areas), the council and partners should not be complacent about the effect of cold homes and fuel poverty. It should also be noted that data relates to the years 2004-2008. They do not include the winter of 2009/10.

Table 5 – Excess winter deaths in Brent

Profile Year	**Data Year**	**Local value**	**England value**	**Local count per year**
2009	Aug 04 - Jul 07	11.3	17.0	57
2010	Aug 05 - Jul 08	10.0	15.6	17

The task group was interested in how local NHS staff view fuel poverty and whether it is ever considered when treating patients. A range of views and opinions were received in interviews which suggests that in Brent awareness is patchy. As expected, those staff that spend time in peoples' homes often encounter households living in less than ideal conditions, displaying signs that are consistent with fuel poverty such as living in one room, heating only one room and leaving the rest of the house unheated and physical signs such as damp. Front line staff report that in their experience it was mainly elderly single people who were in fuel poverty. This is in line with national statistics on fuel poverty. Staff also believed that people living in their own homes in fuel poverty were harder to help than those living in local authority or RSL accommodation, because staff could contact the landlord relatively easily if they came across problems with social rented properties.

[23] National Energy Action website

However, despite being aware of fuel poverty and significant numbers of people living in poor quality accommodation, frontline staff are not sure where to turn in order to try to help people who need advice on their housing and energy situation. None of the frontline staff interviewed were aware of Energy Solutions or the Brent Hot Spots scheme. Some staff reported housing problems to social workers, but this can be time consuming and social workers may not be best placed to assist with housing and energy issues. At other times the landlord was contacted to try and ensure problems were dealt with. Despite the concern of front line staff, they have such big caseloads that there simply isn't time for them to follow up housing related problems.

The task group was told by a number of people that partnership working between the council, health sector and voluntary sector on fuel poverty issues could be better, but there is common ground. North West London NHS Hospitals Trust and NHS Brent recognise this is an issue, but has committed little funding and few resources to tackling it. The council considers fuel poverty to be a significant issue and it is a separate strand in our climate change strategy; we also fund Energy Solutions to carry out its fuel poverty work, although there is a need to do more.

There are issues that the task group would like to see acknowledged and addressed. North West London NHS Hospitals is not addressing fuel poverty with patients admitted with illnesses associated with cold, although there are staff within the trust who are keen to work on this issue (notably the trust's head Respiratory Nurse). There is also no referral pathway for people who are in fuel poverty and have been admitted to the one of the trust's hospitals with a cold related illness.

The situation with regard to primary care and knowledge of fuel poverty is more complex. GPs are to become commissioners of health services, but their engagement in this issue isn't clear. The task group used a Brent GP practice to distribute a questionnaire on fuel poverty, but one of the GPs at the practice had acknowledged that although housing often comes up in patient consultations, fuel poverty is seldom mentioned. She suggested that in screenings for over 75s a question on heating/fuel poverty could be added to help track the extent of the issue and also to refer people for advice if necessary. The task group supports this idea and recommends that all Brent GPs considers this.

Recommendation 8 – The task group recommends that NHS Brent and GPs work to include a question on fuel poverty in their screening of over 75s, to help track the extent of the problem and to refer them to appropriate advice. This could be done on a trial basis and if successful rolled out across the borough.

There are projects in Brent that bring together fuel poverty advice and health services. Energy Solutions have run fuel poverty advice sessions at health clinics organised by the Harness GP cluster. These have taken place at immunisation clinics, general health check clinics and baby clinics. In the past the advice sessions were held on a regular basis, but funding and staff time has been an issue more recently and so their regularity has decreased. This is the sort of initiative that the task group would like to see more of. However, it may require a financial commitment from the health service, which to date, hasn't materialised. Funding for current advice sessions comes from the Energy Solutions regular grant funding.

Plenty of people such as housing officers, those delivering meals on wheels, GPs, district nurses and health visitors have the opportunity to identify excess cold in the home or signs of fuel poverty. It would be useful if households could be referred somewhere that they will be able to receive help for their problem. Energy Solutions would be the obvious place, but this would require a financial input from the NHS to pay for this service. Although the NHS is under intense financial pressure investment in fuel poverty prevention could ultimately become a saving if it results in fewer hospital admissions. The task group would like NHS

Brent and North West London Hospitals to work with Energy Solutions, supported by the council, to develop an appropriate referral pathway, at least as a pilot, to see how fuel poverty and health issues can be addressed. The Hot Spots scheme is already in place from which to build a referral pathway. A referral pathway should involve as wide a range of partners as possible so that there is a better chance that those who need help are identified and referred.

Recommendation 9 – The task group recommends that staff from NHS Brent and North West London NHS Hospitals Trust work with Energy Solutions, supported by the council, to develop an appropriate referral pathway for patients who are suspected of being in fuel poverty. The referral pathway should involve as wide a range of organisations as possible and could build on the Hot Spots scheme that already exists in Brent. Energy Solutions should be appropriately funded by the NHS for facilitating a referral network.

The task group heard a number of practical suggestions that could be implemented to address fuel poverty. One suggestion that could be taken forward by North West London Hospitals would be to run fuel poverty sessions at chest / COPD clinics, where large numbers of patients with respiratory problems could be reached in one go. The task group recommends that this is taken forward, again on a trial basis.

Recommendation 10 – The task group recommends that North West London NHS Hospitals Trust investigates the possibility of running fuel poverty advice sessions with Energy Solutions at their respiratory clinics. Energy Solutions should be funded to carry out this work.

Addressing fuel poverty

The task group heard from the witnesses that it interviewed and through considering examples of good practice effective ways of addressing fuel poverty that could be replicated in Brent. What is clear is that the causes and effects of fuel poverty have an impact across a range of services and it cannot fall to one organisation to tackle this in isolation. It is clear to the task group that the council, NHS Brent, North West London NHS Hospitals Trust and the local voluntary sector all have a crucial role to play in addressing fuel poverty. Much good work is already happening in Brent – Energy Solutions were praised by those the task group interviewed, but there needs to be better partnership working between the council, the voluntary sector and the local NHS on this issue.

First and foremost, the task group recommends that the council and partners to prepare an up to date affordable warmth strategy for Brent. Brent does have a Fuel Poverty Strategy, but it was developed in 2005 and a number of people interviewed felt that it is out of date and needs to be refreshed. Having an up to date strategy will enable the borough to develop a coherent and focussed plan to tackle fuel poverty within existing resources. The strategy should also include some of the information that the task group has already identified as being useful to benchmark progress in tackling in fuel poverty, such as up to date SAP ratings – Islington has a thorough Affordable Warmth Strategy that includes information on the percentages of households in fuel poverty broken down into numerous categories including ward, housing tenure, housing age, type of housing, number of residents, ethnicity and support needs.[24] Any strategy would also need to be developed in partnership with the local NHS and voluntary sector partners.

[24] Islington Affordable Warmth Strategy 2009 (see - http://www.islington.gov.uk/DownloadableDocuments/Environment/Pdf/AWS_web_version.pdf for more information)

Recommendation 11 – The task group recommends that Brent Council, with partners, develop an affordable warmth strategy for Brent to enable the borough to develop a coherent and focussed plan to tackle fuel poverty within existing resources.

It is important that any affordable warmth strategy has an accurate baseline from which to monitor progress. Islington has carried out a stock condition survey which has provided detailed information on SAP ratings in the borough. Harrow has also comprehensive data on SAP ratings, plus targets for improvement (see appendix 1). As well as improving energy efficiency, if these targets are met the council will be working towards reducing fuel poverty. The task group recommends that Brent looks into the feasibility of a stock condition survey in order to produce a more accurate picture of fuel poverty in the borough and a basis from which to chart measures put in place to tackle it. The stock condition survey will also provide information that can be used to target fuel poverty work, such as that in the Islington Affordable Warmth Strategy.

Recommendation 12 - The task group recommends that Brent Council considers the feasibility of undertaking a stock condition survey in order to produce a more accurate picture of fuel poverty in the borough and a basis from which to chart measures put in place to tackle it.

One of the ways that fuel poverty could be given greater prominence in Brent would be to include this issue on an LSP agenda. This approach was used in Slough to raise the profile of fuel poverty with a wide range of partners. If the LSP in Brent was to take up this issue it would bring together the council, PCT, Hospital Trust, fire service, and the voluntary sector to work on the issue. As has been stated previously, although work is happening across Brent to tackle fuel poverty, the links with health aren't as strong as they could be. Other practical arrangements don't yet exist, such as an effective referral network from hospital or GP to places where people can seek assistance for fuel poverty issues. Bringing these issues to the attention of a range of decision makers in Brent could focus organisations on the effects of fuel poverty.

Slough set up an LSP sponsored workshop event to bring together people with an interest in fuel poverty. Brent could so the same, inviting representation from Age Concern, Energy Solutions, Brent Council Environmental Health, Sustainability, Housing Service Strategy/Grants, NWLH Hospitals, NHS Brent commissioning and public health to start addressing the wider issues associated with fuel poverty and developing a referral network. Ultimately, if work addressing fuel poverty is to gain greater momentum than it already has then it will need to become a priority for the leaders of the council, PCT and hospital trust. This is why the LSPs influence could be really crucial.

Recommendation 13 – The task group recommends that Brent's Local Strategic Partnership hosts a fuel poverty event to begin to address the wider issues outlined in this report and to promote the partnership approach involving the council, NHS and voluntary sector to bring more people out of fuel poverty.

Conclusions

The fuel poverty and health task group is encouraged that there is much good work going on in Brent to tackle fuel poverty. Having an organisation such as Energy Solutions in our borough is clearly a good thing and the group wishes that more could be done to support their work. What is clear is that despite concerns about fuel poverty and the impact on health, commitment to addressing it across the NHS is patchy. However, Brent is in a fortunate position that it has networks in place for the NHS to buy into, such as Hot Spots. Developing a resourced referral network would be the task group's first priority.

It is also important that the progress of the Brent's fuel poverty work can be tracked. The need for an accurate baseline for SAP ratings in the borough is clear, to help monitor the impact of initiatives and also target those initiatives in the right areas and to the right people. An affordable warmth strategy would provide the framework from which to take forward fuel poverty work in the future.

The task group believes that implementing a comprehensive referral network for people in fuel poverty will help to address the problems in Brent. Frontline staff need to know where to refer people who are living in a cold home and are unable to afford to adequately heat it. The task group is recommending that partners work with Energy Solutions to develop the referral network, but this requires partnership working and proper engagement from the council and NHS. Importantly, Energy Solutions needs to be fully resourced to do this work.

Above the task group is convinced that tackling fuel poverty cannot be the responsibility of one organisation – it has to be tackled in a collaborative way by the council, NHS, voluntary sector and private sector. The task group hopes that organisations in Brent can work together to address this issue that is having such a detrimental impact on the lives of many local people.

Appendix 1

SAP Ratings – Harrow

Note: SAP rating is a standard assessment procedure for measuring the energy efficiency of housing. Scores range from 0 to 100. Higher scores are better.

Sector	% of housing stock	Average SAP rating		
		Current	2015 target	2020 target
Owner occupier	77	49	69 solid walls 83 cavity walls	91
Council owned	6	65		
Housing Association	4.4	?		
Private renting	12	49		
Other	0.6	?		

	2008/09	2009/2010	2010/2011		2009/2010
SAP less than 35	20.14%	Target 18%	Target 15%		Actual XX%
SAP greater than 65	14.48%	Target 16%	Target 20%		Actual YY%

Appendix 2

Housing and Health Inequalities Scrutiny Review

Fuel Poverty in Brent Questionnaire

During the review the task group published a fuel poverty questionnaire and placed it on the council's consultation tracker from 17th September 2010 until the 8th October 2010for people to fill in. It was also sent to all members of the Brent Citizens Panel and the Brent Local Involvement Network. Copies were also distributed at the Beechcroft Medical Centre in Wembley Park and the Church of the Ascension in Wembley. A total of 136 questionnaires were returned. Although this is not a representative survey, it does provide some interesting points on fuel poverty in Brent. The results are analysed below.

1. Do you live in Brent?

	Number	**Percentage**
Yes	132	97.1%
No	4	2.9%
	136	

Comment – Although four people who responded to the survey did not live in Brent, their results have been included in the questionnaire analysis.

2. What type of housing do you live in?

	Number	**Percentage**
Owner occupied (including buying with a mortgage)	91	67.9%
Private rented accommodation	17	12.7%
Renting from the council (Brent Housing Partnership)	11	8.2%
Renting from a Registered Social Landlord	7	5.2%
Other	8	6%
	134	

Comment – The proportion of homes owned outright or being bought with a mortgage in Brent is 56%, whilst renting from the council accounts for 9% of homes, renting from an RSL

12% and renting from a private landlord 20%[25]. The numbers in the survey are not in line with these percentages, with those owning their own property or buying using a mortgage over represented and those renting (in all sectors) under represented.

3. Do you live in a:

	Number	**Percentage**
House	96	70.6%
Flat	33	24.3%
Bungalow	1	0.7%
Maisonette	4	2.9%
Other	2	1.5%
	136	

Comment – The number of people living in a house is over represented in this survey, with the actual number of houses in the borough accounting for 54% of homes compared to 46% for flats.[26] This information is almost 10 years old and the likelihood is that since the 2001 census the percentage of flats has increased in Brent.

4. How many bedrooms does your property have?

	Number	**Percentage**
1	18	13.3%
2	18	13.3%
3	63	46.6%
4	29	21.5%
5+	7	5.2%
	135	

Comment – The relatively high number of three and four bedroom properties can be accounted for because of the high proportion of respondents who live in a house.

5. How many people live in your home?

[25] Mori Place Survey 2008/09
[26] 2001 Census

	Number	Percentage
1	39	28.8%
2	35	25.9%
3	22	16.3%
4	18	13.3%
5	11	8.1%
6+	10	7.4%
	135	

Comment - The average household size in Brent in 2007 from an independent study was 2.7 persons per house, an increase from 2.5 found in a similar survey in 2005[27]. However, the largest proportion of households in Brent are single person households, although their number is falling.

6. What is your postcode?

Postcode	Number	Percentage
HA0	19	14.8%
HA1	2	1.6%
HA3	15	11.7%
HA9	64	50%
NW2	5	3.9%
NW6	1	0.8%
NW9	10	7.8%
NW10	10	7.8%
SW6	1	0.8%
SE14	1	0.8%
	128	

Comment – The large number of correspondents from the HA9 postcode area is explained by the number of respondents from the Beechcroft Medical Centre in Wembley Park. 72 patients filled in the survey, the majority of whom lived in the HA9 postcode area.

[27] Mayhew Associates, *Brent population estimation, household composition and change, 2007* *http://intranet.brent.gov.uk/bv1nsf.nsf/24878f4b00d4f0f68025663c006c7944/3f1e2c9bf9112e428025742e003b2b5b!OpenDocument*

7. In order to keep warm in your home, especially in the winter, do you? (Some respondents ticked more than one answer):

	Number	**Percentage (out of 136 respondents)**
Only have the heating on in one room	29	21.3%
Use electric fires, fan heaters, oil filled radiators or bottled gas heaters rather than central heating	22	16.2%
Have the curtains closed in the daytime to keep the heat in	29	21.3%
Block ventilation passages to prevent drafts	28	20.6%
Wear lots of clothes or use blankets and hot water bottles to stay warm	54	39.7%
Other (please state)	44	32.4%

Comment – The answers to this question demonstrate that people will use a variety of methods to keep warm, with many respondents indicating they did more than one of the above to stay warm, especially in winter. One answer was almost twice as common as the others - clearly more people wear lots of clothes, use blankets or hot water bottles than anything else. Having said that, a good proportion of respondents didn't answer this question at all indicating they do not have any issues with warmth in their homes. Of those that indicated "other", use the central heating was the most common response.

8. Have you or any of the people you live with suffered from the following illnesses, which are associated with fuel poverty and cold homes? **(Some respondents ticked more than one answer):**

	Number	**Percentage (out of 136 respondents)**
Heart attack	11	8.1%

Chronic obstructive pulmonary disease (COPD) e.g. chronic bronchitis or emphysema	9	6.6%
Respiratory infections	20	14.7%
Asthma	27	19.9%
Worsening arthritis	31	22.8%

Comment – Worsening arthritis was the most common response, but this could be to do with age as well as fuel poverty. Information the task group has received in its interviews suggests fuel poverty, but particularly damp, will exacerbate these conditions but may not directly cause them.

9. If you receive benefits, have you ever received a benefits entitlement check to ensure that you are receiving all of the benefits you are entitled to?

	Number	**Percentage**
Yes	21	21.6%
No	76	78.4%
	97	

Comment – The response to this question is worrying, suggesting more could be done to ensure people are maximising their incomes. This is crucial if people are to move out of fuel poverty. Some of those interviewed by the task group believe that income maximisation is more important in addressing fuel poverty than improving the energy efficiency of the home. People have to have the means of paying their energy bills and this is something that the task group should consider in their recommendations.

10. If the answer to Q9 above was yes, which organisation carried out your benefits entitlement check?

	Number	**Percentage**
Brent Council	15	65.2%
Citizens Advice Bureau	1	4.3%
Age Concern Brent		

Warm Front		
Other (please state)	7	30.4%
	23	

Comment – It is difficult to draw conclusions from this question as the number of respondents was so low. “Others” included family members and “the DHSS”.

11. Have you ever changed energy supplier to reduce the cost of your energy bill?

	Number	**Percentage**
Yes	64	51.6%
No	60	48.4%
	124	

Comment – Whilst it is encouraging that just over 50% of respondents have changed their energy supplier to reduce the cost of their bill, almost 50% haven’t. This is a relatively simple way of reducing energy costs and again, could we be doing more to make people aware of this option?

12. How do you pay your energy bills?

	Number	**Percentage**
Pre payment meter	9	6.8%
Cash or cheque	19	14.4%
Debit or credit card	20	15.2%
Direct debit	77	58.3%
Paperless billing online	7	5.3%
	132	

Comment – Pre payment meter is the most expensive method of paying for energy and these are generally found in HMOs. The low number of respondents from the private rented sector may explain the low number of people using a pre payment meter. Direct debit and paperless billing is the cheapest way to pay for energy, accounting for over 60% of respondents. However, more than 35% of respondents are using more expensive payment methods and this is a worry.

13. Have you changed the way you pay for energy to reduce your energy bill? For example, switching to pay by direct debit

	Number	**Percentage**
No	69	60.5%
Yes	45	39.5%
	114	

Comment – Of those that answered this question, many indicated that they had switched to paying by direct debit. The majority had not switched the way they paid, some saying that they had always paid by direct debit.

14. Have you ever carried out alterations to your home to make it more energy efficient, such as cavity wall insulation or draft proofing or installing a new boiler?

	Number	**Percentage**
No	63	50.8%
Yes	61	49.2%
	124	

Comment – Of those that responded positively to this question, the most common work carried out on the home was the installation of loft insulation, double glazing and new boilers. Four people said they had had cavity wall insulation on their home.

15. If you have carried out alterations to your home, did you receive a grant for this work?

	Number	**Percentage**
No	78	82.1%
Yes	17	17.9%
	95	

Comment – Most people had not had any grant funding to do their work. Of those that had one person had their grant from Warm Front and one person from Warm Zone.

16. If you live in private rented accommodation, has your landlord ever upgraded your house to improve energy efficiency?

	Number	Percentage
No	26	72.2%
Yes	10	27.8%
	36	

Comment – It is difficult to draw conclusions from this question. The majority of those that answered it also indicated on their return that they did not live in private rented accommodation.

17. A household is said to be in fuel poverty if it has to spend more than 10% of its income on fuel to sustain satisfactory heating. On the basis of this definition, do you think your household is in fuel poverty?

	Number	Percentage
Yes	38	32.5%
No	73	62.4%
Don't know	6	5.1%
	117	

Comment – According to Department of Energy and Climate Change statistics, in 2006 10.2% of households in Brent were fuel poor.[28] This was the third highest in London behind Kensington and Chelsea and Westminster. According to this survey, over 30% of respondents consider themselves to be in fuel poverty. Although this is a self selecting survey and not statistically robust, it is surprising that a significant number of respondents consider themselves to be in fuel poverty when compared to government statistics. This 30% figure is more in line with the estimates of those interviewed and also reflects the levels of general poverty in Brent, with which fuel poverty is closely associated. Income levels in Brent are relatively low (3rd lowest in London) and over 21,500 households in Brent have an annual income of less than £15,000 per annum. Against this background it is likely that fuel poverty is higher than 10.2% although the true figure is not known.

[28] Department of Energy and Climate Change – Local Authority Fuel Poverty Levels 2006

London Assembly; Investigation into fuel poverty

Reply - London Borough of Richmond upon Thames
6th June 2011

Key questions

1. How many households are in fuel poverty in Richmond upon Thames?
- DECC 2008 figures 6487, 8.6%
- LBR 2011 estimate 7554-8309 , 10-11%

Numbers based on full income definition, if based on residual definition, number of fuel poor expected to double.
Poorer homes more affected by fuel price rises than wealthier counterparts as all income is allocated to necessities

2. Who are the fuel poor (how are households distributed across age, ethnicity, and socio-economic groups, and housing tenure)?

Our experience shows that the main groups most at risk of fuel poverty are;
- Private rental tenants,
- Older owner occupiers,
- Single occupant 60+,
- People with disabilities,
- Lone parent with children,
- People without employment,
- Under occupied households

3. How do households in your borough experience fuel poverty and what support do they want to tackle it?

Experience –
- Ill health associated with cold homes?
- Impaired health generally,
- Disrepair in the home associated with mould and damp,
- Higher rents less money available for fuel,
- Proximity to City wealth highlights rich/poor divide

Support required –
- Grant schemes such as Coldbusters to provide measures to improve energy efficiency
- Improved property standards,
- Increased income, Solid wall insulation subsidy,
- Better advice,
- Mandatory discount energy tariff for vulnerable households,
- Agency links e.g. hospital discharges – homes to be checked for adequate housing standards and funding to carry out essential works to ensure residents returns to warm home and the cycle of ill health associated with cold homes is broken.
- Requirement to meet minimum level SAP on tenanted properties. Currently SAP 65 is the proxy fuel poverty threshold, but SAP 85 has been proposed as a level of future proofing.

4. What programmes are in place in your borough to reduce fuel poverty and which groups do these programmes target

- Coldbusters (heating and insulation grants) although this is very limited in 2011/12 due to the ending of the Mayor's targeted funding stream for decent homes.

Target – Privates sector residents in receipt of specified benefits

- London Warmzone (insulation only)

Target - Private sector residents ATP and PG

- Low carbon Zone (heating, insulation, renewables)

Target – Single ward based, all residents, all tenures

- Warmfront

Target – Private sector residents in receipt of specified benefits

- RE:NEW (planned to commence autumn 2011)

Target All tenures, heating, insulation, renewables, water saving measures

Mayor's role

5. How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

- Encourage energy companies to share data with local authorities (see note below *)
- Encourage providers to support measures to improve homes and reduce fuel poverty

6. How effectively are the Mayor's programmes contributing to reaching the national target to eradicate fuel poverty by 2016?

- The targeted funding stream for decent homes was used in South West London to offer Coldbuster grants to vulnerable households. This was a worth while scheme and made a difference to the lives of residents.
- Our view is that there are unfeasibly high expectations that the Mayor backed RENEW scheme (rollout autumn 2011) will bring about a step change in energy reduction for London homes.

7. What role should the Mayor have in reducing fuel poverty in London?

- Act as a champion to bring about an end to fuel poverty
- Increase budget to provide solid wall insulation subsidy (see note below **)
- Mobilise industry and public funding towards energy efficiency measures
- Relax data protection rules to allow sharing of client information between energy companies, Dept. of Work and Pensions, councils and agencies (see note below ***)

Note*
Energy companies possess meter, billing and property data about their customers

Note**
3.2 million households in London
2.2 million households in London are solid wall.
London has 30% of the UK's solid wall stock - highest level in the country.
A solution to fuel poverty will require that far more is done to improve the energy efficiency of solid wall homes, particularly in the London region with its high proportion of this type of construction.

This is a problem that affects the private rental tenants disproportionately as a high percentage of private rental properties are in older stock with solid wall construction.
Most funding streams for measures have ended or are about to close. There is little or no help for vulnerable people who cannot afford measures to reduce fuel poverty.

Note***
Current legislation hinders the eradication of fuel poverty through the compartmentalisation of energy, billing, and income data. Better targeting could possibly be achieved by comparing energy use against house type (to determine efficiency) and energy costs to income/benefit/pension (to establish likelihood of fuel poverty).
It would be helpful if the Mayor would help to bring about a change in current data protection laws specific to energy providers to assist with the eradication of fuel poverty, in conjunction with the much needed and increased funding that will be required to solve the problem.

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No More Lagging Behind: Securing London's fair share of insulation funding

Irene Fernow (Westminster City Council)
John Kolm-Murray (London Borough of Islington)

May 2011

1. Summary

Despite having 15% of England's population, less than 5% of jobs funded through the Carbon Emissions Reduction Target (CERT) have taken place in Greater London. With each household required to contribute through their energy bills, Londoners have lost out on millions of pounds compared to other English regions and are effectively subsidising the other regions. This briefing examines the causes of London's shortfall and makes a number of recommendations to compensate for the region's challenges. Fairer distribution of CERT must take place to reduce fuel poverty and carbon emissions across London.

2. Fuel poverty in London

Fuel poverty statistics published by DECC[1] in October 2010 show that 10.8% of Londoner's were in fuel poverty[2] in 2008. The Greater London Authority takes into account London's high housing costs and estimated that this figure was actually 24% in 2008[3]. The UK Fuel Poverty Strategy published in 2001 sets the target[4] of eradicating fuel poverty as far as reasonably practicable by 2016[5]. There are currently no reporting requirements for local authorities on fuel poverty figures following the recent disbanding of national indicators including NI187: Tackling fuel poverty[6]. Despite the lack of reporting requirements many local authorities have an ongoing commitment to reduce fuel poverty and will continue to carry out activities through political and local leadership.

In contrast to rural areas, where much fuel poverty can be attributed to the properties not being supplied by mains gas, fuel poverty in London can be strongly attributed to the high proportion of hard to treat properties. London has significantly more hard to treat properties than any other English region, at 71%.[7] Most of these properties are hard to treat due to having solid walls and would therefore be best addressed by solid wall insulation. Inner London, where hard to treat properties are particularly common, contains 4 of the 10 most deprived local authority areas in England. With the regulator Ofgem predicting that energy bills could rise by up to 25% above inflation by 2020 solid walled homes will be increasingly disadvantaged compared to those properties that are easier to treat.[8]

3. Domestic energy consumption and climate change

The Climate Change Act 2008 set legally binding emission reduction targets by the Government for a reduction of 34 percent in greenhouse gas emissions by 2020 and for a reduction of at least 80 percent in greenhouse gas emissions by 2050. The Mayor of London has further set a target for the city to reduce its CO_2 emissions by 60% by 2025. In 2007 London household energy use made up 38 per cent of the total emissions produced by the city compared to 27% nationally[9]. In 2008 100 authorities signed up to National Indicator (NI) 186 'per capita CO2 emissions[10] in their Local Area Agreements (LAA). LAA and all NIs have now been dropped by Government but local authorities remain a key player in achieving Governments greenhouse gas emissions reduction targets.

Reducing household energy consumption is central to efforts to mitigate climate change nationally and reduce London's CO_2 emissions and will further help decrease fuel poverty by reducing household energy bills[11]. Not all sectors are well placed to achieve such reductions and household emissions is one of the areas that are expected to be required to go beyond the 80% reduction target in order for the overall target to be meet.

4. Carbon Emissions Reduction Target (CERT)

The Carbon Emissions Reduction Target (CERT) requires all domestic energy suppliers with a customer base in excess of 50,000 customers to make savings in the amount of CO_2 emitted by householders and is one of the key national initiatives to do so. Suppliers meet this target by promoting the uptake of low carbon energy solutions to household energy consumers, thereby assisting them to reduce the carbon footprint of their homes. CERT, the third supplier obligation phase[12], was introduced in 2008 and comes to an end in December 2012. Under the current obligation domestic energy suppliers are required to save a total of 293 million tonnes of CO_2. CERT is funded through a levy on the end users utility bills for gas and electrics, to be £61 per household by 2012[13].

CERT funded measures must be approved by OFGEM who administer the scheme and approved measures must demonstrate an ability to reduce CO_2 emissions when used in an average home. To date utilities have predominantly focused on the deployment of the most cost-effective measures with the highest attached carbon saving such as loft and cavity wall insulation. A CERT update from Ofgem in February 2011[14] show that 61% of CERT CO_2 savings have been achieved through insulation and 26% from lighting[15], this translates to 1,412,524 cavity walls 1,743,104 loft insulations (excluding DIY) and only 35,815 solid walls to date.

Whilst full details are not yet available the Energy Company Obligation (ECO) is expected to succeed CERT in late 2012, in tandem with the Green Deal programme.

5. The causes of London's CERT shortfall

London receives less CERT funding than any other region, according to a report recently published by the Energy Saving Trust (EST). The report is based on data from the Home Energy Efficiency Database (HEED) (Q8) and provides an update on the number of reported lofts and cavities insulated under CERT[16]. The figures show that out of a total of 1,911,677 insulation measures undertaken in England only 91,368 of these were in London, this is substantially lower than neighbouring regions and the five local authorities with the lowest insulation rates are all in London (see Appendix 1).

Low CERT expenditure in London can be attributed to a number of factors such as the nature of the housing stock, access, ownership and parking.

a. Wall type

Loft and cavity wall insulation currently attracts the majority of funding under CERT and these measures are frequently not suitable for London homes. Although there are opportunities for cavity wall insulation in London, many homes were built before 1964 and hence 57% have hard-to-treat solid walls. Solid wall insulation rarely attracts energy supplier funding therefore areas with high levels of solid walled properties lose out significantly on CERT funding.

b. Flats

London has a high proportion of flats, which are harder to retrofit, with just under 1 million purpose built flats and almost 400,000 converted flats[17]. There are several issues with works to flats such as the requirement of scaffolding, coordinating works between several parties and the allocation and management of funding between the able to pay and the priority group. The issues around leasehold law remain to date relatively unexplored but are likely to present the greatest challenges of retrofitting

flatted buildings as most leases only allow for repairs and maintenance and are silent on the issue of improvements such as added insulation. In the absence of a legal review of this matter additional support for freeholders and leaseholders are required to tackle common parts of flatted buildings and a mechanism or obligation on the utilities to fully fund blocks of flats in the private sector would enable further CERT funding to be allocated in London.

c. Access and parking

Access and parking can be limited and costly and is acknowledged as a barrier to delivery and a disincentive for contractors to carry out works in London. A requirement for London to receive a proportional share of supplier obligation funding would require suppliers and their contractors to overcome these barriers.

d. The private rented sector

20% of households are privately rented in London compared to 12% nationally[18]. Properties in the sector are in worse overall condition than in other sectors (social housing or owner occupied), are poorly insulated and often house vulnerable families[19].The private rented sector has historically been hard to tackle due to the split incentive between landlord and tenant i.e. the landlord pays for any improvements but the tenant benefits from the saving from any installed energy efficiency measures through reduced fuel bills. Increased CERT activity in London providing part funded or fully funded measures under could help overcome this barrier and thus lead to reduced CO_2 emissions and further alleviate fuel poverty.

e. Conservation areas

It is estimated that around half of all dwellings in English conservation areas are in London, with 80% of these in Inner London boroughs[20]. With internal wall insulation and external wall insulation on the rear of buildings this need not be a barrier to insulation when the right skills and techniques are utilised and energy and conservation professionals work together.

f. Community Energy Saving Programme (CESP)

CESP was designed to finance longer payback measures such as solid wall insulation in the 10% most deprived Lower Super Output Areas (LSOAs) in England and Wales and 15% most deprived in Scotland but typically finances only around £15 per tonne of CO2, an amount generally inadequate to cover the cost of insulation measures in London. The cost of achieving CO2 savings in Westminster, for example, is estimated at £1,200-£1,500 per tonne of CO2. Other London boroughs have found CESP to be uneconomic and it will remain so without significantly greater funding.

Ofgem revealed in May 2011 that, despite London having 18% of the most deprived LSOAs in Great Britain, only 4% of schemes took place there during 2009 and 2010[21].

6. Making CERT fairer for London

The future of the supplier obligation post CERT is as yet unclear but the Government confirms that a new obligation will be put in place. The obligation on utilities to make savings in the amount of CO_2 emitted by householders is paid for by the householder. To date London has received a very limited amount of the funding available despite Londoner's paying the same as households in other regions and some form of ring fencing of any future schemes is required. Despite having 15% of

the population of England, less than 5% of CERT jobs were carried out in London (see Appendix 1).

If utilities were required to spend a fair share of the monies by region the scheme would not only be fairer for consumers but it is likely that there would also be an increase in the spend on hard to treat measures such as solid wall insulation. Increased spend on hard to treat measures would have the added benefit of contributing to the development of the market, drive innovation and provide ecommies of scale.

Funding which can be used to improve the thermal efficiency of the London housing stock has the potential to mitigate climate change through reduced energy consumption to heat and cool homes in the summer which would also assist Londoner's in fuel poverty.

Increased allocation of current and future supplier obligation funding for London would enable London local authorities to reduce fuel poverty and carbon emissions. With such a high proportion of hard to treat homes in London measures will have to be taken to ensure Green Deal take-up, since the higher cost of carrying out the measures in such properties will make the offer less attractive and mean that costs outweigh savings.

7. Recommendations

We call for the following:

1. Increased delivery of funded insulation measures in hard to treat housing through the Green Deal and Energy Company Obligation.

2. A regional energy supplier obligation for London. This should deliver insulation funding to London at a minimum of the same proportion as its population although additional funding could be provided to compensate for historical disadvantage and as a reflection of the high number of hard to treat homes.

3. A mechanism for funding whole private sector blocks.

4. Area-based insulation programmes for Inner London to overcome its particular challenges. These should aim for economies of scale to reduce the cost of insulating hard to treat homes and could be delivered by larger energy supplier contributions to CESP or similar.

APPENDIX 1

Notes: CERT totals are for 2008-2010 and from Energy Saving Trust (2010)
Household numbers are those for 2008 from DCLG projections to 2033 (2010)
'Outer Ring' is defined as all local authority areas bordering Greater London
CWI = Cavity wall insulation LI = loft insulation

Borough	Households	CERT CWI no.	CERT CWI (%)	CERT LI no.	CERT LI (%)
City of London (not counted)	*7000*	*n/a*	*n/a*	*n/a*	*n/a*
Camden	103000	1459	1.42	216	0.21
Hackney	90000	459	0.51	465	0.52
Hammersmith & Fulham	76000	134	0.18	471	0.62
Haringey	98000	389	0.40	1031	1.05
Islington	87000	706	0.81	328	0.38
Kensington & Chelsea	85000	245	0.29	160	0.19
Lambeth	126000	1988	1.58	1319	1.05
Lewisham	115000	942	0.82	1825	1.59
Newham	92000	267	0.29	1793	1.95
Southwark	124000	474	0.38	666	0.54
Tower Hamlets	93000	372	0.40	301	0.32
Wandsworth	126000	420	0.33	1807	1.43
Westminster	120000	71	0.06	145	0.12
INNER LONDON	**1335000**	**7926**	**0.59**	**10527**	**0.79**
Barking & Dagenham	68000	907	1.33	2038	3.00
Barnet	137000	1296	0.95	3031	2.21
Bexley	93000	1776	1.91	3081	3.31
Brent	98000	2117	2.16	2914	2.97
Bromley	133000	3157	2.37	4590	3.45
Croydon	146000	1864	1.28	3730	2.55
Ealing	124000	981	0.79	2218	1.79
Enfield	117000	874	0.75	2876	2.46
Greenwich	97000	737	0.76	1741	1.79
Harrow	86000	1060	1.23	2238	2.60
Havering	96000	2241	2.33	4165	4.34
Hillingdon	102000	2009	1.97	2900	2.84
Hounslow	92000	879	0.96	1733	1.88
Kingston upon Thames	68000	853	1.25	1425	2.10
Merton	87000	451	0.52	1788	2.06
Redbridge	101000	654	0.65	2698	2.67
Richmond upon Thames	83000	536	0.65	1455	1.75
Sutton	82000	829	1.01	1859	2.27
Waltham Forest	91000	558	0.61	2655	2.92
OUTER LONDON	**1901000**	**23779**	**1.25**	**49135**	**2.58**
Brentwood	30000	1740	5.8	1038	3.46
Broxbourne	36000	1556	4.32	1269	3.53
Dartford	39000	915	2.35	1426	3.67
Elmbridge	54000	1414	2.62	1483	2.75
Epping Forest	52000	1740	3.35	1388	2.67
Epsom & Ewell	29000	777	2.68	894	3.08
Hertsmere	40000	1668	4.17	1341	3.35

Mole Valley	35000	1275	3.64	1310	3.74
Reigate & Banstead	55000	1484	2.70	1939	3.53
Sevenoaks	46000	1593	3.46	1624	3.53
Slough	48000	2135	4.64	1408	3.06
South Bucks	26000	1165	4.48	1178	4.53
Spelthorne	39000	1402	3.59	1407	3.61
Tandridge	33000	1167	3.54	1231	3.73
Three Rivers	35000	1248	3.57	1413	4.04
Thurrock	64000	2169	3.39	1580	2.47
Welwyn Hatfield	45000	1760	3.91	1093	2.43
OUTER RING			**AVE: 3.66**		**AVE: 3.36**
GREATER LONDON	**3236000**	**31705**	**0.98**	**59663**	**1.84**
SOUTH EAST	**3480000**	**134241**	**3.86**	**128460**	**3.69**
EAST OF ENGLAND	**2406000**	**83434**	**3.47**	**103461**	**4.30**
ENGLAND	**21731000**	**864220**	**3.98**	**1047457**	**4.82**

APPENDIX 2: CERT-FUNDED INSULATION JOBS IN LONDON MAPPED

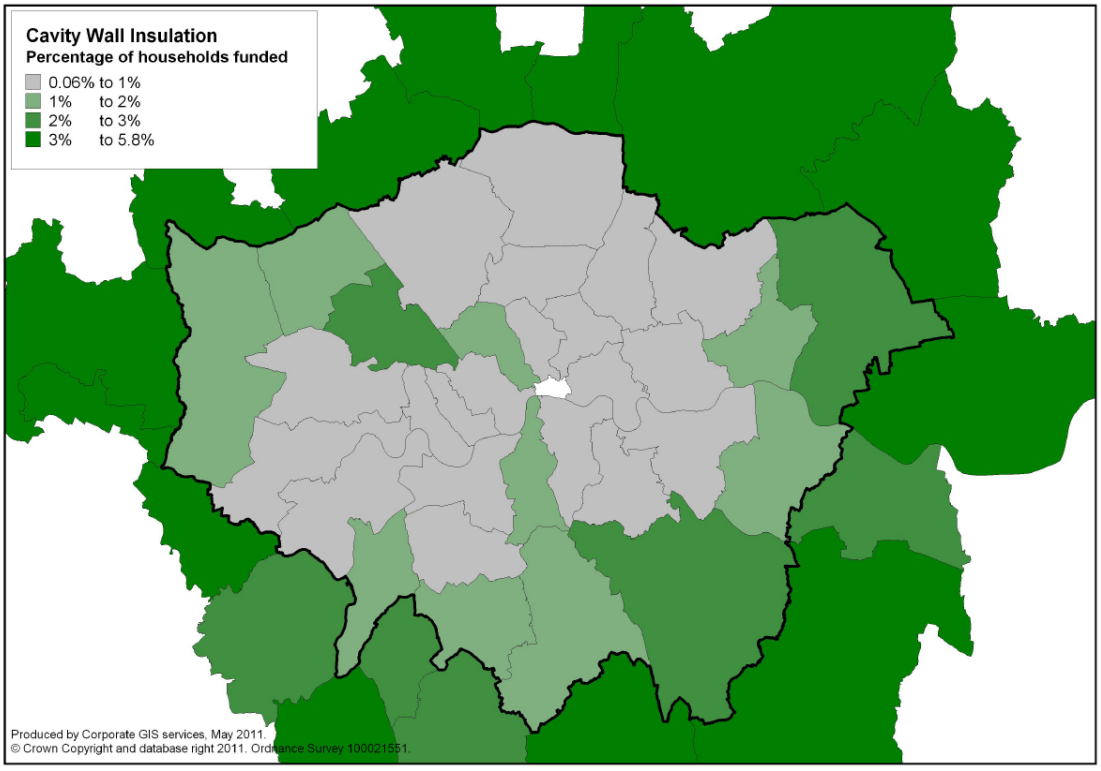


Fig 1. CERT-funded cavity wall insulation jobs 2008-2010: London and environs

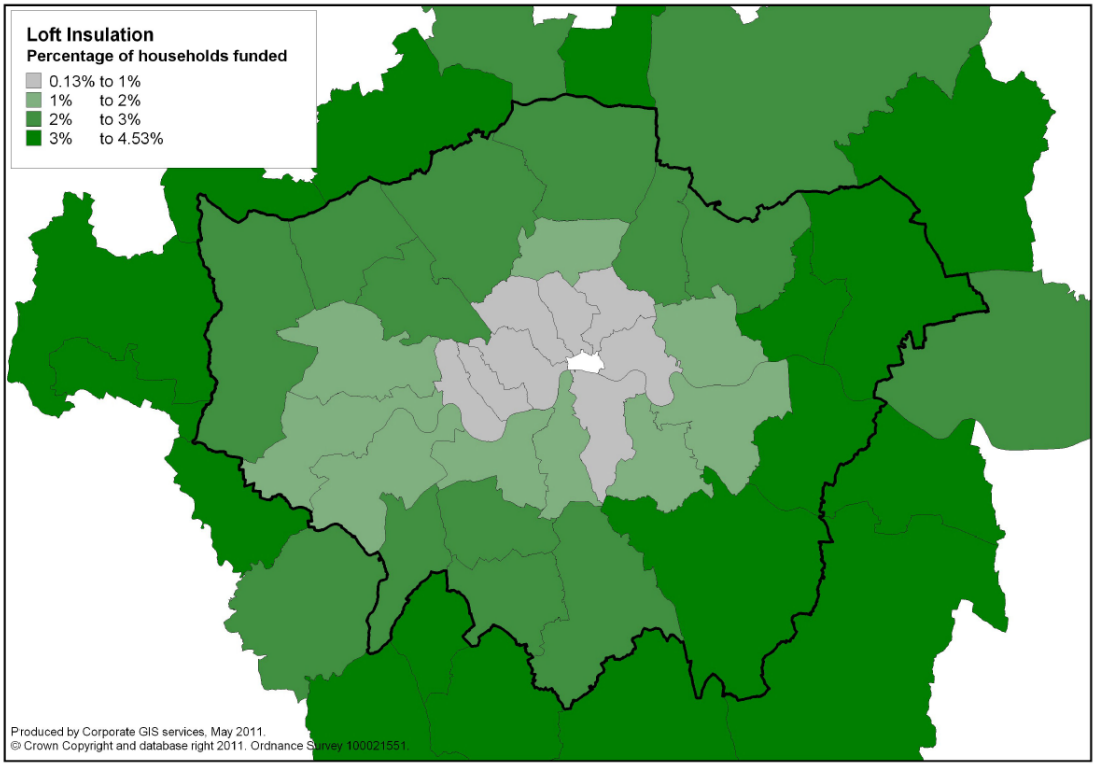


Fig. 2. CERT-funded loft insulation jobs 2008-2010: London and environs

1 , Trends in fuel poverty, England: 2003 to 2008. DECC. http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx

2 A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area, and 18 degrees for other occupied rooms).

3 Fuel Poverty in London: Figures and tables illustrating the challenge of tackling fuel poverty, July 2009 http://legacy.london.gov.uk/mayor/publications/2009/docs/fuel-poverty-jul09.pdf

4 The Government intends to initiate an independent review of the fuel poverty target and definition before the end of the year.

5 The interim target of eradicating fuel poverty by 2010 amongst vulnerable households was not meet.

6 Prior to NI 187 reporting was carried out annually by local authorities under the Home Energy Conservation Act 1995 (HECA) in 2005 which required local authorities to report on domestic energy efficiency improvements.

7 A study of Hard to Treat Homes using the English House Condition Survey. Part 1: Dwelling and Household Characteristics of Hard to Treat Homes. BRE, 2008 http://www.bre.co.uk/filelibrary/pdf/rpts/Hard_to_Treat_Homes_Part_I.pdf

8 'Ofgem publishes a comprehensive review of Britain's energy supplies'. Ofgem press release, 09/10/2009.

9 'Britain's CO2 emissions could be cut by 80%, Daily Telegraph, 27/11/2007, http://www.telegraph.co.uk/earth/earthnews/3316111/Britains-CO2-emissions-could-be-cut-by-80.html. 38% of London's total CO2 emissions in 2006 came from domestic consumption

10 Letter from DCLG to Local Authority Chief Executives, 17/11/2008, http://www.communities.gov.uk/documents/housing/pdf/1149883.pdf

11 Programmes top reduce household energy consumption: Fifth report of session 2008-09, House of Commons Public Accounts Committee, February 2009. http://www.publications.parliament.uk/pa/cm200809/cmselect/cmpubacc/228/9780215526618.pdf

12 The original Energy Efficiency Commitment 1 (2002-2005) required all electricity and gas suppliers with 15,000 or more domestic customers to achieve a combined energy saving of 62 TWh and in the Energy Efficiency Commitment 2 (2005-2008) energy saving targets were raised to 130 TWh suppliers, and here suppliers with at least 50,000 domestic customers (including affiliated licenses) were eligible for an obligation.

13 'Paving the way for a Green Deal'. Department of Energy and Climate Change, June 2010.

14http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/CU/Documents1/CERT%20Q9%20Update.pdf

15 Please note that low energy lighting is no longer a qualifying measure under CERT

16 CERT report from HEED by region Energy Saving Trust. http://www.energysavingtrust.org.uk/business/Business/Information-centre/Homes-Energy-Efficiency-Database-HEED/CERT-reports-from-HEED/CERT-report-from-HEED-Q8-by-region

17 Pan-London Homes Energy Efficiency Programme: Overview Presentation. London Councils. http://www.londoncouncils.gov.uk/London%20Councils/Capital%20Ambition/5DRCustomerInsightPresentation23Sept2009.ppt

18 Housing tenure of Households, borough, Greater London Authority (Aug 2010). http://data.london.gov.uk/datastore/package/housing-tenure-households-borough

19 Minimum Energy Efficiency Standards for Private Rented Homes, Friends of the Earth (Aug 2010) http://www.foe.co.uk/resource/briefings/private_rented_homes.pdf

20 Bottrill, C. 'Homes in Historic Conservation Areas in Great Britain: Calculating the Proportion of Residential Dwellings in Conservation Areas'. Environmental Change Institute, University of Oxford. Aug. 2005.

21 Ofgem's Report on the Community Energy Saving Programme (CESP 2009-2012, to 31 December 2010. Ofgem, May 2011.

0.1 Contents

DSF/WCC Energy Efficiency in Flatted Buildings

Phase 1 : Report Contents

Appendices

Issued to:

City of Westminster

Dolphin Square Foundation
Investing in Homes

Prepared by:

ECD Architects
ENERGY CONSCIOUS DESIGN

keegans

PPCR
associates

1. Introduction

ECD Architects, with Keegans Cost Consultants and PPCR (Public Participation Consultation and Research) were appointed by Dolphin Square Foundation (DSF) and Westminster City Council (WCC) in June 2009 to carry out Phase 1 of a study on the obstacles to improved energy efficiency in private residential flatted buildings in Westminster. This report concludes Phase 1 of these works and reports all findings related to the research carried out.

2. Project Brief & Objectives

The overall objectives are to reduce CO_2 emissions and to reduce fuel poverty. The more specific aims of the study are to explore the legal, financial, social and practical obstacles to implementing energy efficiency measures in the private residential sector. UK householders are currently responsible for 28% of UK CO_2 emissions and in London homes are currently responsible of 38% of all the city's CO_2 emissions. The Government has identified housing as a key sector to reduce CO_2 emissions and reach climate change reduction targets. The UK Low Carbon Transition Plan (2009) requires CO_2 emissions (from heating) in the domestic sector to fall from 13% to virtually zero by 2050. It identifies a range measures to support improvements to energy efficiency including: Smart metering; finance options; community scale action; self-help support, etc, to support the 'Great British Refurb'. Announced in February 2009 this consultation document calls for all homes to have undergone a 'Whole House' refurbishment of energy saving measures by 2030. That includes a comprehensive package of measures to address CO_2 emissions.

In Westminster there are currently a total of 86,500 private sector homes with an average SAP rating of 58 in 2001. However one of the key challenges in Westminster to addressing this issue is the nature and location of the properties involved as the makeup of the housing stock varies considerably from the national average. Approximately 90% of dwellings are flats rather than houses (nationally the converse is true in approximate terms). Westminster contains a large private rented sector – some three times the national average and contains a much higher proportion of stock that is listed or in a conservation area. Furthermore the stock is older than the national average and has a disproportionate number of buildings with solid walls and a significant number of domestic dwellings with flat roofs. The Rugg Review completed in 2008 indentifies the state of the current UK private housing rental sector and in particular the challenges facing upgrade of this stock including: Poor/ unregulated management; ignorance of statutory requirements; low standards; older housing stock; higher yields on poor quality housing and short-term tenures. All of these issues need to be addressed in any serious attempt to introduce energy

efficiency measures generally and in Westminster in particular.

A common (but not universal) feature of landlord and tenant law in England and Wales is that long leases contain provision for the respective obligations and rights of the freeholder and long leaseholder in respect of repair and maintenance but are silent on the matter of improvements. In order to carry out works to common parts of the building it is necessary for all leaseholders and the freeholder to agree to carry out these works and for the leaseholders to agree to fund the works plus future maintenance requirements. All of the above present challenges to the improvement of the energy efficiency of the housing stock and Westminster City Council residents have as a result received a limited amount of nationally and locally available energy efficiency resources for retro-fitting the private sector housing stock.

Given the wide ranging and complex nature of the research required, including the process of resident involvement and selection of suitable properties it was clear that a systematic and methodical approach would be required. Working closely with the client the project team followed the Phase 1 brief which identifies the following processes by which this research should be carried out:

1. To identify six flatted buildings (criteria for selection described in section 3.)
2. To liaise with freeholders to secure commitment to explore improvement options.
3. Contact occupiers via an introductory letter explaining the project and service on offer. (See appendix C)
4. Provide participating leaseholders with personalised advice about the potential energy efficiency improvements within their individual flats. (See section 5 and appendix H)
5. Provide verbal and written guidance to the freeholder and leaseholder for each building regarding the process for consulting their respective lawyers regarding alterations to their individual leases. (See section 8 and appendix L)
6. Provide leaseholder with written and verbal guidance on how to obtain financial assistance towards the building works and any associated legal costs. (See section 7 and appendix K).

This process and subsequent Phase 2 options are described in more detail in Appendix A (Article for Inside Housing Magazine). Having prepared detailed assessments for each property with proposals for improvements and collated legal, financial and technical data, ECD then met with leaseholders and freeholders to discuss options for uptake. (See appendix N).

3. Identification and Selection of Suitable Properties

Criteria for the selection of properties were as follows:

- Small blocks of flats or converted houses (6 flats per building)
- All flats to be owned on long leaseholds (min 7 years)
- Spread of small, medium, large freeholders/head lessees preferred
- Location to include Conservation Areas/Non Conservation Areas
- Construction type to include solid external walls and cavity construction

We commenced work on the project by drawing up a list of potential contacts under two categories; Managing Agents and Freeholders/Head Lessees. These organisations are listed in Appendix B. The list was cross referenced with a property data base supplied by Westminster City Council and the membership list of the Westminster Property Association
Initial contact was made by telephone, followed up by a one page Summary of the Project sent by e-mail. The response from Managing Agents was generally rather negative. Typical comments included:

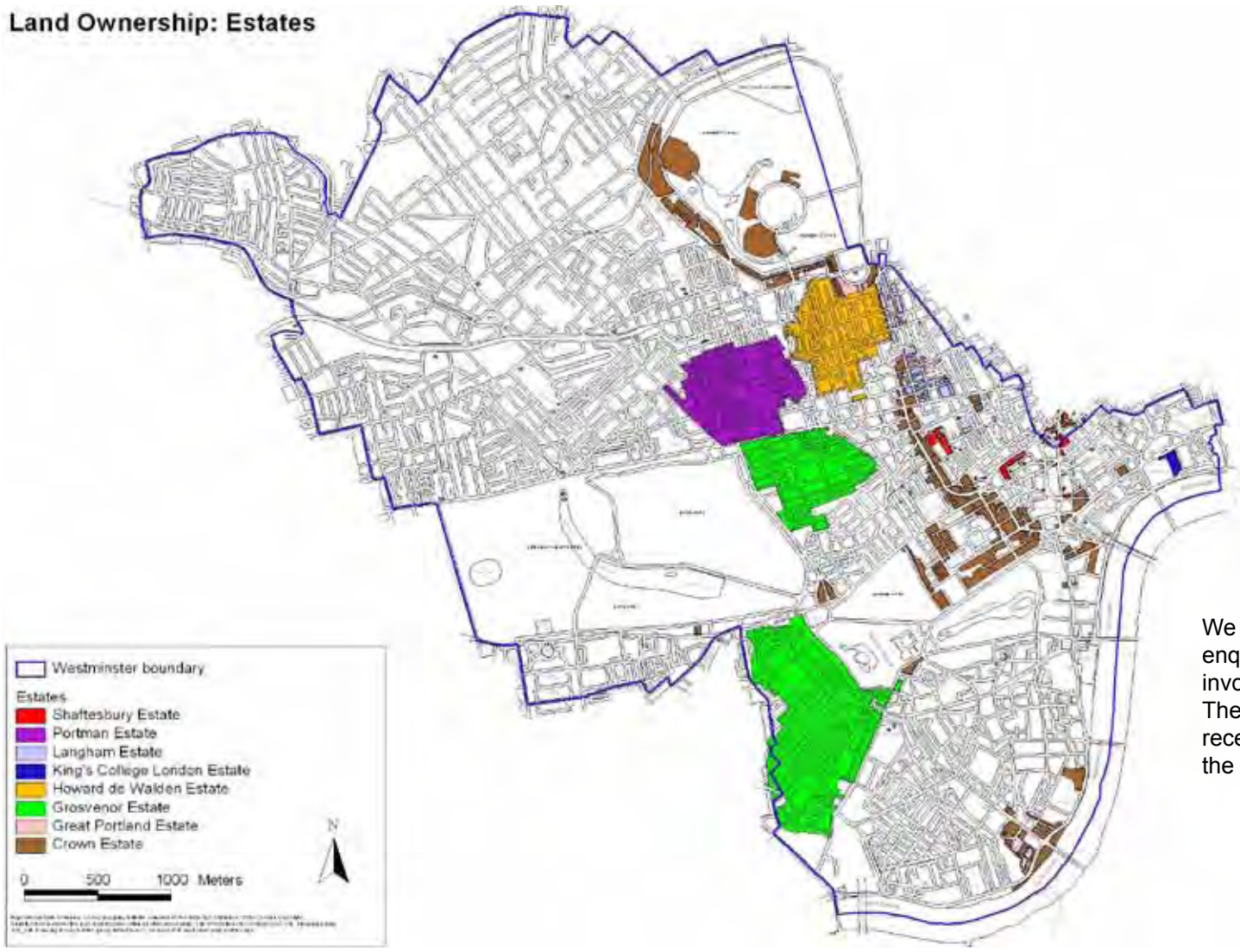
- 'Our clients are very private individuals; they would not wish to participate in any study'
- 'We would like to help but we are forbidden to pass on contact details under the Data Protection Act'
- 'How do we know that the Council will not use such information to enforce implementation of the energy measures recommended?'
- 'If this has got anything to do with EPC's - forget it. They are a waste of time. Nobody looks at them'

The response was not entirely negative, however, and some properties were nominated by Managing Agents, [redacted]
Response from the major Freeholder/Landlords such as [redacted] was more positive, with meetings promptly arranged and potential properties identified. Some reservations were expressed nevertheless:

- 'You will encounter serious planning issues with Listed Buildings - especially any proposals to replace sash windows'
- 'How will these improvement works be funded - will the Council be making a contribution?

Following the initial telephone survey it was possible to draw up a long list of 20 potential properties meeting the preferred criteria - 6 leasehold flats in a small block. External inspections were made of all long-listed properties and key features noted; e.g. Size, Age, Type of construction, Conservation Area, Listed Building etc. For the purposes of this study, non residential uses at ground level, e.g. shop units, have been excluded. The long list was reviewed together with Westminster City Council and the Dolphin Square Foundation and reduced to 6/7 properties. Letters of introduction were then sent out to each individual leaseholder by the Freeholder/Head Lessee, followed up by telephone or email contact by the consultant team. A copy of the introductory letter is included in Appendix C.

Fig 1 Major Landowners in Westminster



We did not receive 100% response to these initial enquiries, despite a sustained effort by all parties involved.
The following is a summary of the positive responses received, with leaseholders agreeing to participate in the study:

- [redacted]
  Block A : 3 of 8
- [redacted]
  Block E : 1 of 4
- Block C [redacted]: 4 of 5
- Block F [redacted]: 2 of 5
- Block B [redacted]: 3 of 5
- Block D [redacted]: 3 of 4

Total participants 16 of 31 (approx 50%)
The location of these properties is shown in the map of Westminster (Fig 2)

(Fig 2: 'Proposed Locations' Map Omitted to save file size: Copies available on request)

(Fig 3: 'Selected Buildings' Photo Library Omitted to save file size: Copies available on request)

4. Survey/ SAP Results

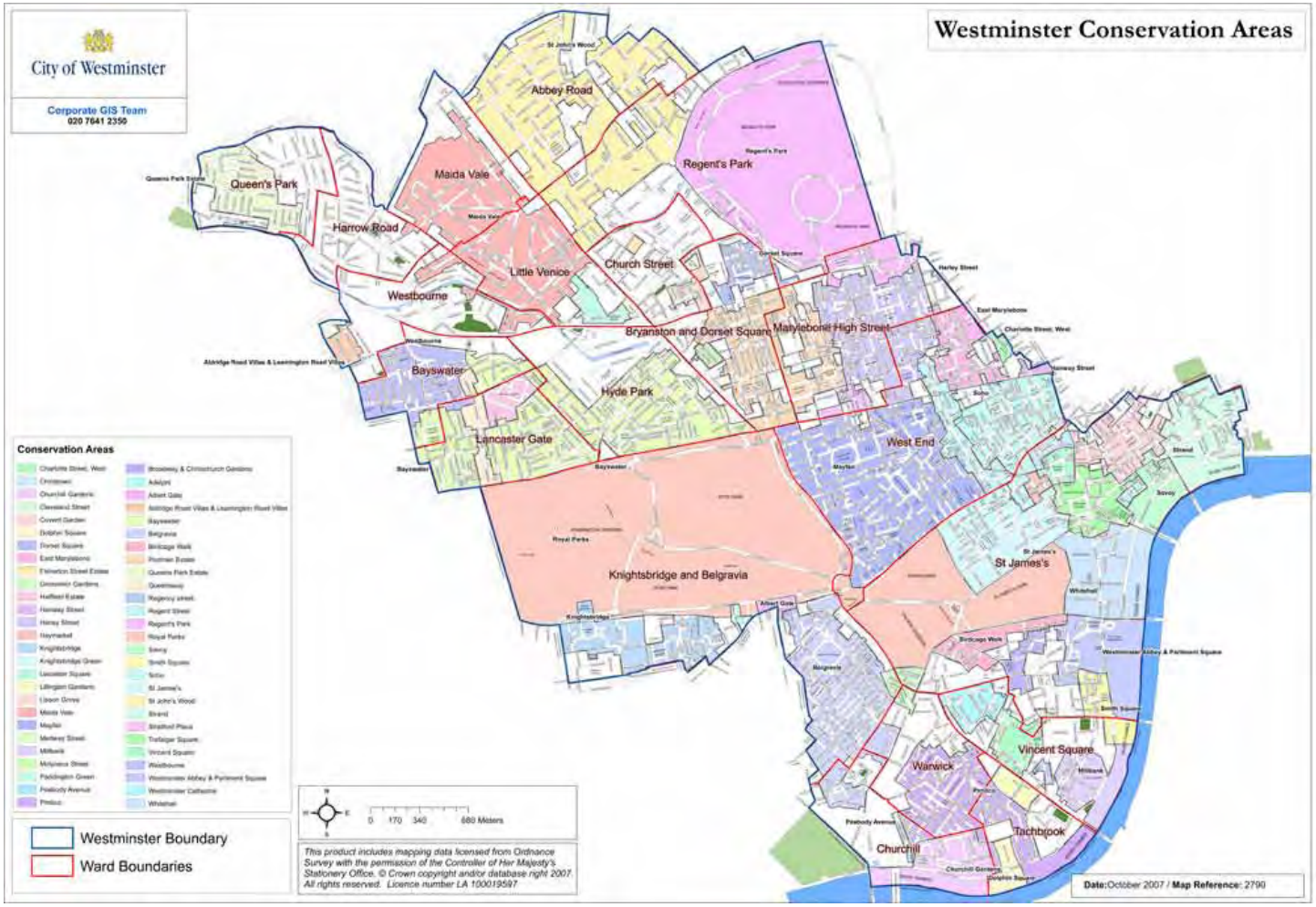
Each of the 16 properties received a measured survey (see Appendix D) to identify key characteristics, i.e.: location within the building; volume; building fabric (especially main heat loss areas); fuel type and heating appliances; lighting type and distribution. (See also SAP survey records: Appendix E). Communal areas in each of the 6 buildings were also measured and heat loss areas and appliances identified.
With the client ECD reviewed the available software to identify the most appropriate means of measuring performance (see Appendix F). It was agreed that SAP provided the best means of measurement for dwellings and base case SAP's were prepared for each property (see Appendix G). However SAP does not enable measurement of communal areas i.e.: staircases and hallways. In the majority of properties these were unheated spaces and as such were unlikely to be significant heat loss areas. The possibilitiy of measuring these areas using sBEM (Simplified Building Energy Model) was discussed and a quote obtained, however it was agreed with WCC that this research was unlikely to prove cost effective and was therefore not taken forward.
The SAP results obtained confirmed that the thermal performance of a number of properties could be significantly improved. A draft project summary was prepared for each property (see Appendix H) identifying current SAP results and suggesting a range of measures that could be carried out on the property to improve performance.

5. Summary of recommended measures

The recommended measures are divided into fabric measures and mechanical/ electrical measures. Fabric measures are usually more cost effective in terms of £/ tonnne CO_2 saved and new buildings should always employ a 'Fabric First' approach. In practice that means to reduce elemental U values to main heat loss areas to a minimum and significantly improve airtightness by sealing gaps in the thermal envelope. However for solid wall properties in conservation areas (some of which are Grade II listed) the options for fabric upgrade are generally limited to internal measures. Furthermore this does mean greater disruption for residents and in some cases reduced floor area which may not be acceptable (see resident feedback - Appendix N). Nevertheless a limited range of fabric measures were proposed (see appendix I for selection of manufacturers
details). These included:
1. Aerogel dry-lining to internal face of external walls and underside of roof where appropriate
2. Secondary glazing generally
3. Replacement vacuum glass to existing frames

(Graphic Objects on this page omitted to save file space: Original available to view on request)

Fig 6: Existing Conservation Areas



4. Replacement windows
5. Insulation to ceiling voids
6. Draught stripping to doors and windows

Upgrades to mechanical and electrical systems are generally less cost effective. However for occupied properties in conservation areas these can be more appropriate. Measures proposed include:

1. New gas fired condensing boilers
2. MVHR (Mechanical Ventilation Heat Recovery)
3. Solar Thermal collection
4. Photovoltaic panels
5. Low energy light fittings (LED's)
6. High efficiency A++ rated appliances

Incorporating a range of these measures on each property (as described in the project summaries) SAP assesments were prepared and % improvements shown and preliminary costs prepared.

6. Planning Considerations

Given the considerable extent of Conservation areas in Westminster (See Fig 3) and the briefing requirement to consider only Private Flatted properties of a limited size, it is not suprising that all of the selected properties are located in Conservation areas. Therefore recognising the importance of obtaining planning approval for any proposals ECD met with WCC planning and conservation officers in early December 2009 to review proposed measures on all 6 properties. Feedback received was as follows:

- Replacement windows will not be acceptable to any elevations visible from the street
- External insulation will not be acceptable on any properties in conservation areas.
- Dry-lining may not be acceptable in Grade II listed properties especially in ground and first floor rooms with original cornice detail mouldings.
- Secondary glazing is generally acceptable.
- Solar panels would be acceptable if not visible from the street.

Following receipt of this information the proposed measures and costs were updated to reflect the limitations imposed and results were collated (See Appendix J).

7. Funding Options

As noted in project aims/ objectives there are a number of obstacles to be addressed if residents in private flats are to be enabled to improve the energy efficiency of their dwellings. Besides planning restrictions there are also legal and financial obstacles. With client input ECD identified a range of local and national funding options for residents depending on their ability to pay (see Appendix K) for a range of fabric and service upgrades for discussion with residents. This included a fund for legal assistance arising from proposals (see below).

8. Legal Summary

In flatted buildings the leasehold contract with the freeholders is usually drawn up separately for each dwelling and identifies responsibilities for maintenance of building elements, i.e.: window repair, etc. However these contracts are usually silent with regard to improvement works. We obtained leasehold contracts for 15 of the 16 properties surveyed and on the basis of those received ECD have therefore prepared a generic statement for residents on the legal implications of the proposed measures (see Appendix L). However it is noted that the specific issues arising from each contract would need to be considered separately and residents may be able to access limited funding for this. Further information on the existing legal framework and need for new legislation to support the wider uptake of energy efficiency measures are discussed in section 10. Finally a specific commentary relating to Block C is provided in Appendix P to illustrate the inherent complexity of this issue and need for reform.

9. Consultation Feedback

Collating all of the information above ECD prepared a consultation document for meetings with residents. Comprising appendices: D, G, H, J, K, L & N..
Residents were then contacted by email, telephone and letter (see Appendix N) explaining that we were seeking their views on the outcomes from the research carried out and whether they would be interested in working with WCC and DSF to explore ways in which they might get involved and improve their properties.
At the same time we contacted freeholders to arrange meetings in which we could explain the project aims and how they might get involved.
Unfortunatley despite a concerted effort over several months (see Appendix O) we have found it extremely difficult to arrange meetings and have so far only managed to meet 2 of the 16 leaseholders and 2 of the 4 freeholders:

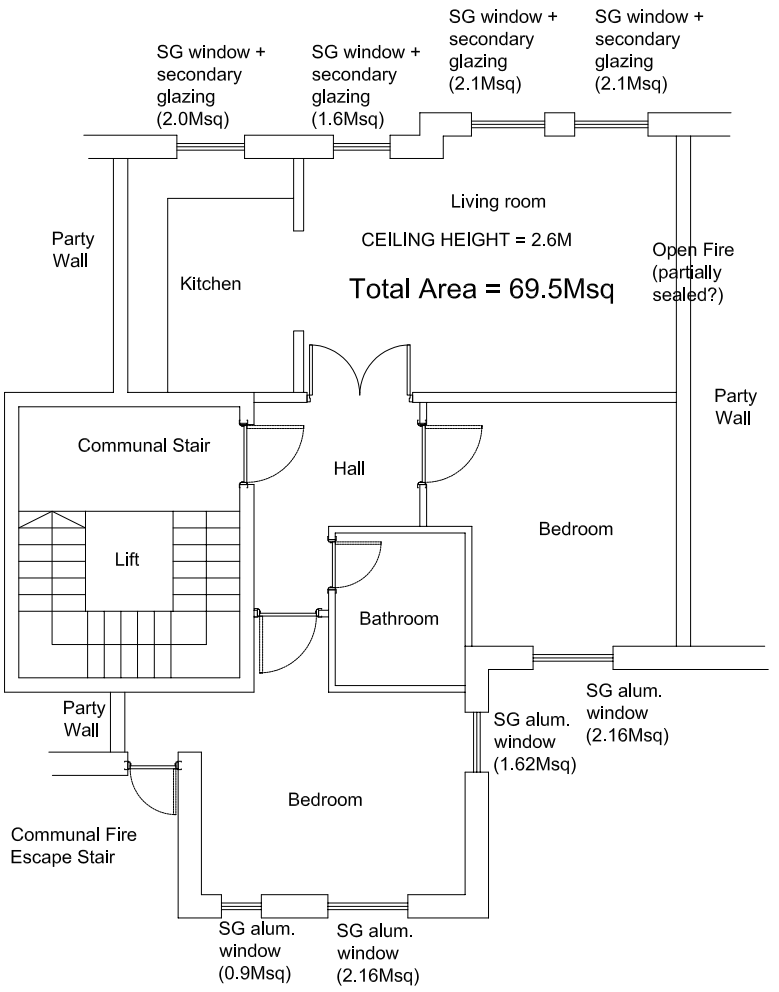


Fig 7: Measured Survey

• Anonymous (Flat 5, 26 South Audley Street)
• Anonymous (Flat 1, 14 Abbey Gardens)
Freeholders:
• Grosvenors Estates
• Dorrington Properties

The results from these limited interviews can be found in Appendix N
The fact that we have been so unsuccessful in contacting residents may be partly due to the fact that these properties are often second or third homes for wealthy individuals. In addition some of the properties are owned by businesses to provide staff with accomodation
when working in London. Whilst this project did not set out to establish occupancy pattersn it is clear from anecdotal evidence that relatively few of the residents in the properties surveyed would regard these flats as their main home. Given that a much larger number of property owners were contacted (see appendix B) but did not reply it is clear that occupancy levels could be even lower than suggested.

10. Key Findings and Conclusions

This report sets out the results obtained from the methodology (items 1 to 6) described in section 2. Given the complex nature of the project: buildings, location and residents there are a number of key findings which contribute to the obstacles to improved energy efficiency in Westminster. These include (in suggested order of importance):
1. Occupancy and turnover
2. Planning restrictions
3. Perceived hassle
4. Cost implications and financing
5. Legal framework

Occupancy and turnover:
As noted previously the extreme difficulty in contacting residents to arrange surveys and interviews has significantly hampered the project team's ability to undertake the Phase 1 research. Whilst the results obtained suggest that the properties studied are representative of the wider Westminster housing stock, the inability to review findings and proposals with a sufficient number of residents suggests that the wide scale implementation of energy efficiency measures will be very difficult unless occupancy is seriously addressed. The future role of 'active' Freeholders with support from the local authority and energy providers might be considered here as a stimulus to engaging leaseholders in this process.

Planning restrictions:
As expected planning issues arising from energy efficiency measures are a key problem that will need to be addressed. Listed buildings are subject to national guidance and it is very unlikely that visible external alterations will be acceptable on these properties. Unlisted buildings in Conservation areas are also subject to limitations imposed by local conservation officers and from the feedback received to date it is unlikely that significant external alterations would be acceptable.
Energy efficiency measures in these properties are therefore (in the short term at least) limited to the following:
a. Improved air-tightness (draught stripping of windows and doors, etc)
b. Internal fabric insulation (wall lining where possible, roof insulation, etc)
c. Internal services upgrades (boiler replacement, MVHR, smart metering, etc)
d. Integrated on-site renewable energy i.e.: PV (where not visible from the street.
Future re-classification of Conservation areas could be considered with a wider range of acceptable energy efficiency measures provided to residents when considering planning applications.

Fig 8: Rear communal escape stair to Woodstock House **(Omitted from compiled submissions document to save file space)**

Perceived hassle:
This is closely linked to the issues above in that it contributes to the limited response from residents who regard any questionnaire as intrusive and time consuming without immediate benefit to them. Furthermore the planning restrictions noted above increase the need for internal and therefore potentially disruptive building works for limited financial gain and possibly reduced floor area (see appendix N). If these works could be coordinated with planned refurbishments then the likelihood of uptake would be significantly increased. The re-introduction of 'consequential improvements' to building regulations (Part L 2010) will certainly improve building performance over time if properly enforced.

Cost implications and financing:
Due to the limited resident feedback it is not possible to confirm whether this is a major issue. However the costs outlined in appendix J far exceed the suggested financial savings in energy costs (see appendix H). Assuming 'simple payback' this suggests lengthy payback periods which may be unacceptable to residents (see appendix N – Flat 5 South Audley Street) with or without financial assistance. This of course raises wider issues about energy/ carbon costs which are beyond the remit of this report to consider. Financing of energy efficiency measures via 'Pay as you save' schemes (as advocated by UKGBC) managed by the LA or energy provider could be introduced and reporting of payback as net present value rather than simple payback considered as a means of increasing the financial stimulus.
Legal framework:

Anecdotal evidence obtained whilst carrying out preliminary surveys suggests that many residents do not know who the freeholder is or how to contact them. This can of course be easily resolved but suggests that residents do not see communal areas as a high priority.

All of the leases submitted include contractual covenants on the part of the lessees i.e. tenants, not to make alterations to structural parts of the buildings of which their flats form part. There are also covenants not to make alterations to internal (non structural areas) without the landlords consent. Subject to certain rights to make changes under the Landlord & Tenant Act 1927 no changes can be made without the landlord's consent.

However and more importantly, the landlord can also neither require the lessee to make alterations to his flat nor charge him for any such alterations which are agreed. Therefore if the landlord wishes to introduce energy saving measures it must be with consent including as to cost and ongoing maintenance.Where alterations are to be made to the communal fabric of the building i.e. the common parts e.g. roof, the landlord cannot make any improvements (including energy saving measures) and charge the lessee for those improvements under the service charge provisions of the leases. Therefore those changes are likely to appear to be economically unattractive as the beneficiaries of the alterations i.e. the tenants, cannot be required to pay for them. The landlord will itself receive no direct benefit but would bear the cost.

By way of illustration; the installation of photovoltaic equipment on the roof of a block of flats to provide lighting to communal areas of the block, although not requiring the consent of individual lessees, could not be charged to those lessees. The same could be said of wind turbines on the roof. A further illustration might be the introduction of LED lights to internal parts of individual flats; there will be no method of enforcing the installation of these by any landlord under the leases.

A further complication is that although some lessees may consent to the changes this would have to be legally agreed and there remains the possibility that one or

two lessees refuse to consent to the changes. The refusal of just one lessee to the changes effectively blocks all alterations as that lessee cannot be required to pay for any immediate or ongoing costs of the changes. It is worth emphasising that ongoing costs of changes have to be recoverable under service charge provisions under the leases. This requires unanimity so as to ensure full cost recovery.

We therefore believe that a change in legislation is required to Landlord & Tenant regulations so as to enable landlords to make energy saving improvements and recover the cost of the same under the relevant leases

Appendix B (Organisations contacted)

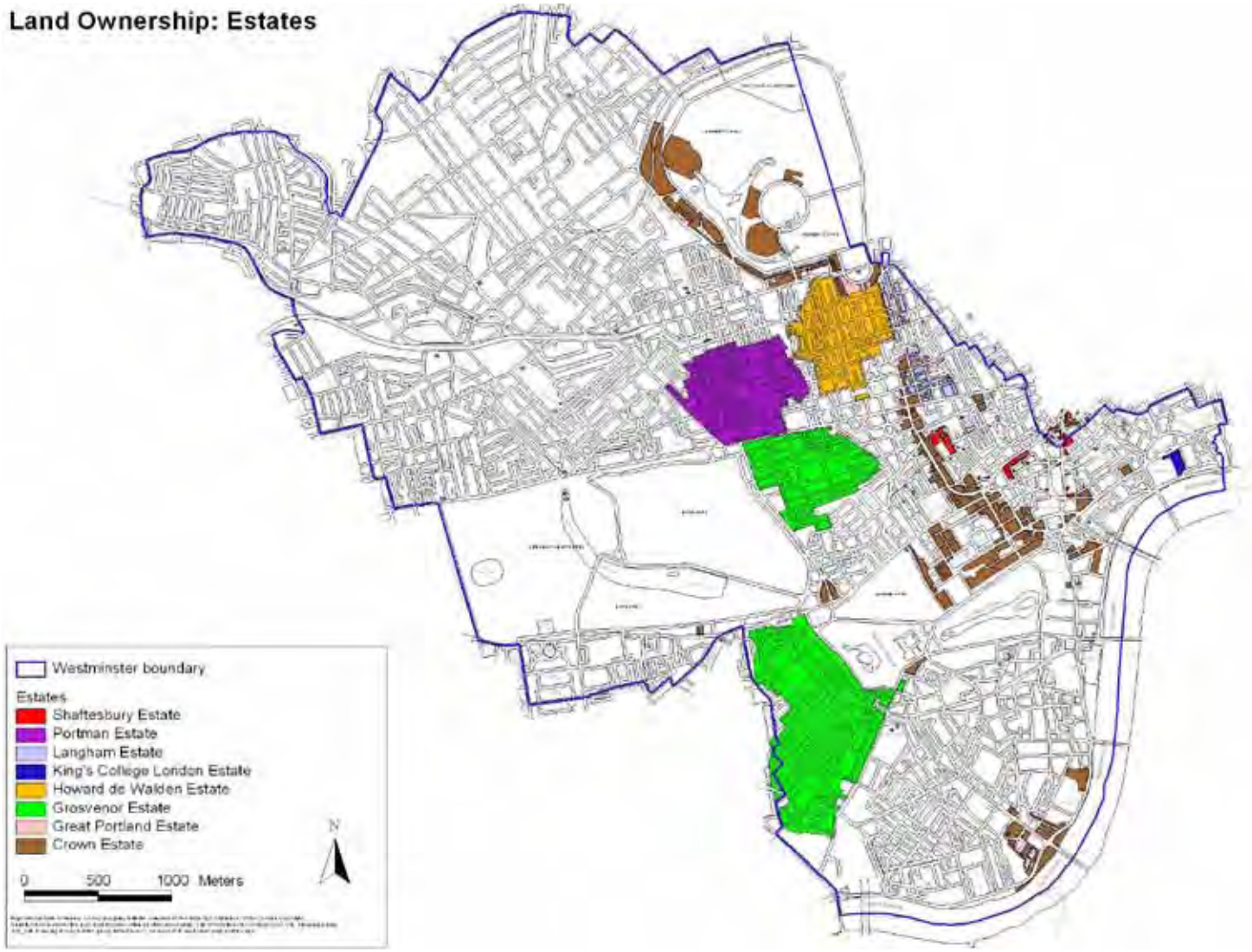
Managing Agents

Apex Housing Solutions
Cluttons
Daunton Soar
Douglas and Gordon
EA Shaw
Fixed Rent
Gracewater Estates
Granvilles
HML Hawksworth
Jones Lang Lasalle
LHH Residential
Pembertons PM
Sinclairs
Strutt and Parker

Freeholders/Landlords

Cadogan Estate
Chancery St James
Dorrington Property
Church Commissioners
Grosvenor Estate
Howard de Walden Estate
Portman Estate
The Crown Estate

Other organisations
Westminster Property Association



Appendix C (Introductory Letter)

Dear,

RE: ENERGY EFFICIENCY IN PRIVATE SECTOR FLATTED BUILDINGS

We have been appointed by Westminster City Council to carry out a research study on energy efficiency in private residential buildings. The project is jointly funded by Westminster City Council and The Dolphin Square Foundation.

The purpose of the study is to investigate the potential for energy and CO_2 savings in flatted buildings, which constitute a large proportion of the housing stock in Westminster. In addition our brief is to identify some of the obstacles to implementation of energy saving measures. Examples might include; planning problems in Conservation Areas (eg window replacement), funding issues (affordability), practical limitations (working in occupied premises) and legal aspects (liability for repairs or 'improvements' within the terms of the lease).

General guidance regarding leasehold law will also be provided because a common (but not universal) feature of landlord and tenant law in England and Wales is that long leases contain provision for the respective obligations and rights of the freeholder and long leaseholder in respect of repair and maintenance but are silent on the matter of improvements. Energy efficiency works to the common parts of flatted buildings – roofs, walls, windows (sometimes), heating systems (where communal systems exist) will typically be works of improvement and therefore outside of the terms of the lease. In order to carry out works it is therefore often necessary for all the leaseholders in the building and the freeholder to agree to carry out these works and for the leaseholders to agree to fund these works and future maintenance requirements.

We would like to use your building as a case study in this research. You will be offered a bespoke home energy assessment, energy efficiency advice and we will provide you with information about any available grants and subsidies to cover the cost of any identified works to the common or internal parts of your home (see enclosed note) We do hope you will be willing to participate in this project and would stress that there is no obligation to take forward any recommendations we make. There is no cost to you as the service is fully-funded by DSF and the City of Westminster.

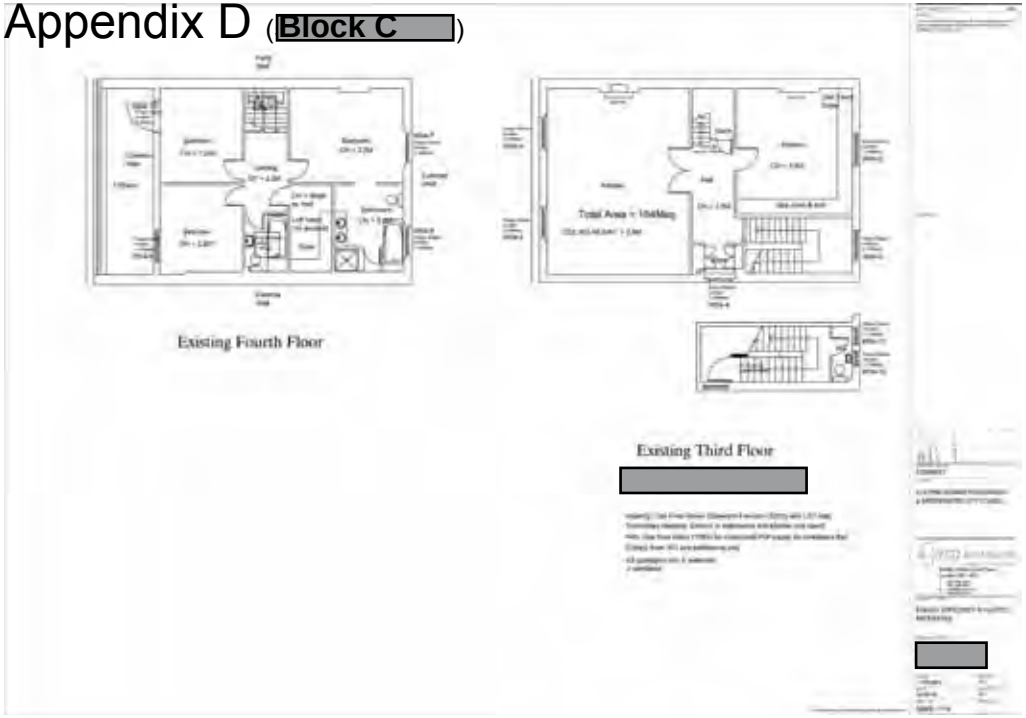
We would be most grateful if you could spare an hour of your time to allow us to carry out an energy audit of your flat. Please give either myself or James Traynor a ring on 020 7939 7500 to arrange a convenient time. Whilst on the phone we will take the opportunity to talk you through the process in a little more detail.

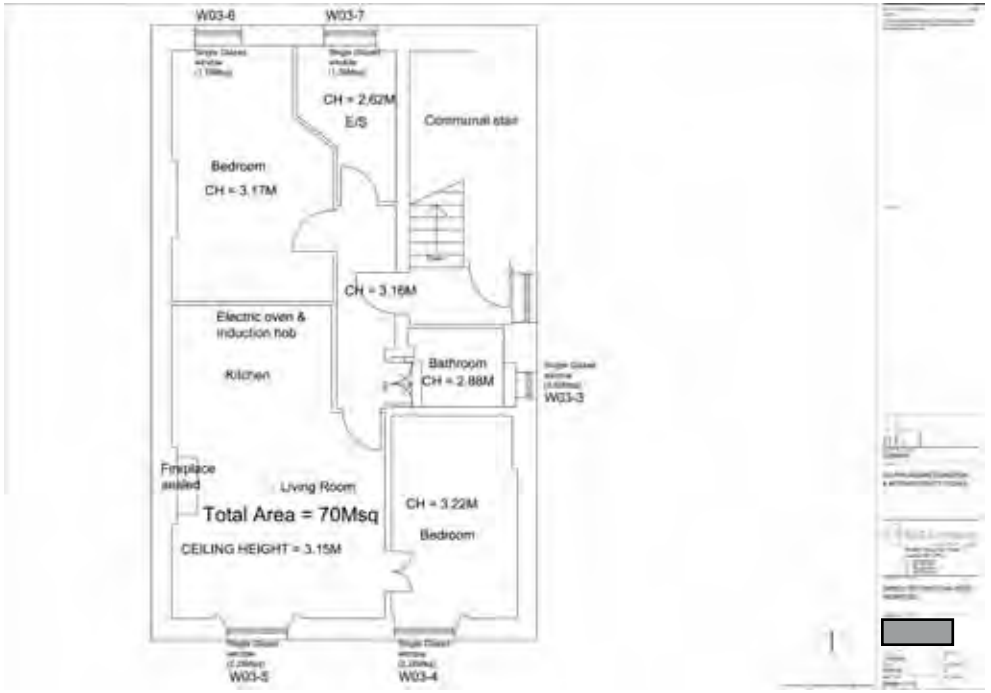
Thanking you in anticipation.

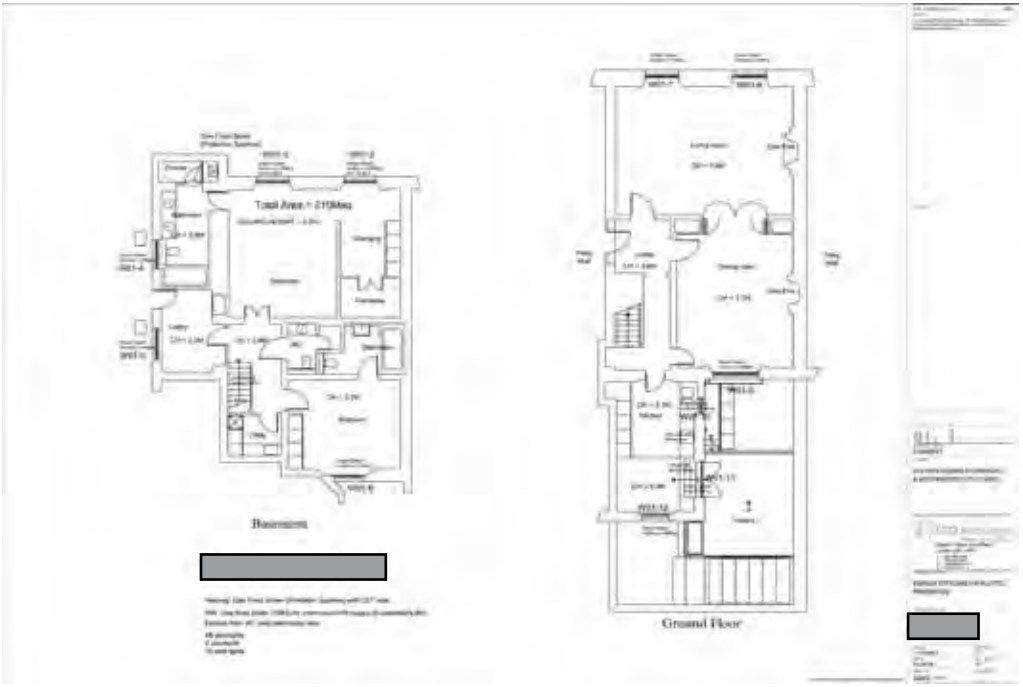
Yours sincerely,

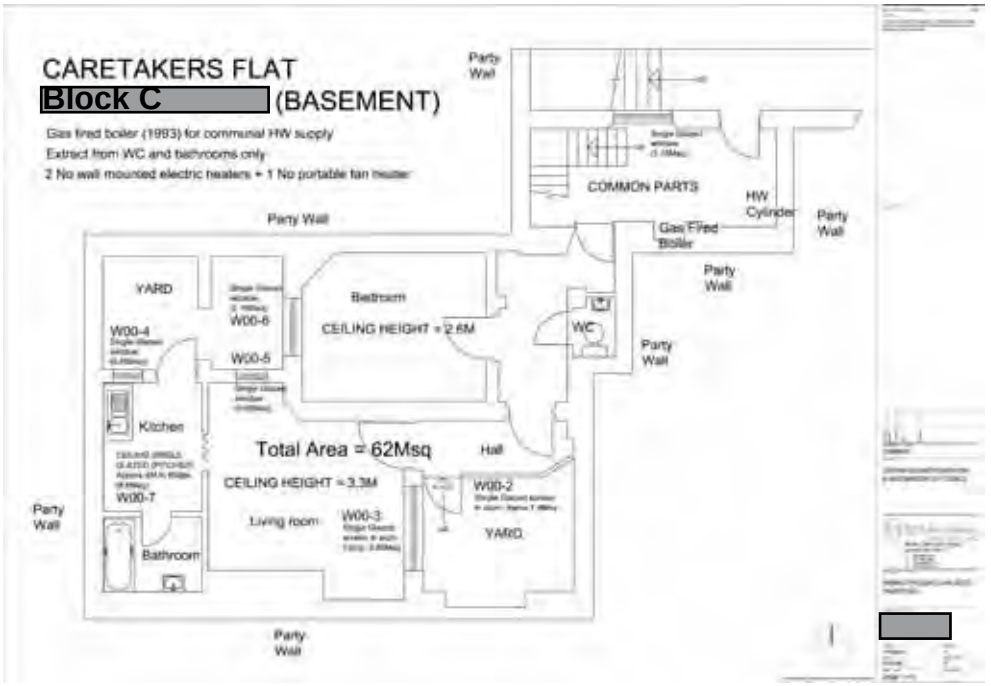
DAVID TURRENT
Cc Jake Mathias. WCC

Appendix D ([redacted])









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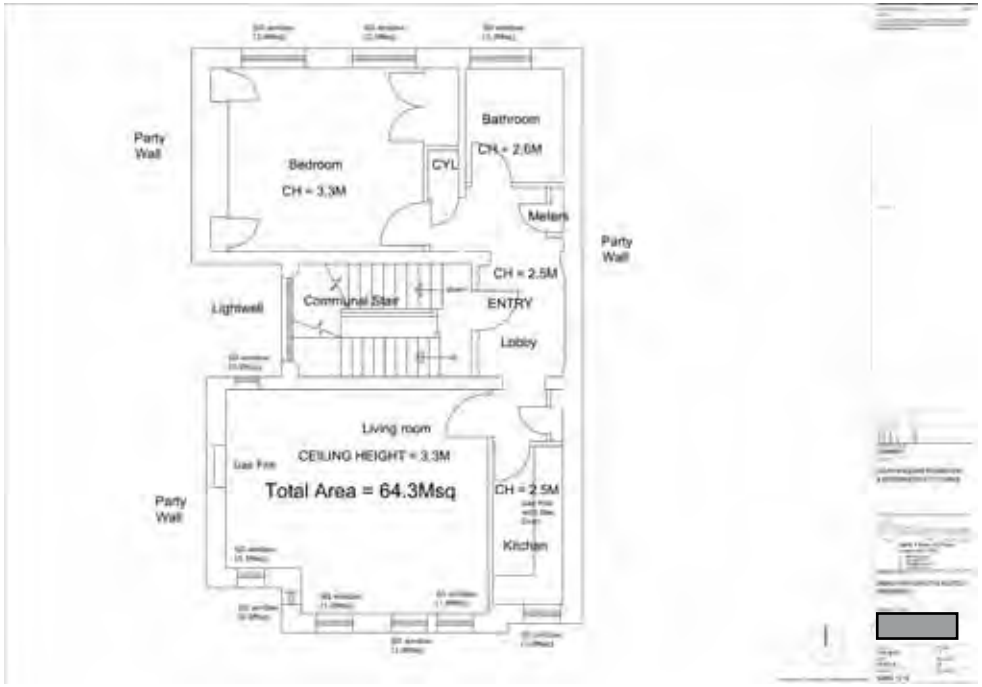

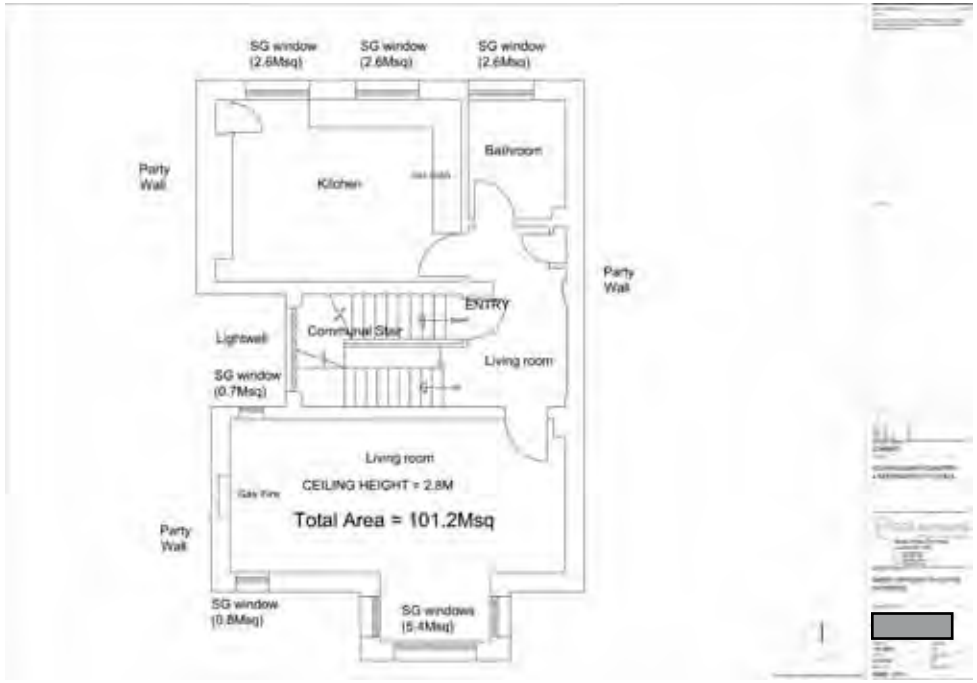

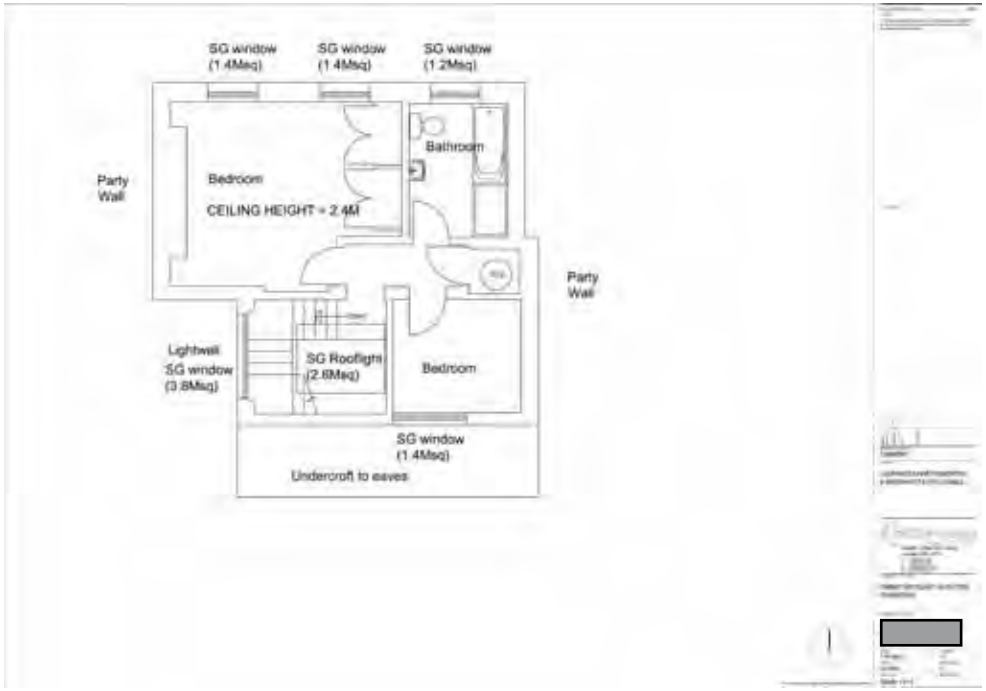

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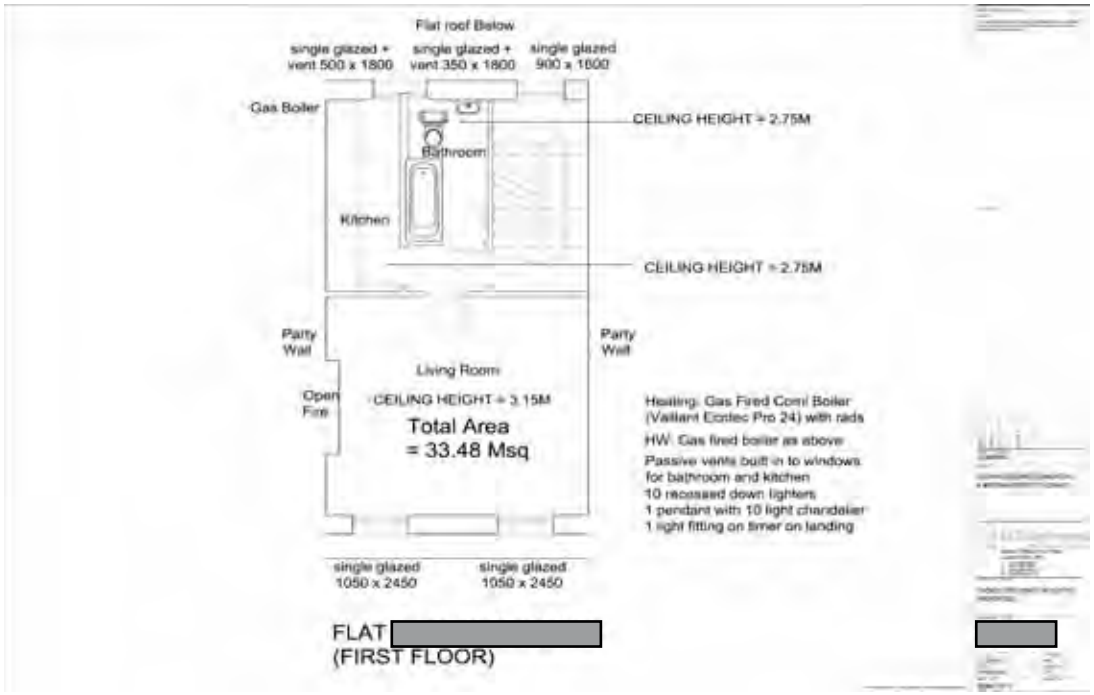

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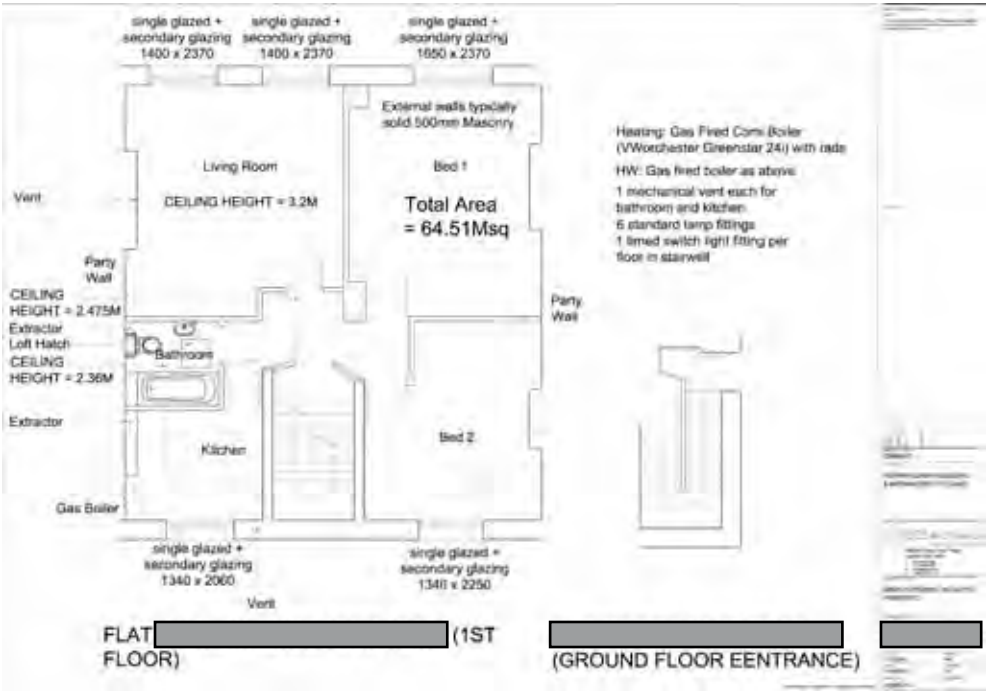

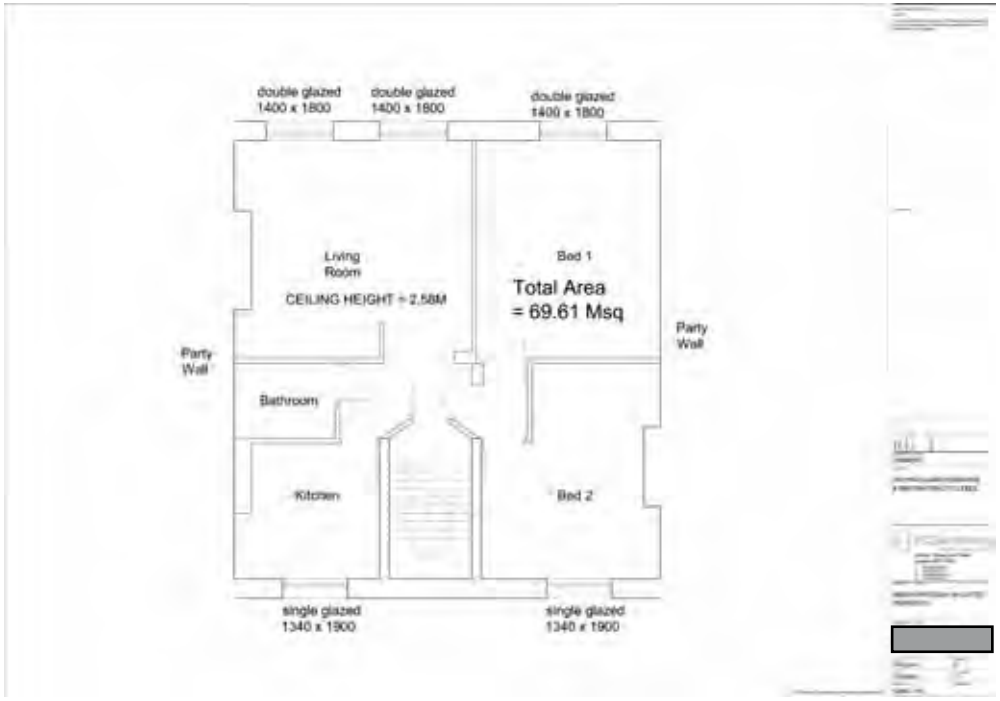

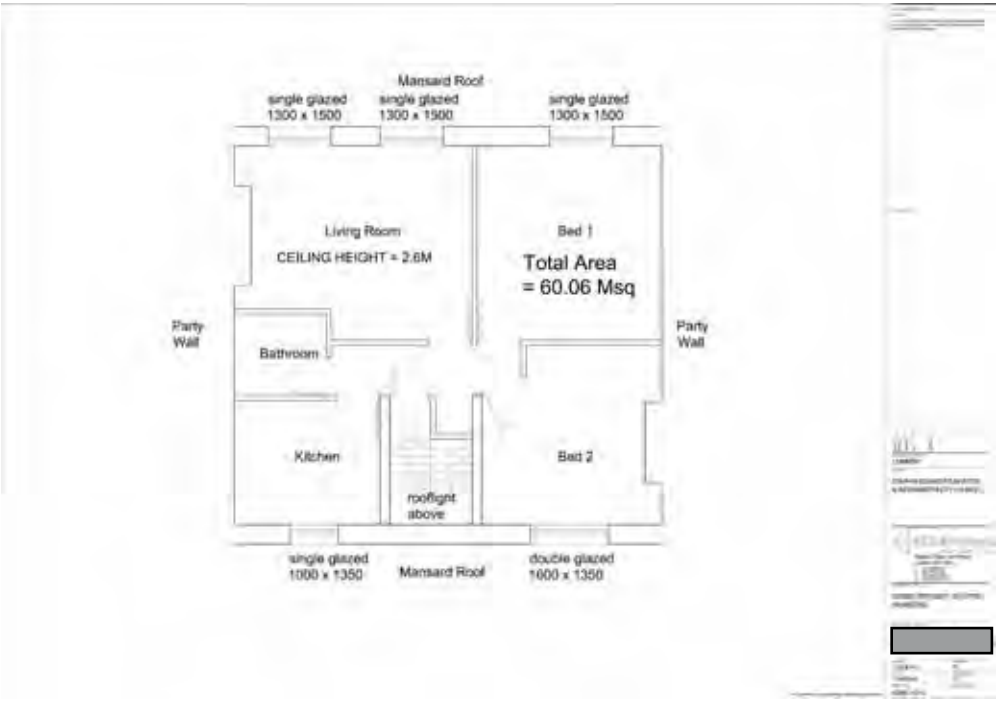

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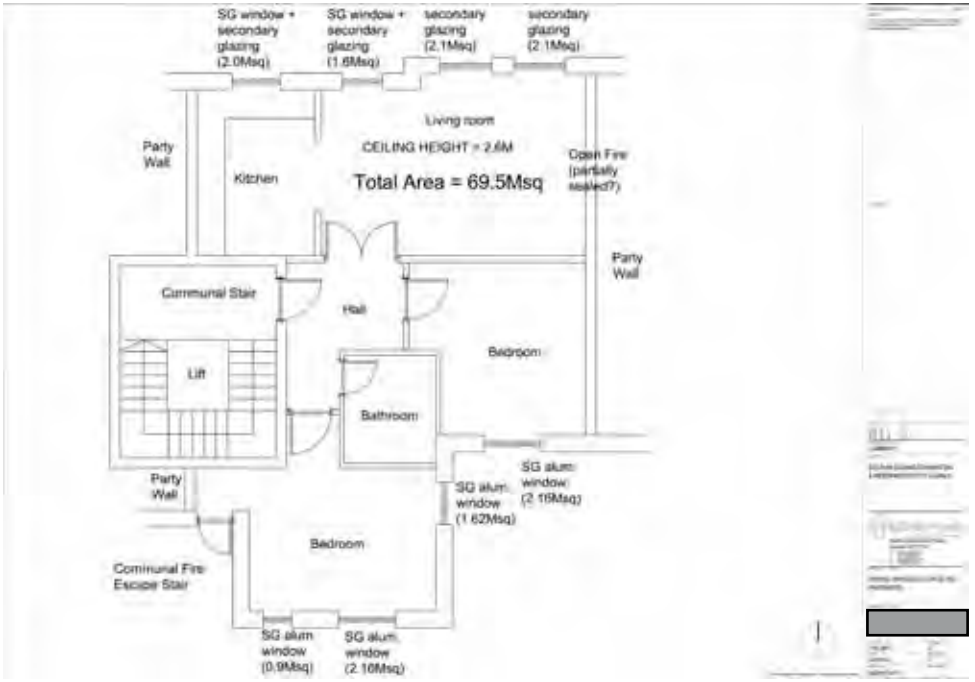

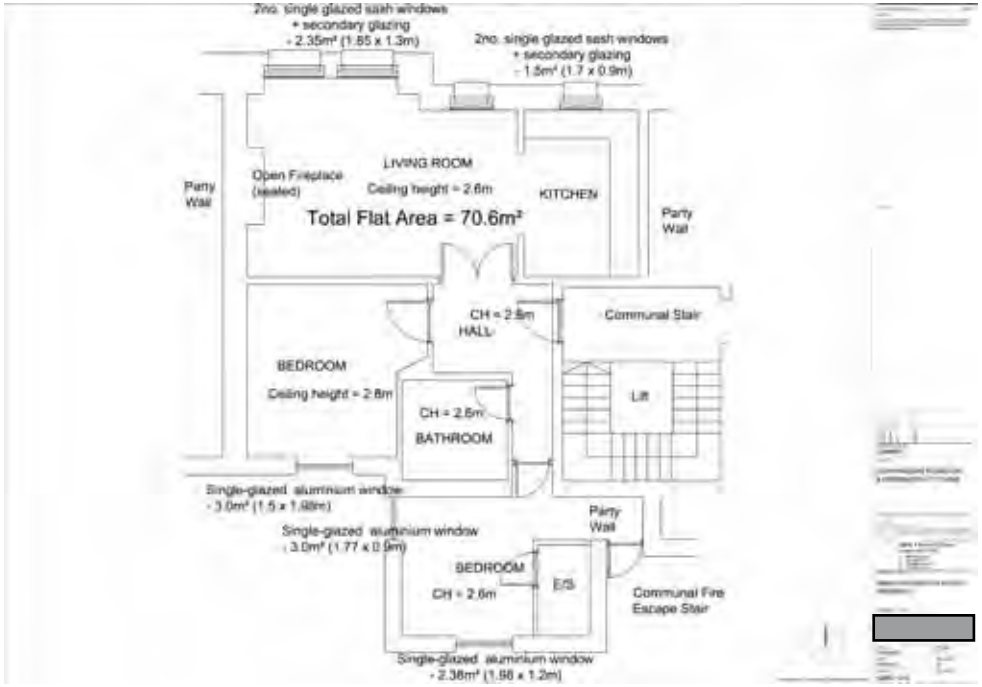

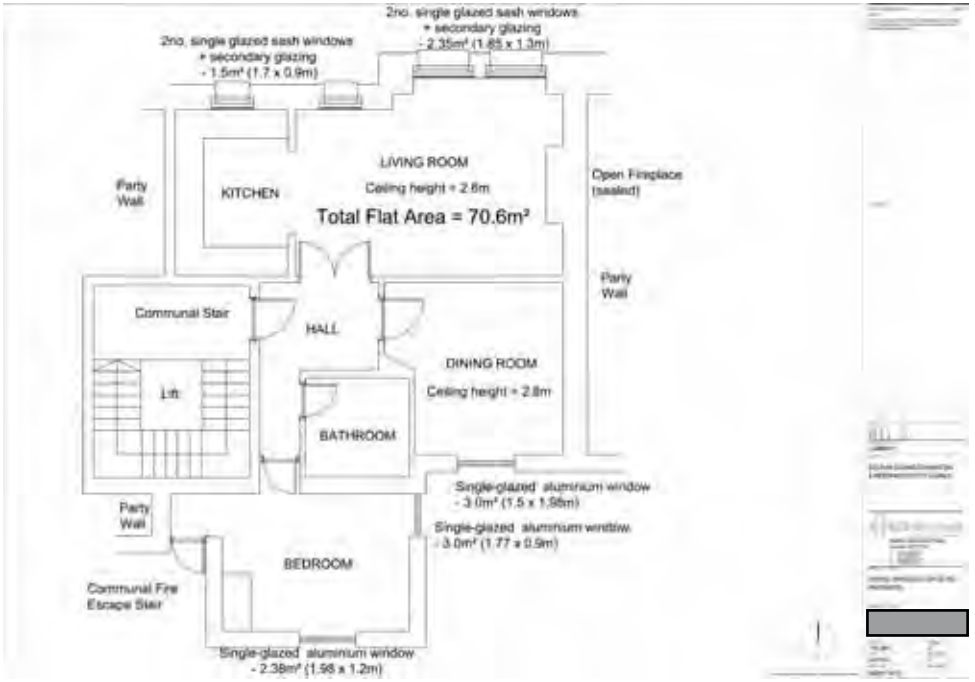

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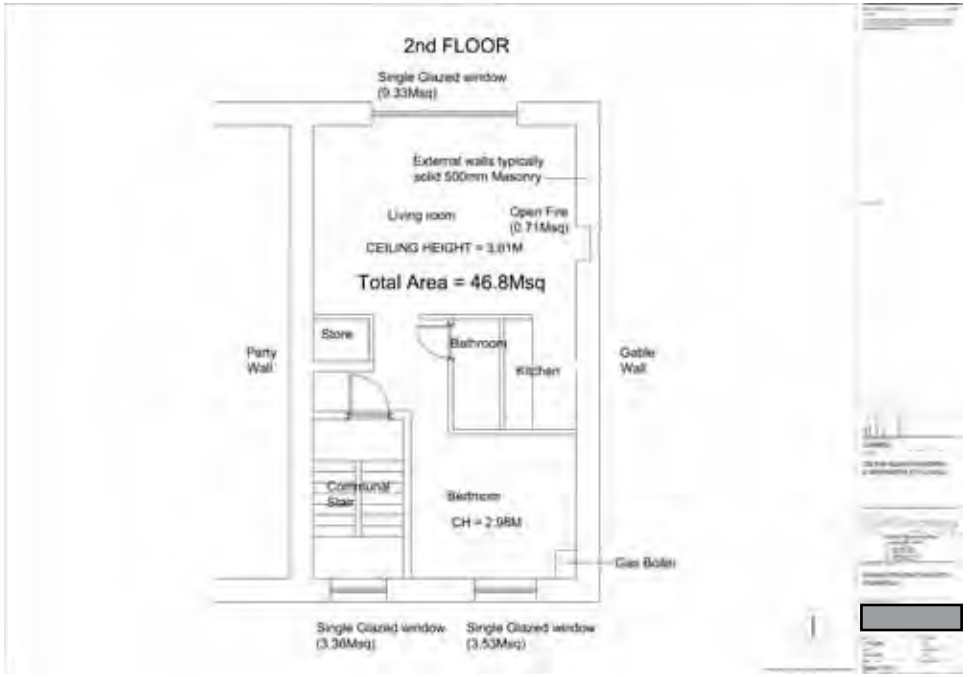
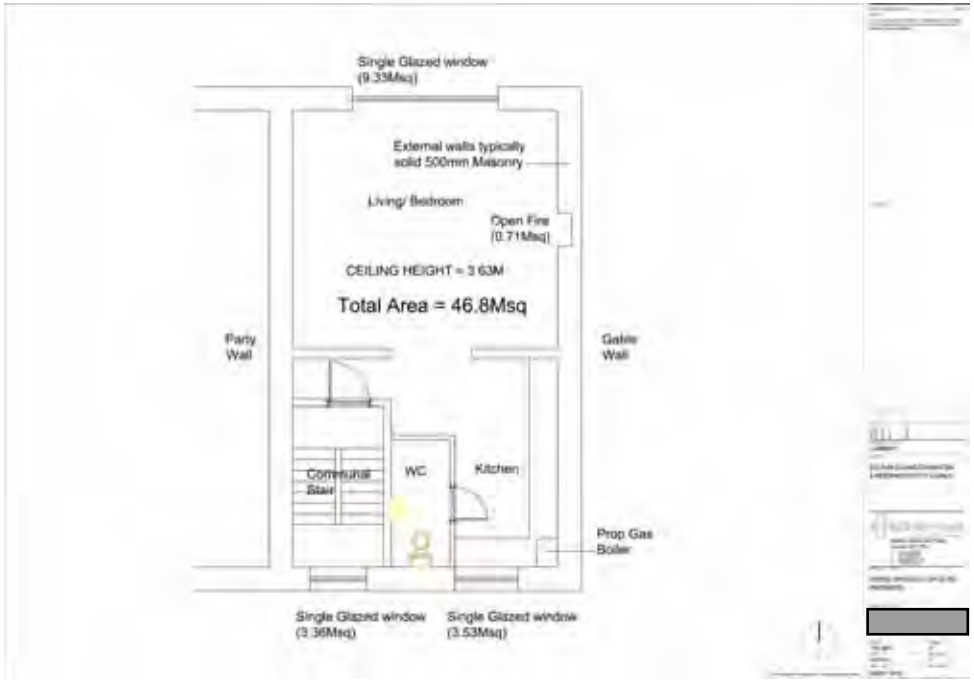
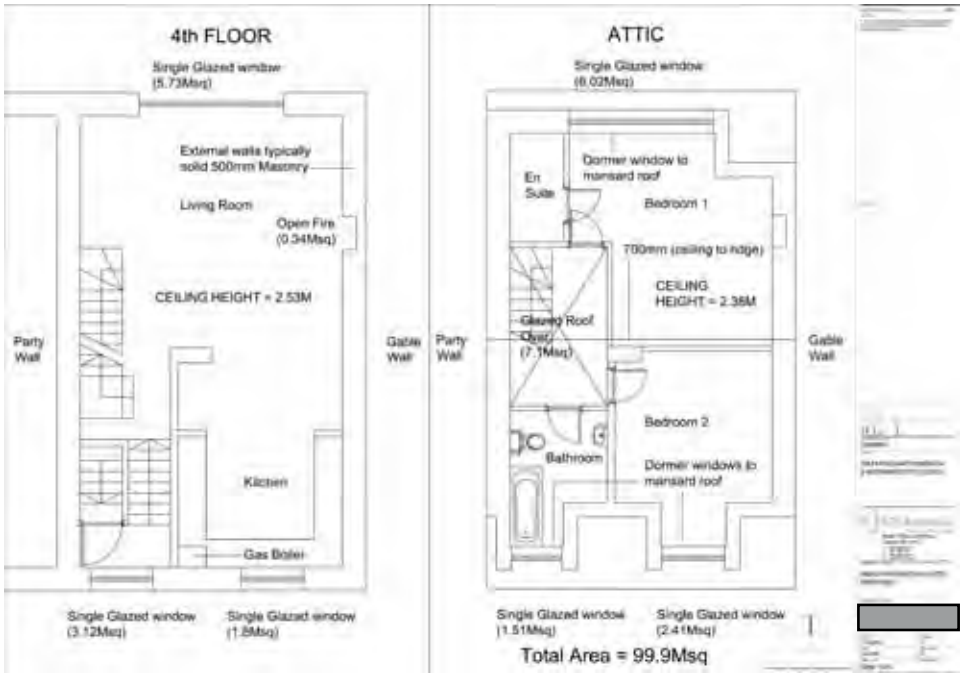
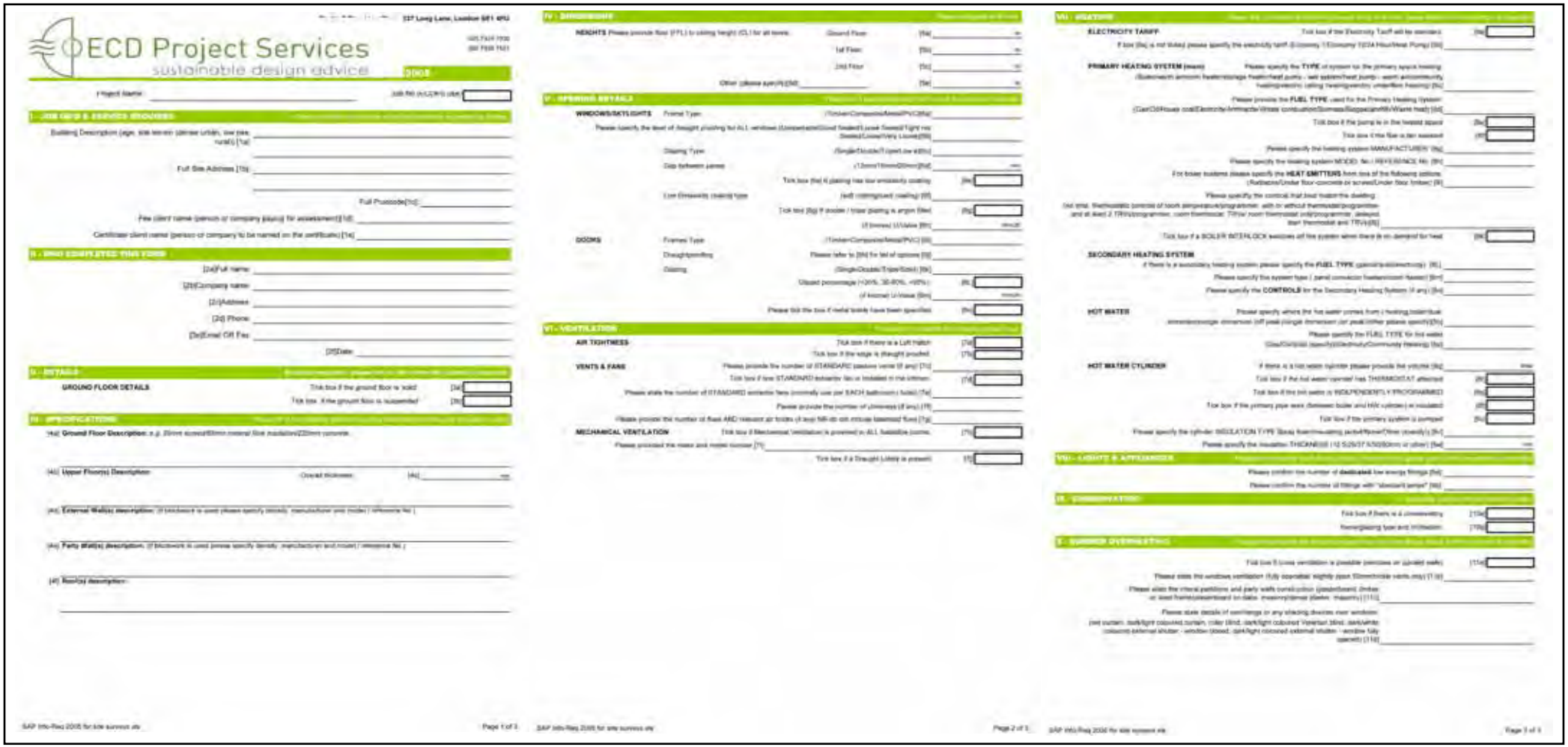






Appendix E (SAP Survey Record Sheet)



ECD Project Services
sustainable design advice

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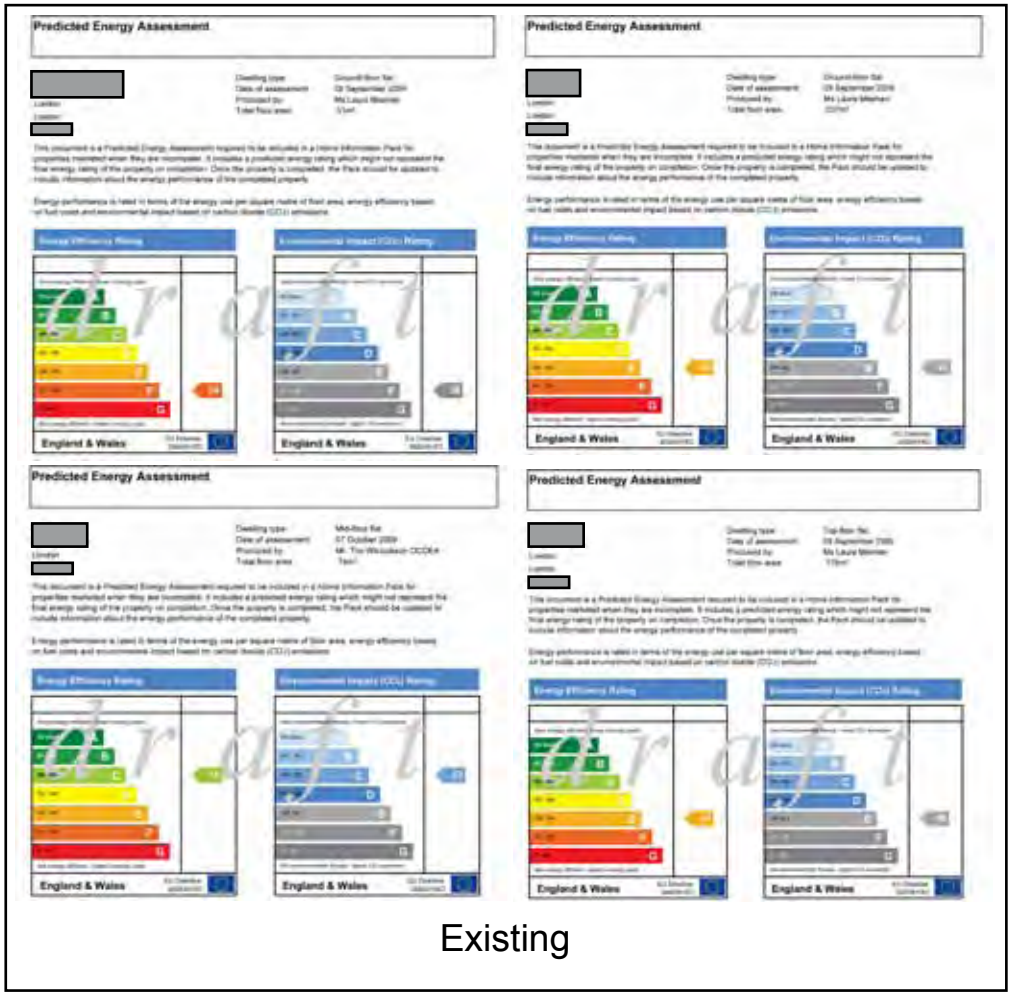
Appendix F (Software Review)

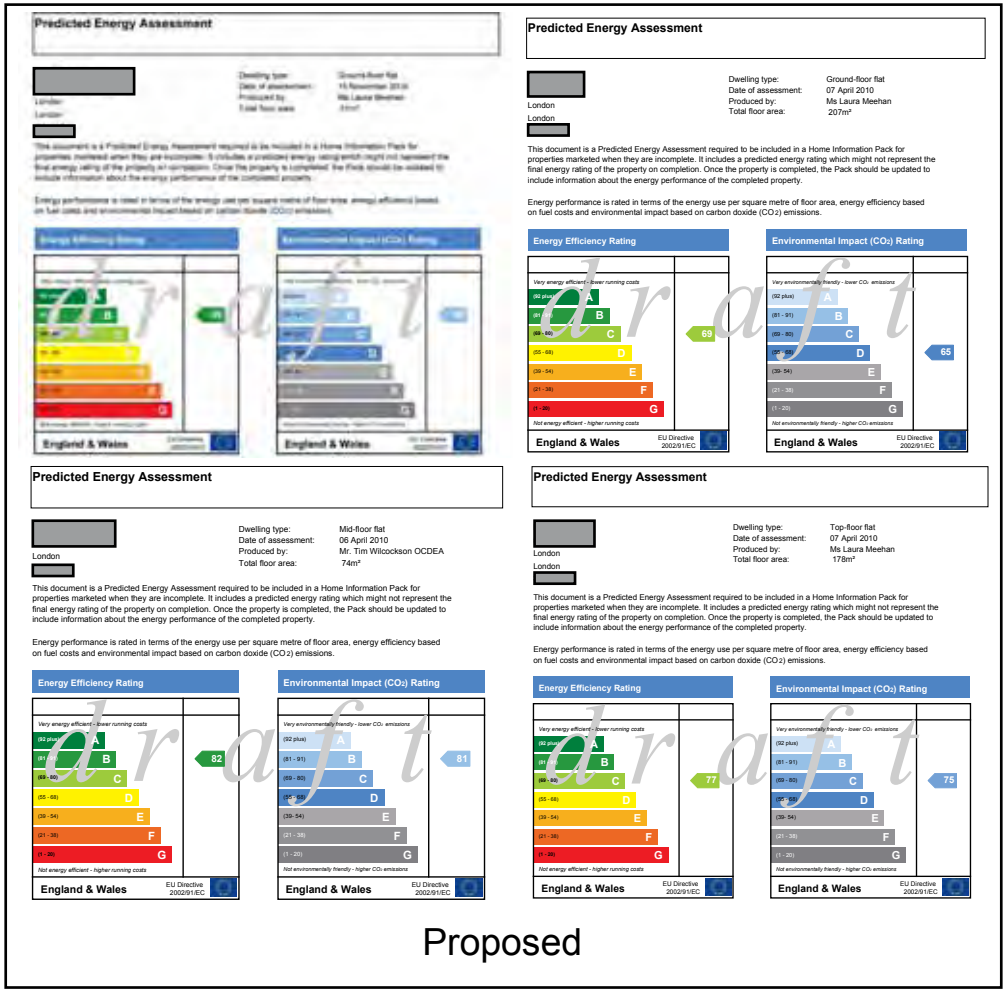
SOFTWARE REVIEW TABLE

Software	NHER Plan Assessor	NES One	TZERO	PHPP	IES
Calculation Methodology	SAP / BREDEM / NHER + EPC	RdSAP + EPC	?	PHPP	Dynamic Thermal Modelling + SAP
Standard Use	New Buildings	Existing Buildings	Existing Buildings	New Buildings	New Buildings
Accessibility	Software / Proprietary	Online / Proprietary	Online / Free access	Software / Proprietary	Software / Proprietary
Ease of use	Specialist	Specialist	Non-specialist	Specialist	Specialist
Detail (Input / Output)	High / High	Medium / High	Low / Medium	High / High	High / High
Output Energy / Finance	Y / N	Y / N	Y / Y	Y / N	Y / N + Comfort
Transparency	Medium	Medium	Low	High	Medium
Comment	Follows government standard methodology for evaluating the energy performance of buildings and verifying compliance with UK building regulations Part L. Allows generation of EPCs Does not evaluate impact of appliances. Requires detailed information on building fabric and performance. Does not generate refurbishment opportunities and costing plan	Follows government standard methodology for evaluating the energy performance of buildings and allows generation of EPCs for existing buildings. Requires reduced input data (compared with SAP) and follows a standard site assessment procedure. Does not cover appliances The more assumptions as a result of missing information the larger the discrepancies between actual and calculated performance are likely to be. Automatically generated EPC recommendation reports are generic and generally not of great value - require further evaluation to refine refurbishment opportunities and costing plan	Very easy to use and freely available, however the calculation methodology is largely based upon assumptions and therefore output data in terms of energy performance and subsequent refurbishment recommendations is unlikely to be accurate. The tool does not allow for interrogation of the calculation methodology and assumptions. Though the tool does provide indicative EPCs it can not be used to verify Part L compliance and to generate accredited EPCs.	The tool requires a high level of detail for data input and is recognized as providing a very accurate assessment of the energy performance of dwellings. However, the tool is specifically designed to evaluate and verify new buildings being designed following the Passivhaus approach (though there are examples of use on refurbishment projects). The tool can not be used for Part L compliance purposes or for the generation of EPCs. No options for refurbishment or financial information is generated	The tool requires a high level of detail for data input and is recognized as providing a very accurate assessment of the energy and thermal performance of buildings Can be used to verifying compliance with UK building regulations Part L. Allows generation of EPCs No options for refurbishment or financial information is generated for refurbishment works

Appendix G ([redacted])



Existing



Proposed

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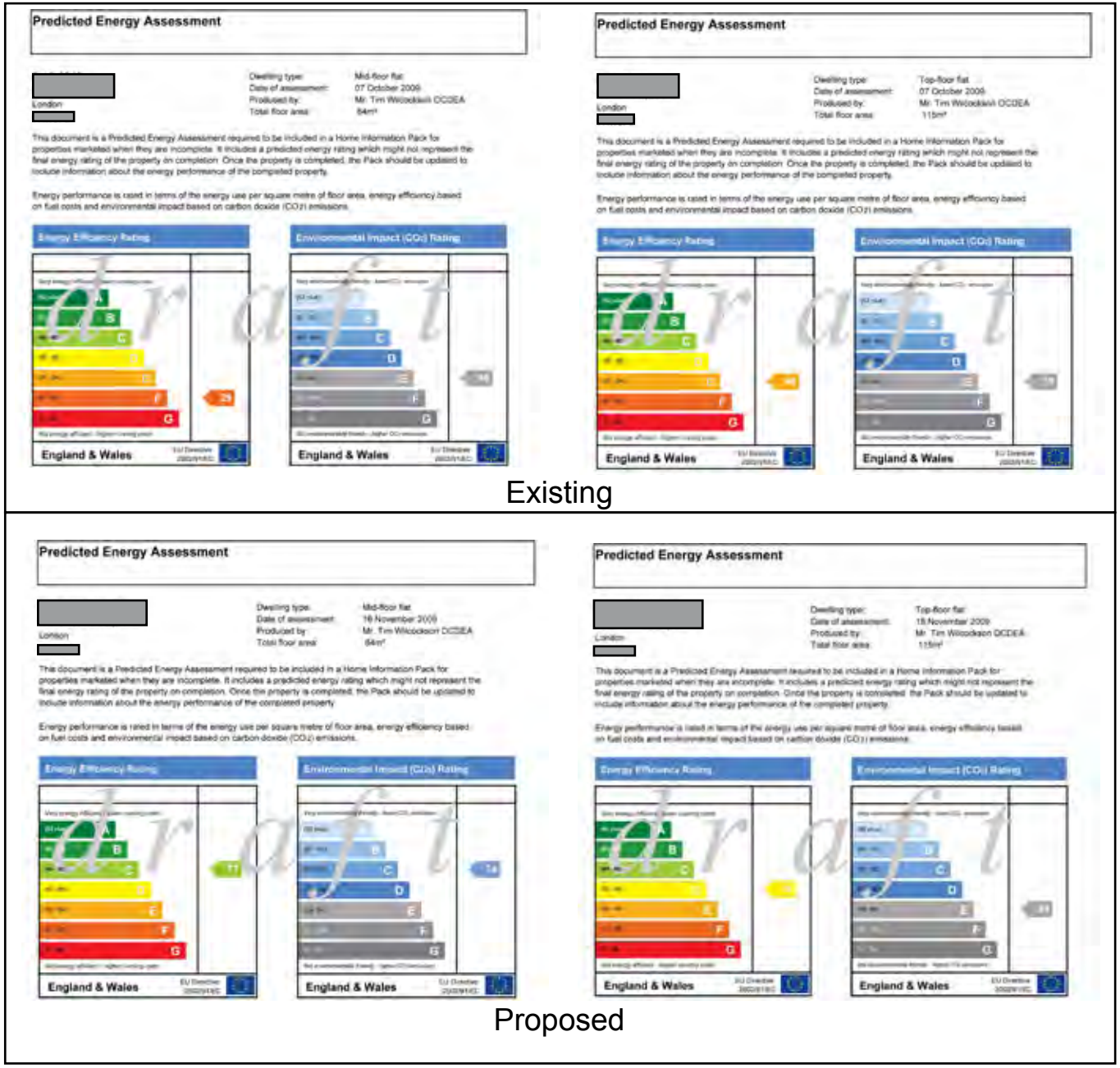

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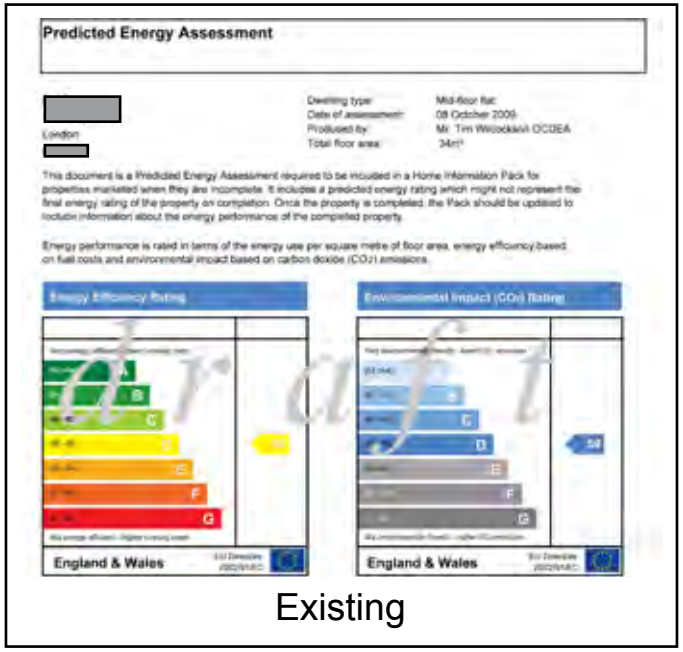


Predicted Energy Assessment

[redacted]
London
[redacted]

Dwelling type: Mid-floor flat
Date of assessment: 08 October 2009
Produced by: Mr. Tim Wilcockson OCDEA
Total floor area: 34m²

This document is a Predicted Energy Assessment required to be included in a Home Information Pack for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, the Pack should be updated to include information about the energy performance of the completed property.

Energy performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.

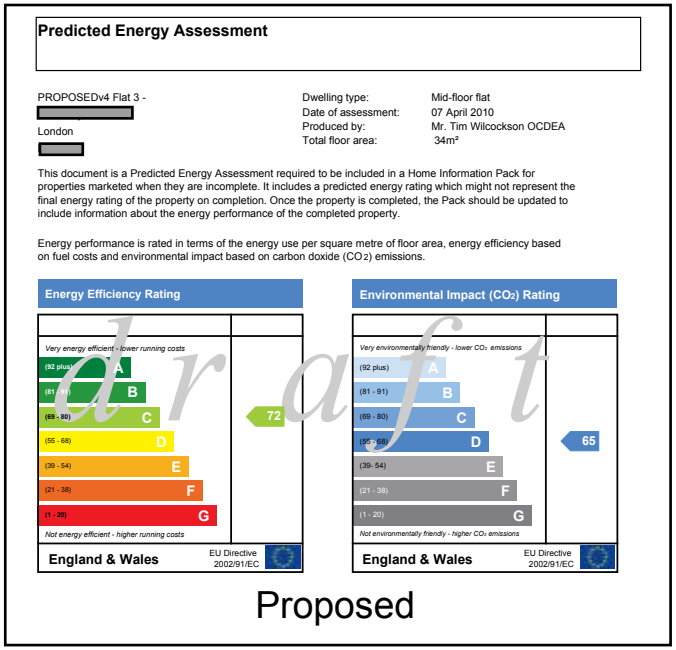
Energy Efficiency Rating

Environmental Impact (CO_2) Rating

England & Wales

England & Wales

Existing



Predicted Energy Assessment

PROPOSEDv4 Flat 3 -
[redacted]
London
[redacted]

Dwelling type: Mid-floor flat
Date of assessment: 07 April 2010
Produced by: Mr. Tim Wilcockson OCDEA
Total floor area: 34m²

This document is a Predicted Energy Assessment required to be included in a Home Information Pack for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, the Pack should be updated to include information about the energy performance of the completed property.

Energy performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO_2) emissions.

Energy Efficiency Rating

Very energy efficient - lower running costs
(92 plus) A
(81 - 91) B
(69 - 80) C
(55 - 68) D
(39 - 54) E
(21 - 38) F
(1 - 20) G
Not energy efficient - higher running costs
72

England & Wales
EU Directive 2002/91/EC

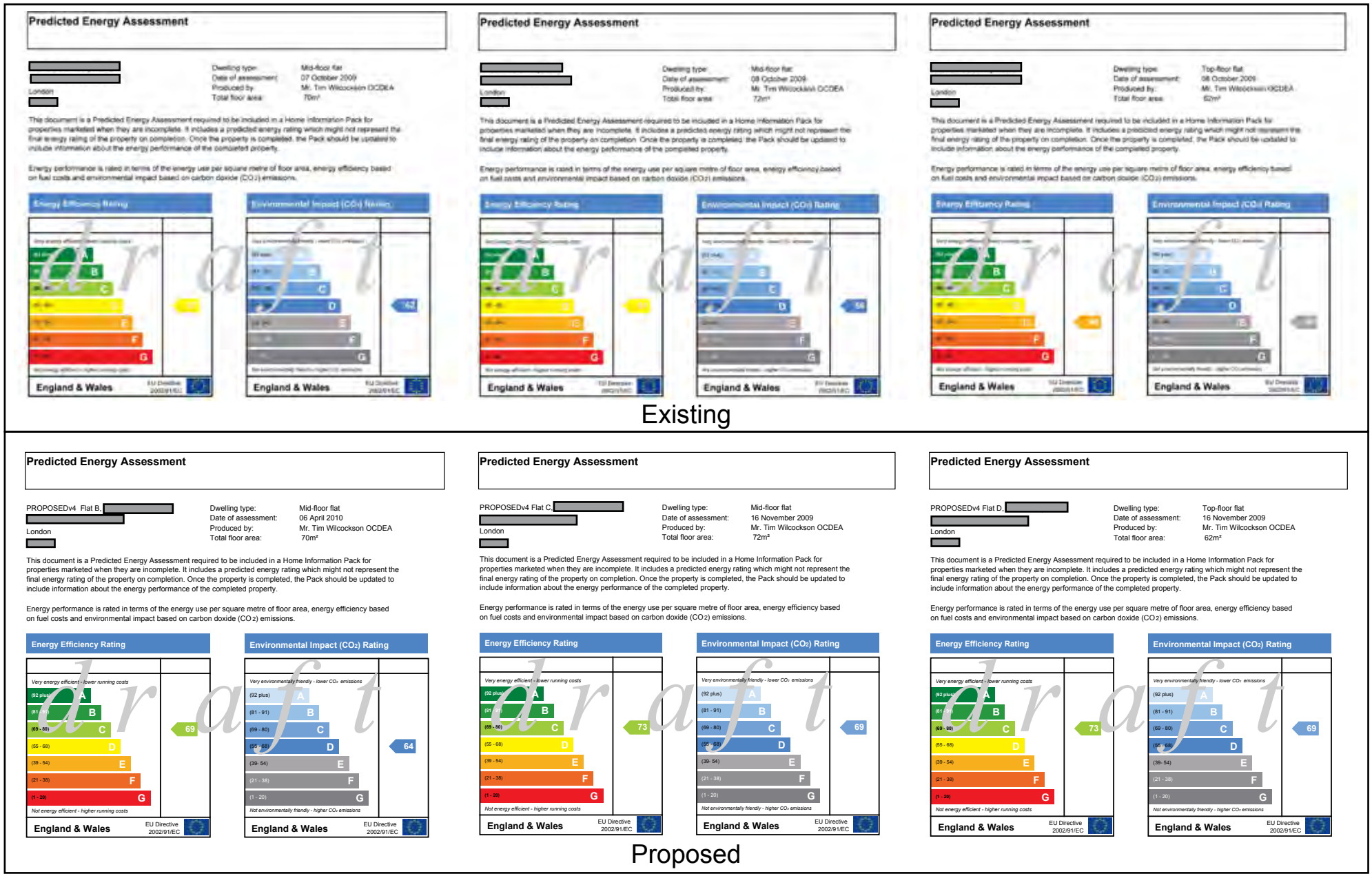
Environmental Impact (CO_2) Rating

Very environmentally friendly - lower CO_2 emissions
(92 plus) A
(81 - 91) B
(69 - 80) C
(55 - 68) D
(39 - 54) E
(21 - 38) F
(1 - 20) G
Not environmentally friendly - higher CO_2 emissions
65

England & Wales
EU Directive 2002/91/EC

Proposed

Appendix G ([redacted])



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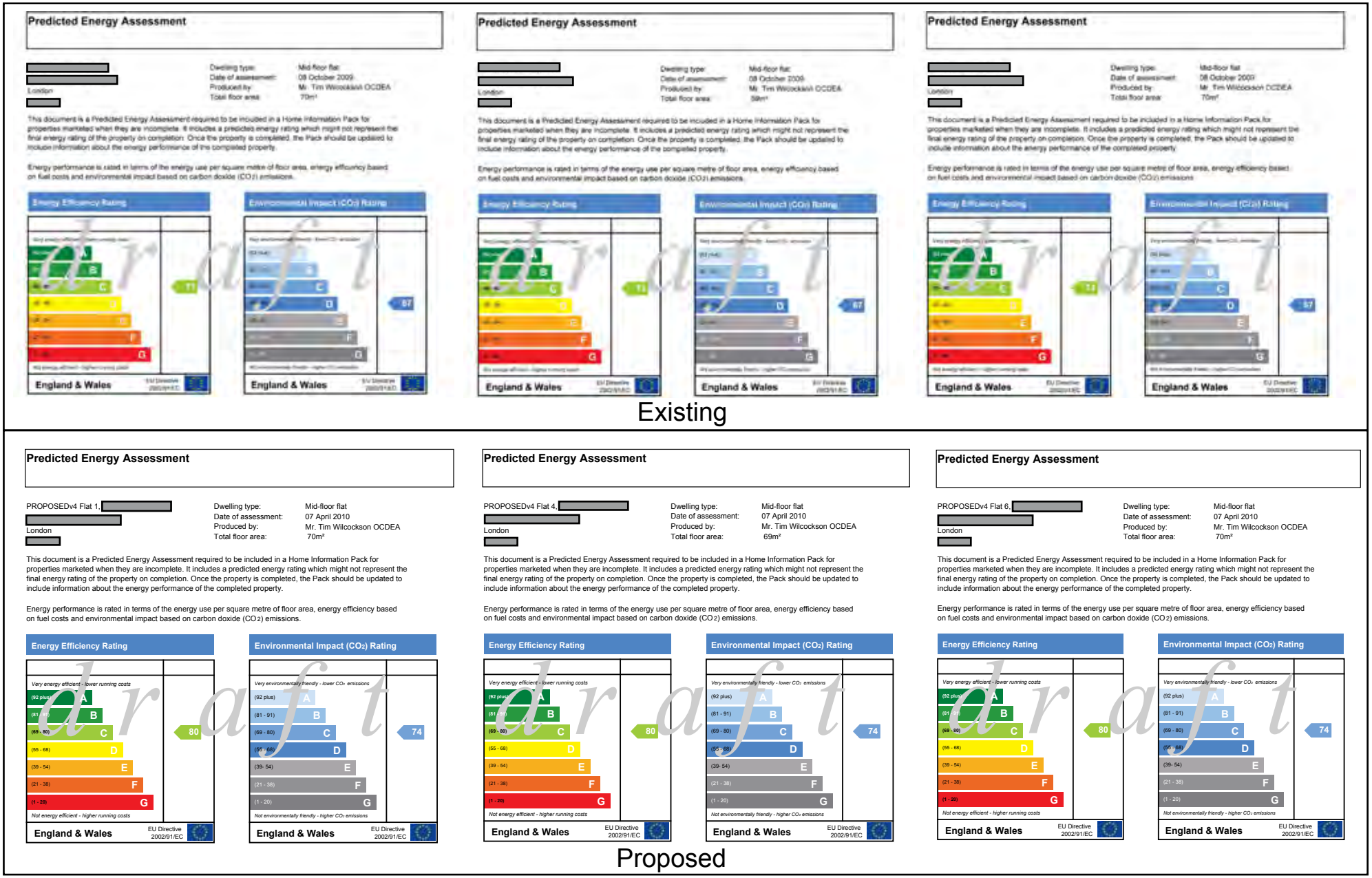

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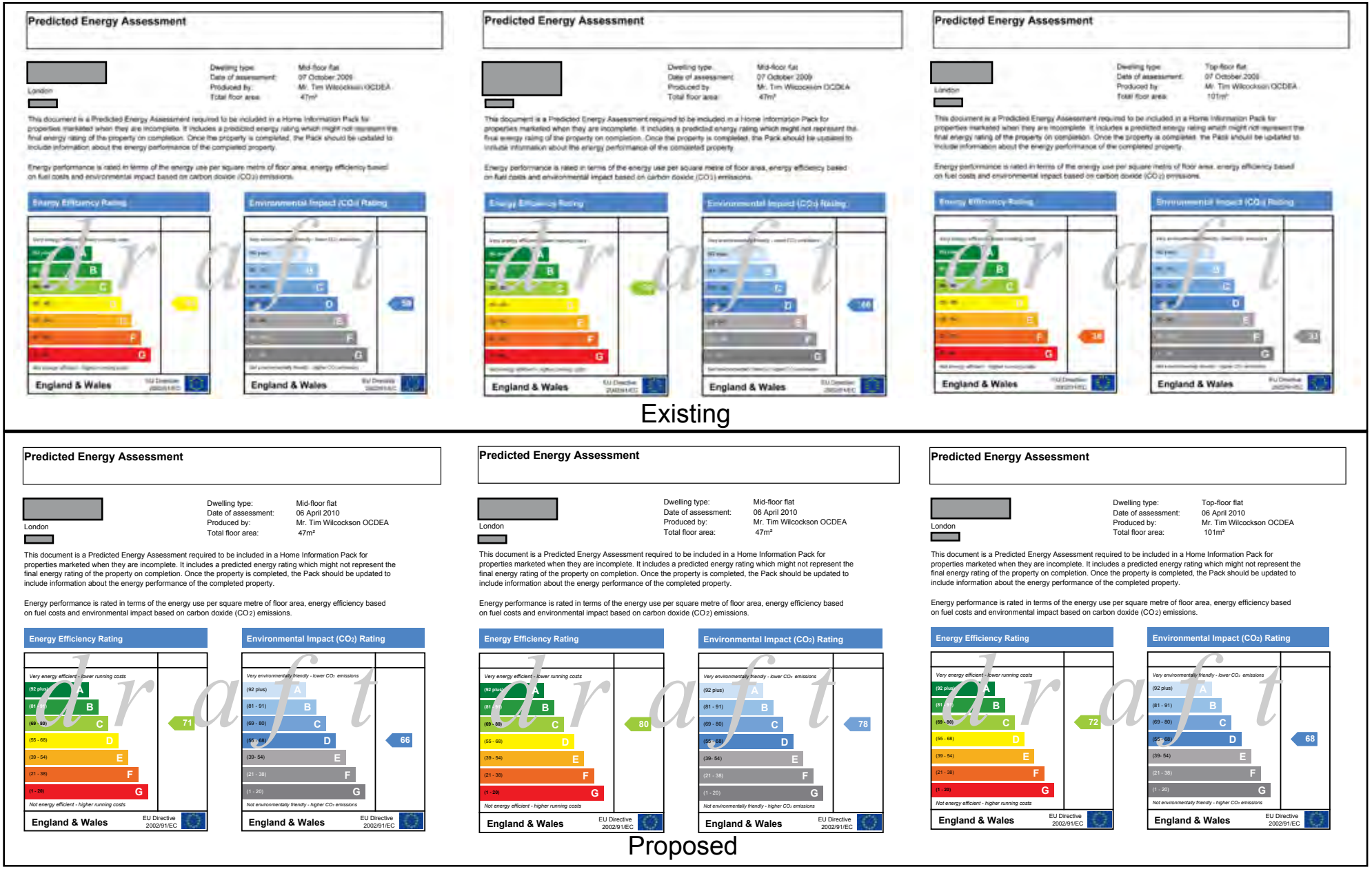


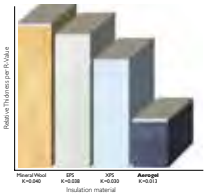
Appendix H Omitted to save file space- Copies available on request

Appendix I (Typical Manufacturers Data for Retrofit/ Energy Efficiency Projects)

THE HIGHEST LEVEL OF THERMAL INSULATION POSSIBLE

Aerogel is a low density solid derived from a gel in which the liquid component has been replaced by air using a process known as supercritical drying. This results in a material with remarkable insulation properties.

By combining the superinsulation performance of aerogel with the flexibility and robustness of a non woven polyester carrier, Aspen Aerogel have developed a unique high technology manufacturing process. For the first time this allows the performance of Aerogel to be utilised in a wide range of practical applications. Historically, use has been limited to industrial and petrochemical. However in partnership with A. Proctor Group Ltd, the high performance of this material will be offered as a unique solution in building and construction applications.



When compared to traditional thermal laminates Spacetherm Panels provide consistently superior thermal performance.

The chart above shows the comparative thickness of various insulants relative to mineral fibre.

U Value - Performance Ready Reckoner - Spacetherm®

Spacetherm®	-	9mm	18mm	27mm	36mm
Timber Frame (89mm Stud)	0.43	0.33	0.27	0.23	0.19
Solid Brick	2.05	0.86	0.55	0.40	0.32
Brick Wall - Cavity	1.44	0.73	0.55	0.37	0.30
Brick Wall - Insulated	0.58	0.42	0.33	0.27	0.23

Insulation thickness excluding 10mm Fermacell

Construction

Construction Base used on above calcs – Substituting Spacetherm thickness as appropriate.

Brick Wall (with cavity)	Brick Wall (with Insulation)	Timber Frame	Solid Brick
10mm Fermacell	10mm Fermacell	102 Brick	220mm Solid Brick
Spacetherm®	Spacetherm®	50mm cavity unventilated	Spacetherm®
102 Brick	102 Brick	Framesheild 100	10mm Fermacell
50mm cavity	50mm mineral wool*	9mm OSB	
102 Brick	102 Brick	89mm Timber Stud - 15% Bridging	
		Spacetherm®	
		10mm Fermacell	

* Insulation K Value = 0.04 W/m.k

Internal wall insulation

Pilkington energiKare.™ The family that's at home anywhere.

Pilkington energiKare™ Legacy

The expanded family of Pilkington **energiKare**™ products lets you get all your glass energy saving requirements from one source. From new homes to older traditional buildings, you can now provide better energy ratings in a wide range of properties. Pilkington **energiKare**™ Legacy provides similar energy efficiency performance as a standard unit, but in a much thinner profile, so it can be used in slim frames – perfect to maintain a property's original appearance.

The importance of energy efficient glazing

Advances in technology have made windows a significant contributor to the energy efficiency of new homes. To help preserve the character of our nation's buildings, restrictions on use can prevent certain properties from moving away from energy inefficient single glazing. So whilst these properties look great, they carry a heavy price in terms of heating costs and carbon footprint. Pilkington **energiKare**™ Legacy provides a hitherto unknown level of window energy efficiency for older properties.

How it works

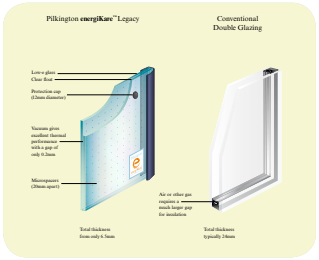
Pilkington **energiKare**™ Legacy utilises advanced Pilkington **Spacia**™ technology. This consists of an outer pane of low-emissivity glass and an inner pane of clear float, with a vacuum rather than air or gas in between. The result is excellent thermal performance from a unit only fractionally as thick as a standard IGU.

Protection cap

The vacuum creation process in Pilkington **Spacia**™ results in a hole in one of the panes, located 50mm from the glass edge. This hole is covered by a small permanent cap (12mm diameter), which must remain on the glass surface and should be glazed towards the inside of the building. This can be positioned in any corner of the pane.

Microspacer grid

With an individual diameter of only 0.5mm, this grid ensures that the two glass panes are kept a fixed distance apart.



Note: Microspacers only visible on close inspection.

Vacuum glazing to existing single glazed window frames

A new level of performance for older buildings.

Pilkington **energiKare**™ Legacy utilises advanced Pilkington **Spacia**™ technology to provide the world's first commercially-available vacuum glazing. It provides a similar level of energy efficiency as modern double glazing, but in a unit that is typically only a quarter of the thickness. This brings a new level of thermal performance to older buildings, and opportunities for slim glazing in new buildings.

- The thermal performance of modern double glazing in the same thickness as single glass, offering the opportunity to improve energy efficiency in older traditional buildings.
- A cost effective method of improving the energy efficiency of older homes where glazing choice is restricted or where the original frames are a desirable feature.
- Pilkington provide an extended warranty to your installer. Ask your installer for maintenance guidelines.
- Four times better thermal insulation than single glazing, meaning lower heating bills.
- Suitable as a replacement for single-glazing in original frames, to retain the appearance of older traditional buildings and meet the requirements of conservation areas.
- Suitable for other applications where use of thinner, low weight glazing is desirable, such as sliding box sashes.
- Greater comfort, as cold spots close to the window are reduced.
- Offers good acoustic performance for lower interior noise levels.
- A range of non-rectangular shapes, for flexibility with original frames.
- Proven solution; successfully used in Japan for over a decade.
- Offers reduced levels of internal condensation compared to single glazing.

Image courtesy of Lamont Rooflights

Pilkington **energiKare**™ Legacy

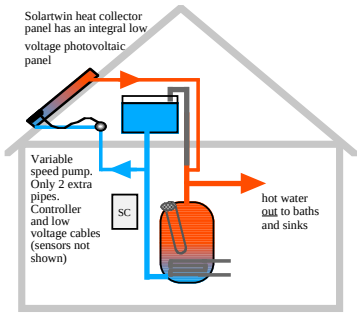
Product	Actual thickness (mm)	Light Transmittance (%)	Outside Reflectance (%)	Centre Pane U-value (U_g W/m²K)	Solar: Direct Transmission (%)	Solar: Reflection (%)	Total Solar Heat Transmittance (g value) %
6mm Pilkington **Spacia**™	6.5 ± 0.1	78	13	1.4	62	17	67

Max size: 2,400mm x 1,350mm Min size: 350mm x 200mm.
The above table is determined in accordance with EN410 and EN673.

Improvement due to secondary glazing

The Solartwin system

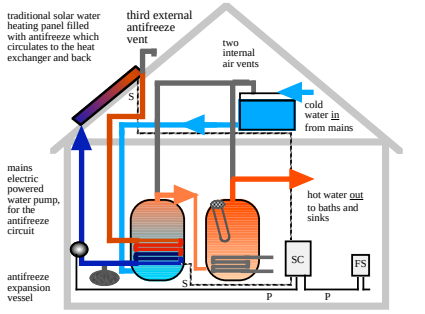
plumbed "direct" showing its low-impact installation



Spot the difference!

Traditional solar water heating

one of several design options, with separate antifreeze circuit, expansion vessel, additional pre-heat cylinder, heat exchanger, solar controller and mains pump.



Solar Hot Water Panels

'FIT-AND-FORGET' INSTALLATION

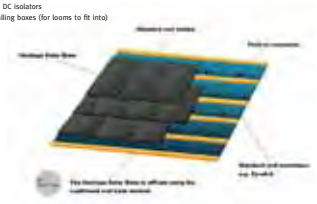
The Heritage Solar Slate embodies the usual benefits of solar, but overcomes some of the obstacles met by traditional installations.

The installation is a 'fit-and-forget' process, requiring no specific training and no additional 'niche' trades on site. The materials are supplied as a simple kit, producing between 600 Watts and 4 Kilowatts per pack.

Developed to be installed in the same way as conventional roofing slates, secured with roofing hooks, the roof should be built as normal, to batten level, with a gauge of 205mm.

Each kit contains:

- Slates
- Roof hooks
- Inverters
- Connectors
- Wiring looms
- AC and DC isolators
- Marshalling boxes (for looms to fit into)



PV Slates

Envisaged Production Interface

Intuitive Smart Metering

Appendix J (Cost Estimates - [redacted])

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Basement Flat				
Replace light fittings with CFL's & LED's including builder's work	18	100	1,230	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Replace existing windows and rooflights including triple glazed units	1	8,100	8,100	
Install gas fired central heating system	1	3,500	3,500	
Insulate existing ground floor slab	1	7,500	7,500	
Insulated dry lining to external walls	1	4,000	4,000	
Insulated dry lining to soffit of exposed ceiling	1	4,500	4,500	
			30,330	30,330

TOTAL APPROXIMATE COST OF WORKS TO BASEMENT FLAT [redacted] **£** 30,330

NOTE: All the above costs are exclusive of Fees and VAT

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 1				
Replace light fittings with LED's including builder's work	80	100	8,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Install MVHR (Mechanical ventilation with heat recovery)	1	5,000	5,000	
Replace existing central heating boiler with condensing combination boiler	1	2,500	2,500	
Draught strip existing sash windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	2,250	2,250	
			20,250	20,250

TOTAL APPROXIMATE COST OF WORKS TO FLAT 1 [redacted] **£** 20,250

NOTE: All the above costs are exclusive of Fees and VAT

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 3				
Replace light fittings with LED's including builder's work	21	100	2,100	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Install MVHR (Mechanical ventilation with heat recovery)	1	5,000	5,000	
Draught strip existing windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	1,875	1,875	
Insulated dry lining to external walls	1	12,000	12,000	
			23,475	23,475

TOTAL APPROXIMATE COST OF WORKS TO FLAT 3 [redacted] **£** 23,475

NOTE: All the above costs are exclusive of Fees and VAT

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 4 Second Floor				
Replace light fittings with LED's including builder's work	30	100	3,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
FRONT elevation windows				
Draught strip existing windows	1	800	800	
Retain windows and install secondary glazing in lieu of replace windows	1	4,200	4,200	
REAR elevation windows				
Replace existing rear elevation windows including triple glazed units	1	10,800	10,800	
			20,300	20,300

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 20,300

NOTE: All the above costs are exclusive of Fees and VAT

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Common Parts				
De-comission existing gas boiler and make good	1	400	400	
Draught strip existing windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	1,875	1,875	
			3,275	3,275

TOTAL APPROXIMATE COST OF WORKS TO COMMON PARTS OF [redacted] **£** 3,275

NOTE: All the above costs are exclusive of Fees and VAT

Appendix J (Cost Estimates - [redacted])

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 2 First Floor				
Replace light fittings with LED's including builder's work	24	100	2,400	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Install gas fired central heating system	1	6,000	6,000	
Draught strip existing sash windows	1	1,800	1,800	
Retain windows and install secondary glazing in lieu of replace windows	1	2,680	2,680	
			14,380	14,380

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 14,380

NOTE: All the above costs are exclusive of Fees and VAT

keegans

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 5 Top Floor				
Replace light fittings with LED's including builder's work	35	100	3,500	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing sash windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	1,875	1,875	
Insulate flat roof (Area unknown)	1	2,000	2,000	
Insulated dry lining to external walls of the mansard roof	1	8,200	8,200	
			18,075	18,075

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 18,075

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Common Parts				
Upgrade loft insulation	1	1,500	1,500	
Draught strip existing sash windows	1	1,200	1,200	
Retain windows and install secondary glazing in lieu of replace windows	1	6,250	6,250	
			8,950	8,950

TOTAL APPROXIMATE COST OF WORKS TO COMMON PARTS OF [redacted] STREET **£** 8,950

NOTE: All the above costs are exclusive of Fees and VAT

Appendix J (Cost Estimates - **Block E**)

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Project Management
Cost Consultancy
Building Surveying
Architecture
Planning Supervision
Regeneration

Address: [redacted]

04.01.2010	Quantity	Rate	£	£
Common Parts				
Increase thickness of roof space insulation	1	300	300	
Insulate flat roofs (Area unknown)	1	500	500	
Provision of solar thermal panel and associated works	1	4,500	4,500	
			5,300	5,300

TOTAL APPROXIMATE COST OF WORKS TO COMMON PARTS OF [redacted] **£** 5,300

NOTE: All the above costs are exclusive of Fees and VAT

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Project Management
Cost Consultancy
Building Surveying
Architecture
Planning Supervision
Regeneration

Address: [redacted]

04.01.2010	Quantity	Rate	£	£	Potential Annual Saving
Flat 3 First Floor					
Replace light fittings with LED's including builder's work	10	100	1,000		20
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500		87
Retain windows at FRONT and install secondary glazing in lieu of replace windows	1	2,250	2,250		75
Draught strip and overhaul of existing windows at FRONT	1	600	600		15
			5,350	5,350	197

£ 5,350

NOTE: All the above costs are exclusive of Fees and VAT

Appendix J (Cost Estimates - [redacted])

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Common Parts				
Draught strip existing windows	1	600	600	
Retain windows and install secondary glazing in lieu of replace windows	1	1,350	1,350	
			1,350	1,350

TOTAL APPROXIMATE COST OF WORKS TO COMMON PARTS OF [redacted] **£** 1,350

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat B First Floor				
Replace light fittings with LED's including builder's work	20	100	2,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	2,250	2,250	
			6,750	6,750

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 6,750

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat C Second Floor				
Replace light fittings with LED's including builder's work	20	100	2,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	400	400	
Retain windows and install secondary glazing in lieu of replace windows	1	750	750	
Replace existing central heating boiler with condensing combination boiler	1	2,500	2,500	
			7,150	7,150

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 7,150

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat D Top Floor				
Replace light fittings with LED's including builder's work	12	100	1,200	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	1,000	1,000	
Retain windows and install secondary glazing in lieu of replace windows	1	1,875	1,875	
Insulated dry lining to external walls of the mansard roof	1	5,400	5,400	
			10,975	10,975

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 10,975

NOTE: All the above costs are exclusive of Fees and VAT

Appendix J (Cost Estimates - [redacted])

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 1 First Floor				
Replace light fittings with LED's including builder's work	31	100	3,100	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
FRONT elevation windows				
Draught strip existing windows	1	800	800	
Retain windows and install secondary glazing in lieu of replace windows	1	4,200	4,200	
REAR elevation windows				
Replace existing REAR elevation windows including triple glazed units	1	8,000	8,000	
			9,600	9,600

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 9,600

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 4 Second Floor				
Replace light fittings with LED's including builder's work	30	100	3,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
FRONT elevation windows				
Draught strip existing windows	1	800	800	
Retain windows and install secondary glazing in lieu of replace windows	1	4,200	4,200	
REAR elevation windows				
Replace existing rear elevation windows including triple glazed units	1	10,800	10,800	
			20,300	20,300

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 20,300

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 6 Third Floor				
Replace light fittings with LED's including builder's work	30	100	3,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
FRONT elevation windows				
Draught strip existing windows	1	800	800	
Retain windows and install secondary glazing in lieu of replace windows	1	4,200	4,200	
REAR elevation windows				
Replace existing REAR elevation windows including triple glazed units	1	8,000	8,000	
			17,500	17,500

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 17,500

NOTE: All the above costs are exclusive of Fees and VAT

Appendix J (Cost Estimates - [redacted])

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 2 First Floor				
Replace light fittings with LED's including builder's work	20	100	2,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	600	600	
Retain windows and install secondary glazing in lieu of replace windows	1	2,138	2,138	
			6,238	6,238

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 6,238

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 3 Second Floor				
Replace light fittings with LED's including builder's work	20	100	2,000	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	600	600	
Retain windows and install secondary glazing in lieu of replace windows	1	1,403	1,403	
Replace existing central heating boiler with condensing combination boiler	1	2,500	2,500	
			8,003	8,003

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 8,003

NOTE: All the above costs are exclusive of Fees and VAT

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Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Flat 4 Top Floor				
Replace light fittings with LED's including builder's work	25	100	2,500	
Install A** rated white goods (WM, FF, DW)	1	1,500	1,500	
Draught strip existing windows	1	1,200	1,200	
Retain windows and install secondary glazing in lieu of replace windows	1	2,250	2,250	
Insulated dry lining to external walls of the mansard	1	5,400	5,400	
Replace existing central heating boiler with condensing combination boiler	1	2,500	2,500	
			15,350	15,350

TOTAL APPROXIMATE COST OF WORKS TO [redacted] **£** 15,350

NOTE: All the above costs are exclusive of Fees and VAT

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www.thekeegansgroup.com

Address: [redacted]

04.01.2010

	Quantity	Rate	£	£
Common Parts				
Draught strip existing windows	1	400	400	
Retain windows and install secondary glazing in lieu of replace windows	1	1,425	1,425	
			1,425	1,425

TOTAL APPROXIMATE COST OF WORKS TO COMMON PARTS OF [redacted] **£** 1,425

NOTE: All the above costs are exclusive of Fees and VAT

Appendix K (Funding Options)

Summary of Available Grants and Energy Efficiency Advice for Energy Efficiency to Flatted Buildings Project Participants

Energy Efficiency Advice in Westminster:
ECD Architects will provide energy efficiency advice to project participants and direct **yo**u to any suitable grant and discount schemes for energy efficiency improvements in your home.
Below is a summary of the grants available.
Grants for Energy Efficiency Improvements in the Home:
There are several local and national energy efficiency grants and discount schemes aimed at leaseholders, owner occupiers and privately renting residents. These schemes have overlapping eligibility criteria and are predominately aimed at low income earners or those in receipt of income related benefits and offer measures such as:

- Central Heating Installations
- Central Heating Repairs/ Improvements
- Draught Proofing

There are Government grants, grants from fuel utilities, regional grants and grants from Westminster Council. There is a fair degree of overlap in the types of works that can be funded and in the eligibility criteria. We will not attempt to describe these here but will give you personalised advice to enable you to access the best- suited scheme.
Households who are not on low-income may be eligible for part-funding of the works through fuel utilities funding (known as their Carbon Emissions Reduction Target – CERT – funding). Again, we will give you personalised advice.

Grants for Energy Efficiency Improvements to Common Parts:
The Low Carbon Buildings Programme offer part funding (subject to successful application) for renewable energy installations such as solar panels. Insulation of common parts could potentially be part funded through the Carbon Emissions Reduction Target (CERT). Commonly funded measures under CERT are:
Loft Insulation
Cavity Wall Insulation

Grants for Legal Advice and Lawyers Fees:
It is likely that some funding will be made available through the City Council towards the cost of any legal fees in the event that modifications to leases are required to enable works to common parts to proceed.
Energy efficiency information on Westminster City Council's website:
http://www.westminster.gov.uk/environment/energy/
http://www2.westminster.gov.uk/services/environment/greencity/

Low Income or Eligible for Benefit

There are three different grants available to Westminster residents for energy efficiency improvements. These are:

1) Warmfront
2) Warmth and Comfort Scheme
3) Westminster Energy Grant

Warmfront
Residents should contact Westminster regarding energy grants as previous experience with Warmfront has been disappointing.

Warmth and Comfort Scheme
The Warmth and Comfort Scheme ends on the 1st of September 2009. Contractors will not be available to do works under this scheme until a new contractor is procured towards the end of 2009.

Appendix K (Continued)

Westminster Energy Grant

This is a Westminster Council administered energy grant. We recommend that residents be referred to this grant scheme. To be eligible for an Energy Grant the applicant must satisfy condition A or B below:

1) be a tenant, owner-occupier or other lawful occupier of a house, bungalow, flat or maisonette; and,
2) the house, bungalow, flat or maisonette must be the applicant's principal or only residence; and
3) be in receipt of one or more of the following benefits on the date of application:
   - Jobseekers' Allowance (income based);
   - Income Support;
     - Working Tax Credit (with an annual household income of less than £15,460);
     - Child Tax Credit (with an annual household income of less than £15,460);
   - Housing Benefit;
   - Council Tax Benefit (not including single occupancy reduction);
   - Disability Living Allowance;
   - Attendance Allowance;
     - Industrial Injuries Disablement Benefit (where it includes constant Attendance Allowance);
   - War Disablement Pension;
   - Guaranteed Pension Credit;

   or, in applying the means testing provisions made under Section 30 of the Housing Grants, Construction and Regeneration Act 1996, have a contribution of less than £4,000 to make towards the cost. If eligible, leaseholders could receive 100% grant assistance up to £4,000.

Amount of assistance

No more than £20,000 shall be paid in respect of the same House in Multiple Occupation within any 5 year period and no more than £8,000 in other cases. Eligible costs shall include any preliminary and ancillary costs, the cost of service agreements and warranties; the cost of surveying services; specialist advice; and, the costs of labour and materials

The Home Improvement Agency (HIA) offers a hand holding service for residents who apply for Westminster Energy grants. This service includes the HIA helping with getting quotes for work and completing specification sheets. Unfortunately there is currently a waiting list/bottle neck for the Westminster energy grant, administered through HIA, because the HIA is short staffed. However, if the freeholder or leaseholder is able to complete the grant form, get quotes and provide all the relevant information, independent of the HIA then the waiting list can be avoided. The application for the Westminster energy grant can be sent directly to the Energy grants team for their sign off and the energy grant should be received by the applicant in a timely manner.

In order to gain additional information about the grant please contact 020 7641 6161 or email res@westminster.gov.uk

From 21st September 2009, Westminster Council has also established a Fuel Poverty helpline, which will provide help to Westminster residents through performing benefit entitlement checks, assistance with energy grants, assistance with the cost of fuel, through fuel switching services, social tariffs and directing residents to the appropriate agencies. The helpline will be operational from the 21st of September 2009 and the free phone number is 0800 072 9005.

Energy Efficiency Grants

If the resident is over 70 or in receipt of benefits then they may be eligible for free cavity wall and loft insulation.

Six of the big energy companies offer potentially free cavity wall and loft insulation for those that are over 70 or in receipt of benefits. If the resident is interested in accessing the free insulation then I'd recommend they contact one of the energy companies listed below:

- EDF - 0800 096 9966.
- British Gas - 0845 971 7731

Appendix K (Continued)

- Npower - 0800 022 220.
- Eon - 0845 301 4927
- Scottish Power - 0845 601 7836
- Scottish and Southern - 0845 777 66 33

Legal Fees Grant

If it is possible to incorporate energy efficiency measures into the building (such as cavity wall insulation) then eligible assistance for costs incurred in legal fees for provision of advice to the eligible person or organisation regarding the implications of carrying out works to improve energy efficiency, environmental performance of the living accommodation and/or the common parts of the living accommodation or for any necessary deeds of variation or other amendments to a lease or other legal instrument will be provided via a grant.

The amount of assistance shall be the reasonable costs of legal services incurred. In the case of an applicant who is in receipt of one or more of the following benefits the maximum assistance in any 12 month period shall be £2,000 subject to the production of bona fide receipts or invoices

- Jobseekers' Allowance (income based);
- Income Support;
- Working Tax Credit (with an annual household income of less than £15,460)
- Child Tax Credit (with an annual household income of less than £15,460)
- Housing Benefit;
- Council Tax Benefit (not including single occupancy reduction);
- Disability Living Allowance;
- Attendance Allowance;
- Industrial Injuries Disablement Benefit (where it includes constant Attendance Allowance);
- War Disablement Pension;
- Guaranteed Pension Credit;

Able to Pay

Boiler Repair or Replacement

Boiler Scrappage scheme (announced December 2009)

The scheme is open to 125,000 householders in England living in an owned or privately rented home. Please note:

If you are a householder (including tenants) under 60 you can only apply for the scheme if the boiler you are scrapping is in working order and is the main boiler used to heat the home.

- If you are a householder (including tenants) and 60 or over you can apply for the scheme regardless of whether the boiler you are scrapping is in working order. However, it still needs to be the main boiler used to heat the home.

Only householders and landlords who privately own and rent dwellings are eligible to apply for a voucher. Boiler installers and manufacturers, local authority registered social landlords, and housing associations are not eligible to apply.

If you own your own home or rent it from a private landlord and are in receipt of certain benefits, you may be eligible for a grant of up to £3,500 (or £6,000 where oil, low carbon or renewable technologies are recommended) under the Warm Front Scheme. See below for more details, or alternatively visit: www.warmfront.co.uk

Please note you cannot receive funding under both Warm Front and the Boiler Scrappage Scheme

Energy Efficiency

If the resident is not in receipt of a benefit or not considered to be on a low income (based on means testing) then they may be eligible for cavity wall and loft insulation discounts.

Six of the big energy companies offer a discount on the cost of cavity wall and loft insulation for those that are under 70 and not in receipt of benefits.

Appendix K (Continued)

If the resident is interested in accessing a discount then I'd recommend they contact several energy companies, as the level of discount offered for cavity wall and loft insulation varies between energy companies. Also it is not always necessary for the resident to be a customer of the energy company providing the discount.
The phone numbers to access information about the different discounts offered by the energy companies are:

- EDF - 0800 096 9966.
- British Gas - 0845 971 7731
- Npower - 0800 022 220.
- Eon - 0845 301 4927
- Scottish Power - 0845 601 7836
- Scottish and Southern - 0845 777 66 33

Legal Fees Grant
If it is possible to incorporate energy efficiency measures into the building (such as cavity wall insulation) then eligible assistance for costs incurred in legal fees for provision of advice to the eligible person or organisation regarding the implications of carrying out works to improve energy efficiency environmental performance of the living accommodation and/or the common parts of the living accommodation or for any necessary deeds of variation or other amendments to a lease or other legal instrument will be provided via a grant.

The amount of assistance shall be the reasonable costs of legal services incurred, subject to the production of bona fide receipts or invoices, and subject to a maximum of £1,000 in any one 12 month period. Anyone who is not in receipt of a benefit is eligible for this grant.

Renewable Energy Grants
Low Carbon Building Programme (Closed from End Feb 2010)

Solar for London
A cash discount is provided for the installation of a solar water heating system. This discount can be accessed in addition to the LCBP grant for solar thermal hot water. Additionally, Solar for London can help to identify if a dwelling may be suitable for a solar water heating system. They also provide independent advice, information about solar water heating systems and are able to arrange no obligation surveys and quotes. If the resident would like more information about the programme then please ask them to ring 0207 820 3156 or they can look as the website www. http://www.solarforlondon.org/.

Feed in Tarriffs (FiT's)
From February 2010 a range of Feed in Tarriffs were introduced to support the wider take up of renewable energy in buildings. Further information on the levels for each technology, i.e.: Solar PV; Micro CHP; Wind, etc are available at: http://www.decc.gov.uk/ NOTE: This can represent provide a significant return on investment depending on location and installation.

Appendix L (Legal Statement)

ENERGY EFFICIENCY IN PRIVATE SECTOR FLATTED BUILDINGS

RESEARCH CARRIED OUT BY ECD ARCHITECTS ON BEHALF OF WESTMINSTER COUNCIL & DOLPHIN SQUARE FOUNDATION.

LEGAL SUMMARY OF LEASEHOLDER/ FREEHOLDER RESPONSIBILITIES

NOTE:
The following information is intended to be used as a guide to leaseholders who are considering energy efficiency improvements to their property as part of the above project. However all parties are strongly advised to obtain separate legal advice on the specific issues arising from the proposed works in relation to their specific existing leasehold agreements.

As a general principle any and all improvements cannot be imposed upon the lessees irrespective of whether or not these are energy-related improvements. An immediate example might be the change from single to double glazing. Conversely where individual lessees wish to make improvements which impact upon areas outside the demise of their lease i.e. communal areas this will require landlord's approval. Inevitably there will be a cost implication in respect of the preparation and implementation of licences for alterations/works.

Commentary on legal issues arising from proposed measures:

1. Install gas-fired central heating system; the lessee should be free to carry out this improvement subject only to any requirements to vent the system through the structural wall which would normally require landlord's consent.
2. The replacement of light fittings and installation of LEDs; this is a matter purely for the discretion of the lessee.
3. Installation of Arated appliances;** this is a matter purely for the discretion of the lessee.
4. **Replacement of existing windows and roof lights with double glazing;** Window frames and glass often belong to the lessee however the repair and/ or alteration of the frames can be a matter of discretion for the landlord and the lessee can be precluded from making any such alteration of his own volition. As a general comment the installation of secondary or double glazing will be determined by the drafting of each lease and there will inevitably be a variation in the provisions as many leases take differing approaches.
5. Installation of existing ground floor slab; the demise of the flat stops at floor level and therefore any insulation which requires alteration of the joists on which the floor sits would require landlord's consent.
6. Insulate dry lining; technically this may also require a licence from the landlord, even if the works relate to internal non-load-bearing walls and are part of the lessee's demise. Any dry lining which would involve alteration of structural timbers would be at the absolute discretion of the landlord.

Common parts:
Alterations to existing shared services: this will require consent of all lessees
Insulate and resurface flat roof areas: This recommendation would be an improvement and therefore will require consent of all lessees.
Replacement windows or re-glazing with vacuum units: this is another improvement and will require consent of all lessees.

Any alteration requires landlord's consent and although such consent is not to be unreasonably withheld there can be a cost implication in the preparation and agreement of a licence in respect of such alterations.

The issues that have been highlighted here are likely to arise in the majority of blocks divided into flats held under leasehold tenure. Therefore in order to facilitate energy improvements there has to be a close liaison between the landlord and all of the lessees from the outset.

Appendix M (Follow up letter to residents)

11 December 2009

Dear

Re: Energy Efficiency in Private Sector Flatted Buildings

Thank you for allowing my colleagues from ECD Architects to carry out an energy audit in your home as part of our research into Energy Efficiency in Private Sector Flatted Buildings in a project jointly funded by Westminster City Council and the Dolphin Square Foundation.

The results of ECD's initial research are now available and we should like to discuss these with you setting out the potential works which could be undertaken to the building overall and your home in particular, the potential costs of any works and the likely energy and cost in use savings. We will also provide you with a general summary of the legal/leasehold issues arising from the works and a summary of available grants and energy efficiency advice for flatted buildings.

I should be grateful if you could contact me on 020 7407 7452 to arrange a time at your convenience for my colleague James Traynor from ECD Architects and I to meet with you to discuss this. The interview should last no more than an hour

Thank you once again for your participation and I look forward to speaking to you.

Yours sincerely

Tim Thurston
PPCR

Appendix N (Resident Feedback)

Energy Efficiency in Private Sector Flatted Buildings

Name [redacted]

Address [redacted]

Telephone Number [redacted]

Email [redacted]

Questions for freeholders and lessees

1) What do you think of the principle of seeking to make [redacted] more energy efficient?

Supports the proposals in principle but would need more information and details of apportionment of costs

2) Now that you have seen the proposals would you support the implementation of the work to [redacted]

Yes ✓ No ☐

would be prepared to consider but needs to think about cost, managing agent very slow to carry out repairs and until this is resolved it is her first prioirty

Questions for lessees only; freeholders go to question 6

3) How do you feel about the specific proposals for your home?

concerns re aesthetic effect of secondary glazing, more consideration needs more thought

flat is very warm so heat saving works would not be a priority

works to building would need to be agreed by all residents - equitable apportionment of cost

4) Now that you have seen the proposals would you be prepared to have the work done to your home:

if grants were available? Yes ☐ No ☐

if grants were not available? Yes ☐ No ☐

Not able to answer this question at the moment, needs more consideration as she is buying another property elsewhere

5) Would you be prepared to be work with the freeholder to investigate and develop more detailed proposals for the building and your home?

Yes ✓ No ☐

If not, why not?

Questions for freeholders and lessees

6) Do you feel that the work is likely to represent good value?

Yes ☐ No ✓

If not, why not?

may be selling and therefore not able to take a long view on income return on capital cost

7) What other benefits do you think work of this nature should bring?

contribution to carbon reductions etc.

8) Would you like more information about energy efficiency works and how they might be funded?

Yes ✓ No ☐

9) Is there anything else you would like to ask us at the moment?

not at the moment, will speak to sister (Oxford Brookes in Urban Planning, writing book on Planning for Climate Change)

Thank you very much for giving us your time. We will let you know what happens next as soon as we are able.

Block E

Energy Efficiency in Private Sector Flatted Buildings

Name [redacted]

Address [redacted]

Telephone Number [redacted]

Email

Questions for freeholders and lessees

1) What do you think of the principle of seeking to make [redacted] more energy efficient?

Supports in principle but with a caveat regarding cost

2) Now that you have seen the proposals would you support the implementation of the work?

Yes ✓ No ☐

With a caveat regarding cost

Questions for lessees only; freeholders go to question 6

3) How do you feel about the specific proposals for your home?

Would be prepared to consider some of the work but:

+ concerned regarding cost relative to savings
+ disruption of work such as wall lining
+ loss of space in a relatively small flat by wall lining
+ potential loss of capital value relative to loss of space in an area where space is a prime driver of property values

4) Now that you have seen the proposals would you be prepared to have the work done to your home:

if grants were available? Yes ✓ No ☐

if grants were not available? Yes ✓ No ☐

If not, why not?

5) Would you be prepared to be work with the freeholder to investigate and develop more detailed proposals for the building and your home?

Yes ✓ No ☐

If not, why not?

Questions for freeholders and lessees

6) Do you feel that the work is likely to represent good value?

Yes ☐ No ✓

If not, why not?

Savings v capital costs

7) What other benefits do you think work of this nature should bring?

Sustainability, social responsibility etc

8) Would you like more information about energy efficiency works and how they might be funded?

Yes ✓ No ☐

at a later date when he has had time to digest ECD information and carry out further research himself

9) Is there anything else you would like to ask us at the moment?

Has similar work been carried out elsewhere?

Are there other schemes which he can look at as a comparison?

He is interested in any works which do not impact on interior space

Thank you very much for giving us your time. We will let you know what happens next as soon as we are able.

Block F

Appendix O (Record of attempts to contact residents)

Energy Efficiency in Private Sector Flatted Buildings - Contact Log (Anonymous Version)

address	no. of flats included	leaseholder details (freeholder shown in bold)	tenant	additional contact details / information	Letter/email	call log - 1st	call log - 2nd	call log - 3rd	call log - 4th	call log - 5th	call log - 6th	call log - 7th
Block B	3 of 5	**Anon**	**Anon**	**Anon**		23/01 13.00 doesn't work wkends	28/01 11.00 in meetings all day	02/02 13.00 with a client	10/02 14.00 on a call	12/02 10.00 out of office	15/02 15.30 in a meeting	
Flat 2		Anon	Anon	Anon	email 11/12	*unable to find contact number*						
Flat 3		Anon	Anon	Anon	email 11/12	28/01 13.05 N/R	02/02 13.10 N/R	10/02 14.05 asked for details to be re-sent so he can arrange with tenant	16/02 resent			
Flat 4		Anon	Anon	Anon	email 11/12	28/01 11.10 fax	02/02 13.10 N/R	10/02 14.20 fax	12/02 10.05 fax			
Block D	3 of 4	**Anon**	**Anon**	**Anon**		23/01 13.10 offices closed at the weekend	28/01 11.15 on annual leave back next week	02/02 13.15 back 2mrw 03/02	10/02 14.20 asked for confirmation in WRITING so freeholders can be contacted	16/02 resent		

Appendix O (Continued)

Flat B		Anon	Anon	Anon	email 11/12	23/01 13.15 N/R	28/01 11.25 N/R	02/02 13.25 N/R	10/02 14.30 N/R	12/02 10.05 N/R	15/02 15.35 N/R	
Flat C		Anon	Anon	Anon	email 11/12	23/01 13.20 is in the process of selling the property.						
Flat D		Anon	Anon	Anon	email 11/12	23/01 13.30 weds 27th 10.30-11.30	25/01 18.20 meeting cancelled due to architect	28/01 11.25 N/R	02/02 13.25 N/R	10/02 14.30 N/R	12/02 10.10 N/R	15/02 15.35 N/R
Block A	3 of 8	**Anon**	**Anon**	**Anon**		23/01 13.40 name on voice mail states 'Jade Sharman'	28/01 11.30 N/R	02/02 13.30 N/R	10/02 14.35 N/R	12/02 10.10 name on voice mail states 'Jade Sharman' (will check # again)	15/02 15.00 N/R	
Flat 1		Anon	Anon	Anon	letter 11/12	23/01 13.45 is in S.Africa back week beginning 08/02	10/02 14.35 is not near diary CB Fri 12th 10.30	12/02 10.30 N/R				
Flat 4		Anon	Anon	Anon	letter 11/12	23/01 13.55 N/R	28/01 11.30 N/R	02/02 13.30 no ring straight to v.m.	12/02 10.15 no ring straight to v.m.	15/02 15.45 no ring straight to v.m.		

Appendix O (Continued)

Flat 6		Anon	Anon	Anon	letter 11/12	23/;01 13.55 N/R	28/01 11.35 contact details given for landlord	28/01 11.45 N/R	02/02 13.35 N/R	10/02 14.45 knows nothing of audit could details be e-mailed to Rachel Shaw at	16/2 resent	
Block E	1 of 4	**Anon**	**Anon**	**Anon**		23/01 13.40 name on voice mail states 'Jade Sharman'	28/01 11.30 N/R	02/02 13.30 N/R	10/02 14.35 N/R	12/02 10.10 name on voice mail states 'Jade Sharman' (will check # again)	15/02 15.00 N/R	
Flat 3		Anon	Anon	Anon	letter 11/12	23/01 14.00 N/R	28/01 11.45 N/R	02/02 13.35 N/R	10/02 14.55 fri 5th mar 10.00-			
Block C	4 of 5	**Anon**	**Anon**	**Anon**		23/01 14.00 closed for weekend	28/01 11.50 out of office	02/02 13.40 in meeting	10/02 15.05 got through to v.m.	12/02 10.15 got through to v.m.	15/02 15.50 got through to v.m.	
Basement		Anon	Anon	Anon	letter 11/12	23/01 14.10 N/R	28/01 12.00 N/R	02/02 13.50 N/R	10/02 15.05 got through to v.m	12/02 10.25 N/R	15/02 15.50 N/R	
Flat 1		Anon	Anon	Anon	letter 11/12	23/01 14.10 N/R	28/01 12.00 N/R	02/02 13.50 audit answer	10/02 15.10 Ms Jacob is not available	12/02 10.25 audit answer	15/02 15.55 audit answer	
Flat 3		Anon	Anon	Anon	email 11/12	*unable to find contact number*						
Flat 4		Anon	Anon	Anon		23/01 14.15 N/R	28/01 12.05 N/R	02/02 14.00 ?line dead?	10/02 15.15 Mr Woodthorpe lives in Hong Kong			

Appendix O (Continued)

Block F	2 of 5	**Anon**	**Anon**	**Anon**		23/01 14.00 closed for weekend	28/01 11.50 out of office	02/02 13.40 in meeting	10/02 15.05 got through to v.m.	12/02 10.15 got through to v.m.	15/02 15.50 got through to v.m.	
Flat 2		Anon	Anon	Anon		23/01 14.15 N/R	28/01 12.05 engaged	02/02 14.00 N/R				
Flat 5		Anon	Anon	Anon	letter 11/12	23/01 14.20 N/R	28/01 12.10 N/R	02/02 14.15 CB 15.30	02/02 15.30 fri 12th 13.00-			

Appendix O (Continued)

James Traynor

From: James Traynor
Sent: 11 March 2010 14:23
To: [redacted]
Cc: 'tim thurston'
Subject: Energy Efficiency in Flatted Developments (Westminster)
Attachments: 5285_1014.pdf; Inside Housing Article (Westminster).pdf; PEA Existing.pdf; PEA Proposed.pdf; Estimated Costs (flat 4).pdf; GBC_PAYS_exec_sum_FINAL.pdf; Review of Leasehold agreements (Advice to leaseholders).pdf; EE Advice and Grants in Westminster.pdf; Typical LED light 01.pdf; Typical LED light 02.pdf; Typical LED light 03.pdf; Typical LED light 04.pdf; Secondary glazing 01.pdf; Secondary glazing 02.pdf; Soild wall insulation.pdf; Results Questionnaire.doc

RE: [redacted] Block B [redacted], London, [redacted]

Dear [redacted]

You may remember that I carried out a survey and energy audit at your property last year on behalf of Westminster City Council and Dolphin Square Foundation. I also mentioned that we would be contacting you in due course to discuss the outcomes from this research and potential energy efficiency improvements that might be considered.

My colleagues have been trying to contact you for several weeks to arrange a meeting with you. Unfortunately we have not been able to contact you to arrange a suitable time. We are now concluding the feedback process and preparing to issue our report to Westminster City Council.
I therefore attach a series of documents that we are presenting to residents in face to face interviews with a short questionnaire seeking your feedback. These documents include the following:

- Press article outlining scope of project
- Survey drawings of your property
- Predicted Energy Assessments (Before and after proposed improvements)
- Building Summary with outline specification
- Estimated costs
- Legal statement
- Summary of available grants and energy efficiency advice
- Summary of 'Pay as you save' report.
- Literature on specific measures/ technologies proposed.

We are intending to complete the report to our client next week and therefore require your feedback (via the questionnaire plus any additional documents you may wish to provide) not later than 15th March 2010.

(PLEASE NOTE: This is a research project which does not commit leaseholders or freeholders to any potential works or associated costs. We are simply trying to establish whether you would support the project in principle and whether you would like to be involved in any future works.)

If you have any queries regarding the above please do not hesitate to contact me.
Kind Regards,

James Traynor
Associate Director

ECD Architects
energy conscious design
Studio 3 Blue Lion Place, 237 Long Lane, London SE1 4PU
dd: +44 (0)20 7939 7528
t: +44 (0)20 7939 7500

Appendix P (Legal commentary - Flat 3, Block C)

The leasehold contract for this flat has been identified as being slightly different to the other 14 contracts received and one in which the scope for energy efficiency improvements may be more possible due to the presence of an existing communal boiler. However our assessment of the issues arising suggest that even here the legal position is not clear:

RE: Flat 3, Block C
The landlord covenants to provide hot water but significantly this appears to be delimited to just washing and bathing i.e. not heating. The lease leaves it open as to how this might be achieved but any landlord is likely to encounter significant difficulties in changing the system unless, the system requires complete renewal. At that point in time the landlord could argue that an energy saving system should be deployed if it can be shown to be more economic and cheaper. That in itself may not be clear cut because some systems may be cheaper to run but more expensive to install.

Some lessees (indeed many) only retain flats for a relatively short period i.e. less than 5 years, and they may therefore be less interested in longer term solutions which involve greater capital outlay at the start. Another issue will again be the possible requirement for the landlord to make alterations to the internal demise of the flat (to accommodate the new technology) and the landlord cannot require this of the lessee.

The overriding and guiding factor will be the Landlord & Tenant Acts 1985 & 1987 which restrict the recoverability of service charges. These acts require reasonableness and notice and consultation, etc, failing which the costs are thrown away as they cannot be recovered. Experience suggests that most landlords are reluctant to take a chance as it is of no gain to them. It is therefore our opinion that new legislation is required to overcome legal obstacles to potential energy saving measures identified in this report.

Fig 10:

From: Fernow, Irene [mailto:ifernow@westminster.gov.uk]
Sent: 08 June 2011 11:32
To: Jo Sloman
Subject: Investigation into fuel poverty in London Health and Public Service Committee

Dear Jo,

I am grateful for the opportunity to provide an officer response to the HPS Committee fuel poverty investigation.

Q1: What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?

Although some action has been taken by suppliers to address fuel poverty in London recently published figures showcase that London has to date received limited CERT/CESP funding from the utilities despite Londoners contributing equally though their fuel bills. I attach the Fair CERT briefing produced by Westminster and Islington which highlights this issue in greater detail.

Q2:What challenges do energy companies in London face in delivering measures to tackle fuel poverty?

It must be acknowledged that there are several barriers facing energy companies in London to tackle fuel poverty through their existing schemes. Barriers include; the large number of hard to treat properties which are more costly to retrofit; installer reluctance to work in London most notably due to parking issues; varying property types and tenures on a street by street basis potentially making it harder and more costly to target and deliver assistance; the high number of conservation areas and listed buildings; the large number of flats in the private sector and flatted buildings with mixed social and private tenure making it complicated to deliver loft and cavity wall insulation.

Q3:How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

By facilitating relationships with local authorities, contributing to the solution in regards to parking issues, creating schemes under which the utilities can operate.

Q4: How effectively are the Mayor's programmes contributing to reaching the national target to eradicate fuel poverty by 2016?

The Lagging Behind report http://www.london.gov.uk/who-runs-london/the-london-assembly/publications/environment/lagging-behind-insulating-homes-london was a much welcomed piece of work and we would grateful for further pieces of work and lobbying that highlight the issues specific to London, in particular work around hard to treat properties in conservation areas and flatted buildings in the private sector or with mixed tenure. We await the outcomes from the Low Carbon Zones and RE:NEW and hope that these projects will be successful and showcase how assistance can be delivered effectively in London.

Q5: What role should the Mayor have in reducing fuel poverty in London?

To raise awareness of London's urban issues such as the impact of high housing costs on the number of fuel poor, the need for retrofit solutions for common parts of private and mixed tenure blocks of flats, championing the need for regional delivery targets under CERT and future schemes such as ECO. The mayor further has a role to play in attracting funding for London and to address conservation issues.

Flatted buildings
I have referred above to the issues around flatted buildings and attached is the report from the Energy Efficiency in Flatted Buildings project, which aimed to explore the barriers of retro fitting common parts of flatted buildings in the private sector. The main barrier is the legal challenges that face leaseholders as the majority of leases generally only allow for maintenance and repairs and energy efficiency works will in most circumstances be classified as an improvement, in addition to this there are of course also significant practical and social barriers.

I further attach the article written by the FPRAs legal advisor Dr Nicholas Roberts which gives a good summary of the legal issues. There has been one further article (EIBI 09.2010) which can be found here http://www.ukace.org/publications/ACE%20Warren%20Report%20(2010-09)%20-%20Lets%20remove%20the%20barriers%20to%20the%20landlord.pdf

Please note that this is not a corporately agreed document and we therefore request that it is treated as confidential.

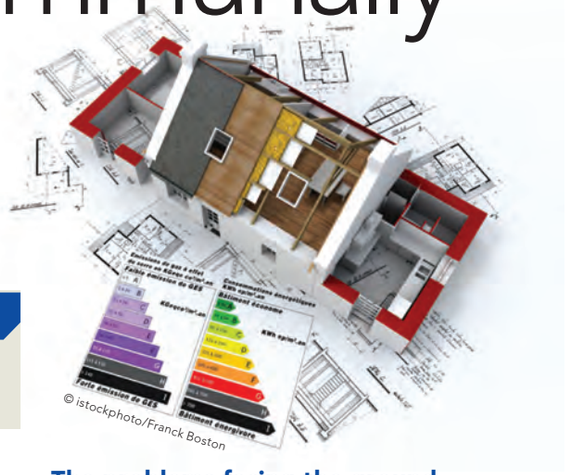
Kind regards
Irene

Irene Fernow
Energy Efficiency Commissioning Officer
Westminster City Council
T: 020 7641 2583

Property

Keeping warm communally

Dr Nicholas Roberts explains why long-term flat leaseholders can face an insulation brick wall


© istockphoto/Franck Boston

IN BRIEF

- Is it possible for an individual leaseholder to carry home energy conservation measures without impinging on the part of the property vested in the landlord?

Governments of all political persuasions are keen to encourage home energy conservation as part of the campaign to drive down CO_2 emissions, but little attention has been paid to how difficult this may be for those who live in long leasehold flats. In many cases, however much as they may wish to insulate their homes, the legal matrix which they inhabit makes it difficult to improve the physical structure in which they live.

The typical scenario

The case considered here is that of the owner of the long leasehold flat which is of conventional construction, whether purpose-built or a "conversion". It is assumed that the legal structure will be the usual "internal box" set-up, ie with the foundations, main structure, exterior and roof the responsibility of the ground landlord, and the leaseholder responsible only for internal repairs and decorations). The priorities for most house owners who wished to insulate their homes would probably be:

- additional loft insulation;
- double glazing (probably uPVC sealed units); and
- cavity wall insulation.

The problems facing the individual leaseholder

It seems not to be recognised by the government, or indeed by commentators generally, how difficult it may be for either the typical leaseholder or the typical landlord to install all or any of these. The extent of the demise to each leaseholder will generally end at the inner surface of the exterior walls, so the cavity between the two skins of brickwork will not belong to him—instead it will form part of the "common parts" and belong to the landlord. The demise of the typical top-floor flat usually ends at the ceiling, and so will not include the attic space above it. Although one does encounter leases where the exterior windows either expressly or by necessary implication belong to the leaseholders, more often the exterior windows will form part of the main structure, and so will belong to the landlord. So even if it were practically possible for an individual leaseholder to install or improve roof insulation or to install double glazed sealed units (an individual leaseholder will rarely be able effectively to install cavity wall insulation!), it will therefore not generally be legally possible for an individual leaseholder to carry out any of these home energy conservation measures. Indeed, it would technically be an act of trespass against the landlord for a leaseholder to install insulation material in a wall cavity or attic space that did not belong to him, or to replace windows which formed part of the common parts.

> "Getting 75% of the parties actively to back an application is an uphill task"

The problems facing the ground landlord

If it is not possible for an individual leaseholder to carry out these energy conservation measures because they will impinge on the part of the property vested in the landlord, then one next needs to consider whether the landlord will be able to do so, and to pass the cost on to the individual leaseholders via the service charge. In most cases this would be a far more practicable way of insulating a block of leasehold flats than for leaseholders to attempt any measures themselves. In the case of replacement double glazing, it would also ensure that the external appearance of the block preserved a degree of uniformity. However, in many cases it will be out of the question for the landlord (or for any residents' management company (RMC) that fulfils its functions) to undertake the works. It is well established that a landlord, or an RMC, is able to incur expenditure and pass it on to the service charge account only if there is clear authority under the lease for it to do so, eg (of many cases) *Lloyds Bank Ltd v Bowker Orford* [1992] 2 EGLR 44. In the majority of cases, probably the vast majority, the lease will make no reference to incurring expenditure on energy-saving

measures: these will therefore count as "improvements" which go beyond what is authorised by the lease. (Replacement of single glazed metal window frames which were in need of repair with uPVC double glazed units was treated by the Lands Tribunal as a repair rather than an improvement in *Wandsworth LBC v Griffin* [2000] 2 EGLR 105, but the decision in *Mullaney v Maybourne Grange (Croydon) Mgmt Co Ltd* [1986] 1 EGLR 70 is to the contrary.) So home insulation measures, however desirable, are likely to be possible only if the landlord—in whom the common parts are vested—is prepared to undertake them, and if sufficient leaseholders are willing voluntarily to contribute to the cost in order to make them viable. If there is a separate RMC then that may have to be involved also, either to organise the contributions, or to consent, if the common parts are demised to it.

One does, of course, sometimes come across leases where the service charge provisions contain a "sweeping up" clause which allows the landlord or RMC to incur such expenditure as it sees fit for the benefit of the block, and to pass it on to the leaseholders via the service charge. In such cases it is more likely that the landlord or RMC will be entitled to put in train the home insulation measures, and to pass on the cost to the leaseholders, though purchasers of flats and those advising them remain understandably suspicious of such open-ended provisions, which can be seen as offering the landlord a "blank cheque" to effect improvements which the leaseholders may consider as unnecessary. Further, such clauses tend to be restrictively construed, eg *Lloyds Bank Ltd v Bowker Orford* (above). Suspicions may be partially allayed if the power to incur such expenditure is given to an RMC rather than to an "outside" landlord, as in that case it is at least likely that the improvements will be acceptable to a majority of the leaseholders. Even then, however, purchasers and their advisers may be suspicious that the majority who control the RMC may wish to effect substantial improvements to an apartment block which the minority do not want and possibly cannot afford.

The failure of leases generally to allow for improvements is inevitable so long as we tend to construe leases according to strict canons of interpretation; however, if this stands in the way of updating blocks of flats so that they comply with modern standards of energy efficiency, we should acknowledge that there is a problem, and that something needs to be done about it. Fortunately, there is a solution readily to hand, if the government is prepared to make some secondary legislation.

The solution

Part IV of the Landlord and Tenant Act 1987 (LTA 1987) contains provisions allowing for long leases of flats to be varied. In 2003 this jurisdiction was transferred from the courts to the Leasehold Valuation Tribunals (LVT). Section 37 allows for all the leases in a block to be varied—apparently in any respect—on the application of a substantial majority of the parties involved (75% of the parties concerned, provided not more than 10% of the parties object, the landlord counting as one of the parties). This section could therefore be used to allow a landlord to carry out insulation measures, and to charge the costs to the service charge, but getting 75% of the parties actively to back an application is an uphill task. The websites of LEASE and of the Residential Property Tribunal Service (of which the LVTs form part) suggest that s 37 is accordingly little used.

> **"Some leaseholders will no doubt be concerned that they might be called on to pay for unnecessary insulation measures"**

A better alternative would be for it to be possible for a lease to be varied under LTA 1987, s 35. This section allows the LVT to vary a lease on the application of any leaseholder (or the landlord), to ensure that it complies with what may be described as certain "minimum standards" of acceptability which are set out in s 35(2). If it is necessary for all the leases in a block to be varied to give effect to this, all the leaseholders must be given notice, and if they wish they can become parties to the application. If they have been given notice, they will be bound by any variation that may be ordered. Thus it is possible to apply to the LVT for a lease to be varied so that it contains adequate provisions including as to:

- repair or maintenance;
- the provision of reasonably necessary services;
- insurance arrangements; and
- the computation of the service charge.

What is there to prevent the addition of a further paragraph to s 35(2) relating to "the provision of reasonable insulation measures to improve the energy efficiency of the flat and of the building of which it forms part"? It would not even require primary legislation, as s 35(2)(g) (added by s 162 of the Commonhold and Leasehold Reform Act 2002) allows the secretary of state to add further paragraphs to s 35(2) by regulation.

Some leaseholders will no doubt be concerned that they might be called on to pay for unnecessary insulation measures, but provided any new paragraph makes it clear that it covers only "reasonable" measures, then if a lease is varied, and any leaseholder subsequently objects to specific insulation proposals, their reasonableness could be determined by an LVT on a further application under s 19 and/or s 27A of the Landlord and Tenant Act 1985. This should afford sufficient safeguard to leaseholders who fear that they may become committed to unnecessary expenditure.

There is, of course, a further difficulty in ensuring that privately owned leasehold flats are well insulated. The various government grants for home insulation tend to be based on the status—age and/or disability and/or financial need—of the individual occupants, and are not therefore available to insulate whole buildings, where some but not all of the leaseholders are eligible for assistance. Any amelioration of this is likely to involve additional expenditure, which may not be a priority in the current economic climate. But it should at least be possible for leaseholders who are willing to pay for home insulation to be able to obtain it, without finding that the terms of their leases stand in their way. NLJ

Dr Nicholas Roberts is a solicitor; principal teaching fellow, School of Law, University of Reading and legal adviser to the Federation of Private Residents' Associations (FPRA) Ltd.

The views expressed in this article are the author's own and not necessarily those of FPRA Ltd.

Jo Sloman
Chair, Health and Public Services Committee
City Hall
The Queen's Walk
London SE1 2AA

10 June 2011

Dear Mr Cleverly,

London Assembly's Health and Public Services Committee review request for information and views to inform a future investigation into fuel poverty in London

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, renewables, coal and gas-fired electricity generation, combined heat and power and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including both residential and business users.

EDF Energy welcomes the opportunity to respond to the London Assembly's Health and Public Services Committee request for information and views to inform a future investigation into fuel poverty in London. We support the aims to address the Mayor's policies and programmes to respond to the challenges and maximise the opportunities to reduce fuel poverty in London. Our extensive experience in delivering initiatives to target fuel poverty among vulnerable groups in London provides us with a valuable insight and expertise and allows us to understand the delivery challenges associated with London while also recognising future opportunities.

EDF Energy believes that fuel poverty is an aspect of general poverty and, as such, should principally be addressed through social and economic policy measures to improve household income and reduce poverty. At the same time, we also take seriously our role as a responsible supplier for all our customers, including supporting the most vulnerable, as demonstrated by our industry-leading voluntary support initiatives.

A sustainable approach to reducing carbon emissions and fuel bills overall is through the improvement of London's housing stock by making properties more energy efficient, rather than providing short term rebates and grants. Government policies such as the Green Deal, the future Energy Company Obligation (ECO), and the Renewable Heat Incentive (RHI) will all assist this objective. We are committed to working with Government to create a successful Green Deal, which will enable private sector capital to fund energy efficiency improvements for consumers, offset by savings on their energy bills. The advent of these key polices create opportunities for London, in partnership with key stakeholders, to effectively deliver support to all groups, including the vulnerable.

EDF Energy believes that the new Energy Company Obligation (ECO) will play an important role in providing assistance to more vulnerable householders and in increasing

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the levels of installation of higher cost measures. It is important that it can be delivered cost effectively, in view of the wider distributional impacts on all consumers for the costs of this policy.

In the longer term, the UK's transition to a low carbon economy will have an increasing impact on domestic energy prices, as a number of environmental policies impact on energy costs. EDF Energy believes that the additional costs will be minimised through incentivising investment in the most affordable low carbon energy supplies and maintaining competitiveness for sustainable growth. The forthcoming Energy White Paper on Electricity Market Reform will be very important in this regard. This will ensure that the Government's policies are implemented with least impact on consumers, including those in fuel poverty.

In the shorter term, a key issue for the London Assembly's Health and Public Services Committee team to consider is to minimise the cost to suppliers of identifying those who should be targeted by fuel poverty and carbon reduction programmes and therefore the burden on the suppliers' wider customer base. EDF Energy's view is that the approach to use generic proxies to identify where the support should be targetted creates inefficiencies in the use of resources intended to tackle fuel poverty and that the wider sharing of Government data should be further explored to see what efficiencies this can bring.

Additional areas for London Assembly's Health and Public Services Committee to consider include applying an integrated and coordinated approach to delivery across London boroughs whilst allowing for flexibility. This would help to address the challenges associated with delivering measures in London, including for example additional operational and access costs and the higher proportion of hard to treat homes.

We have elaborated on these views in our detailed response to key consultation questions outlined in the following document. Should you wish to discuss any of the issues raised in our response, have any queries of would like to arrange a meeting to discuss our proposals please contact my colleague Valentine Mulholland on 07875 116519, or myself.

Yours sincerely,

Denis Linford
Corporate Policy and Regulation Director

Attachment

London Assembly's Health and Public Services Committee review request for information and views to inform a future investigation into fuel poverty in London

EDF Energy's response

EDF Energy welcomes the opportunity to submit written evidence to the London Assembly's Health and Public Services Committee request for information and views to inform a future investigation into fuel poverty in London.

Key Summary Points

- EDF Energy believes that fuel poverty is an aspect of general poverty and as such, should principally be addressed through social and economic policy measures to improve household income and reduce poverty.

- At the same time, we take seriously our role as a responsible supplier for all our customers, including supporting our most vulnerable customers, and this has long been demonstrated by our industry leading voluntary initiatives. However, operating in a competitive market, it is not sustainable in the long term to continue to provide direct financial support to the vulnerable through a scheme ultimately funded by all customers. We believe that more enduring approaches to tackling fuel poverty should be developed.

- A more sustainable approach to tackling fuel poverty in the long term is through the improvement of the London housing stock, improving the energy efficiency of homes to help reduce heating costs on an ongoing basis, rather than providing short term rebates and grants. Government policies such as the Green Deal, the future Energy Company Obligation (ECO), and the Renewable Heat Incentive (RHI) will all help in this regard.

- The new Energy Company Obligation (ECO) will play an important role in providing assistance to vulnerable householders and in increasing the levels of installation of higher cost measures. Increasing the installation levels of higher cost measures will support London where an estimated 57% of properties have solid walls.

- Data sharing and Government support with targeting those in greatest need could help alleviate fuel poverty while more long term sustainable solutions such as improving the energy efficiency of the housing stock and maximising the benefit of a more decarbonised energy supply are being rolled out.

- In the absence of information on households living in fuel poverty, programmes to date have been focused on those in receipt of certain social security benefits or the elderly. There is evidence that this represents a poor proxy for those in fuel poverty. The cost to suppliers of identifying those eligible for such assistance can add to the costs of delivery and therefore the burden on suppliers' wider customer base.

- Our experience of partnership working would recommend future energy efficiency policies to enable more flexible and less complex approaches to deliver results, for example compared to the current Community Energy Savings Programme (CESP), in order to support more effective delivery in London.

- Insulation installers often have to incur additional operational costs to operate in London due to a number of factors including access and parking being limited, the cost of the congestion charge, extra travelling time and hard to access properties. All these act as barriers to delivery and a disincentive for contractors to carry out works in London.

- Applying a consistent and integrated area based approach across London boroughs could be considered to help to overcome the challenges specific to London, as evidenced by London Warm Zone (LWZ).

- The London Assembly (could support the effective delivery of future programmes by encouraging and advocating opportunities for enhanced public/private partnerships with key stakeholders.

- For the significant proportion of households unable to access the gas grid in London, alternative low carbon heating technologies could also make a significant contribution. Heat pumps in particular may present an adaptable and more cost effective solution for London homes and flats.

- The UK's transition to a low carbon economy will have an increasing impact on domestic energy prices, as a number of environmental policies impact on energy costs. These costs will be mitigated through incentivising investment in the most affordable low carbon energy supplies and maintaining competitiveness for sustainable growth. This will help to ensure that Government's policies are implemented with least impact on consumers, including those in fuel poverty.

Energy companies' action on fuel poverty

What action is your organisation currently taking to target fuel poverty among vulnerable groups?

1. EDF Energy has led the industry in supporting fuel poor customers. EDF Energy was the first supplier to introduce a discounted social tariff in 2006, and an energy trust fund in 2003 to support our most vulnerable customers. The EDF Energy

Trust supports customers with serious household debts, by awarding grants to give them a fresh start. We have donated over £17 million to this independent charity, which has assisted over 20,000 vulnerable households directly, and provided grants to debt and welfare advice agencies in local communities to expand the support further. We developed the sector's first social tariff, Energy Assist, offering customers most likely to be living in fuel poverty our lowest standard tariff and a package of support, including benefits and energy efficiency advice. Over 164,000 customers continue to benefit from this tariff.

2. In 2005, we were also the first energy supplier to align tariffs for electricity pre-payment meters with those customers paying by cash or cheque, an example followed by others so that no supplier now charges a surcharge to customers who select to pay by pre-payment meters.

3. This leadership approach in developing voluntary initiatives was followed by our competitors so that by the end of March 2011, the main domestic energy suppliers were spending over £150 million on discounted and social tariffs, rebates and programmes of support for customers likely to be living in fuel poverty. As a development to this voluntary approach, EDF Energy had long advocated a form of mandatory social price support to provide greater clarity for consumers and a more level playing field for suppliers, and we therefore welcomed the Government's introduction of the Warm Home Discount (WHD) scheme in April 2011, to last four years until 2015. We are currently working with Government to implement this £250 million scheme which will rise to £310 million by 2014/15 and which is expected to support two million households. We expect the WHD support to have a significant impact on the most vulnerable of London's citizens.

4. A key part of this new scheme will involve suppliers paying a rebate on electricity bills of £120 rising to £140 by year four to customers identified by the Department of Work and Pensions(DWP) and the Department of Energy and Climate Change (DECC) as falling into an annually increasing sub groups of Pension Credit recipients. DECC and DWP will identify eligible customers so that the rebate will be paid to them automatically This takes forward the concept of data sharing that EDF Energy has been advocating for years and that was successfully piloted to support 250,000 customers in 2010. EDF Energy believes that such data sharing should be extended so that Government can support the identification of all those customers eligible under the WHD. This would ensure that all suppliers would be supporting the same types of customers, that customers would receive the support automatically rather than having to come forward, and that suppliers were not wasting resources simply on finding those to help.

5. A key EDF Energy initiative to assist London householders and especially those who are vulnerable has been the London Warm Zone (LWZ) which was established in 2001. Since 2001, LWZ has earned much praise from key stakeholders including government departments such as the Department of Energy and Climate Change

(DECC) and the Department of Work and Pensions (DWP), London Boroughs, Ofgem and the Fuel Poverty Advisory Group (FPAG). EDF Energy has provided over £14m funding for energy efficiency measures and also provided core sponsorship and a seconded manager to work with the LWZ team.

6. London Warm Zone Case Study[1]

The London Warm Zone (LWZ) scheme is part of Warm Zones, a unique not-for-profit Community Interest Company owned by National Energy Action (NEA). The scheme proactively identifies vulnerable and fuel poor households, many of whom are living in the most deprived areas of London, and offers a comprehensive package of measures to help people save energy, money and carbon emissions.

Within London there are people who may not only be defined as 'High Risk', but due to cultural differences and language barriers, may also be classified as 'Hard to Reach'. To overcome this challenge, LWZ has developed a unique area-based, street-by-street, door-to-door assessment approach. It manages the whole process from the initial contact with residents through to the installation of measures and claiming of entitled benefits.

To offer customers a 'one-stop shop', LWZ has agreements in place with a range of partners to deliver the different aspects of the scheme: assessments, surveying, contractors who carry out the physical works and financial services providing benefit checks and financial coaching and debt management.

The scheme is now being extended further by offering customers renewable energy technologies such as solar thermal. It has also been involved in early discussions on the Government's flagship Green Deal policy.

It has been nationally recognised that this independent area-based assessment approach, when conducted in the correct fashion, has the potential to unlock millions of pounds of leverage for households that have never previously engaged with any scheme to improve the energy efficiency of their homes or review their incomes. The not-for-profit ethos of LWZ allows a focus on what is best for the customer while delivering a commercial and sustainable scheme.

LWZ has built up a wide range of strategic partnerships with key organisations including the London Development Agency, Greater London Authority, individual London Boroughs as well as community and voluntary groups. At a national level, there is close work with Government departments, NEA and Eaga plc.

[1] For more information, please see: www.londonwarmzones.co.uk

In the last three years alone, EDF Energy has provided over £5m to fund more than 60,000 door-to door assessments and installed new and improved heating and insulation in over 19,000 homes through this scheme.

LWZ has also been involved with the GLA/Mayors RE:NEW scheme, managing technical & demonstration trails in Hillingdon and in discussions with others, London sub regions and individual Boroughs.

LWZ work in this area has been recognised and cited as best practice in overcoming the significant barriers to the installation of energy efficiency and low carbon measures in London.

7. In addition, through the Carbon Emissions Reduction Target (CERT) programme, and previous energy efficiency programmes, EDF Energy has offered discounted insulation measures to domestic households including our significant customer base in London.

8. EDF Energy is also funding energy efficiency measures in partnership with Tower Hamlets Council through the Community Energy Savings Programme (CESP). Our managing agency Sustain is working with the Poplar Harca Housing Association on a CESP scheme that covers four Lower Super Output Areas (LSOAs) in the Tower Hamlets area of East London. The scheme involves the installation in flats of exterior wall, cavity wall and loft insulation to achieve potential savings of 42,000 tonnes of CO2.

9. EDF Energy's commitment to London is further emphasised by our becoming the first Sustainability Partner of the London 2012 Olympic and Paralympic Games and we are keen to use this as a platform to encourage and engage people in London and nationally to reduce the amount of energy they use.

10. In addition to our programmes of specific support, and aware that many of our customers are struggling at the current time, we offered all our customers a Winter Price Freeze last winter, delaying our price increase until March 2011 in the knowledge that our customers consume most of their energy during the cold winter months. We offered all our customers stable, competitive prices at the time when they needed this the most.

What challenges does your organisation face in delivering measures to tackle fuel poverty

11. While we recognise that there are many challenges faced in delivering measures to tackle fuel poverty which are specific to London, its unique nature also presents opportunities to achieve successful delivery of programmes.

12. A key issue for suppliers in delivering fuel poverty programmes is identifying those customers living in or at risk of fuel poverty who should benefit. This is extremely problematic as it relies on information about both household income and property condition. There is currently very little information about the condition of individual properties although this may improve as, increasingly, the energy efficiency status of properties is recorded via Energy Performance Certificates and incorporated into the National Energy Efficiency Database. However, in the short to medium term, suppliers will not have access to this information. .

13. Government programmes, such as Warm Front and CERT, have relied on eligibility for certain income related state benefits acting as a proxy for households on low incomes and the elderly, and therefore most likely to be living in fuel poverty. It is recognised this is a poor proxy for fuel poverty and creates a number of significant risks as highlighted by recent evaluation evidence from the National Audit Office's (NAO)[2] and the English House Condition Survey analysis[3] on the Warm Front scheme.

14. Despite being acknowledged as a poor proxy for fuel poverty, energy suppliers have to bear the costs of identifying households in receipt of benefits, adding to the costs of delivering the obligations. These in turn impact on all consumers by resulting in additional costs on household bills, and thus running counter to the objective of alleviating fuel poverty. It is therefore essential that any resources focused on alleviating fuel poverty are accurately targeted.

15. There are many challenges in engaging with vulnerable people who are often the hardest group to access, and less likely to take up measures. Communication difficulties can also present additional issues, for example, when marketing the programmes, visiting the customers and installing measures. Effective communication is required with these customers throughout the process from assessment and survey through to installation and inspections to ensure that the measures get installed.

16. Installers also often incur additional operational costs delivering measures in London due to; restrictions in access and parking, congestion charges, additional travelling time and hard to access properties such as high rise flats.

17. Loft and cavity wall insulation are currently the main focus of programmes such as CERT and these measures are not always suitable for London homes. Although there are opportunities for cavity wall insulation in London, 57% have solid walls.

[2] National audit Office's (NAO) evaluation of the Warm Front scheme in February 2009
http://www.nao.org.uk/publications/0809/the_warm_front_scheme.aspx

[3] http://www.nao.org.uk/publications/0809/the_warm_front_scheme.aspx

18. 20% of households are privately rented in London compared to 12% nationally. Properties in this sector tend to have a lower thermal efficiency standard than in other tenures. The private rented sector has historically been harder to tackle by energy efficiency programmes due to the split incentive between landlord and tenant i.e. the landlord pays for any improvements but the tenant benefits from the fuel bill saving from any installed energy efficiency measures. It is anticipated that the new responsibilities on landlords outlined in the current Energy Bill will assist in addressing these issues.

19. It is estimated that around half of all dwellings in English conservation areas are in London, with 80% in Inner London boroughs. With internal wall insulation and external wall insulation on the rear of buildings this need not be a barrier to insulation when the right skills and techniques are utilised and energy and conservation professionals work together, however it does impact on costs.

How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

20. Despite the recognised challenges faced in delivering measures to tackle fuel poverty in London, there are also significant opportunities available and these should be maximised for London to help to tackle fuel poverty. In particular, the introduction of the Green Deal and the new Energy Company Obligation in autumn 2012 offers an opportunity for many of the current challenges to be addressed. Proposals for how the Mayor can make maximise these opportunities and enable successful delivery are detailed below.

21. One key area that the Mayor's office could support is the encouragement of further data sharing to identifying and targeting the vulnerable, where appropriate. Targeting support to those in greatest need through Government sharing data in this way is an effective way to target support to the most vulnerable, and should be taken further in targeting all fuel poverty and energy efficiency investment, for example through the Warm Home Discount scheme There is also the opportunity to explore the potential for data sharing by boroughs who also hold information about households in receipt of benefits.

22. The Mayor may be able to advocate partnership working, bringing together key players to collaborate to consider these challenges in more depth and identify and implement possible solutions in areas such as the infrastructure and amenities issues that are specific to London.

23. Addressing the delivery challenges through advocating a consistent and integrated approach across organisations, installers and householders where appropriate will help to support a more effective delivery of measures. For example obtaining planning permission for Solid Wall Insulation can present barriers depending on the borough, so engaging early with planners is essential. The value of the correct

design of future policies and delivery programmes with an integrated approach is crucial.

24. Enabling flexible delivery and simplifying schemes can also help. For example, experience with CESP has shown that greater flexibility about which areas are eligible for works would support opportunities for increased delivery of measures. The complexity of the CESP scheme creates high cost and resource impacts, which negates many of the key benefits. Encouraging LA engagement would be an invaluable benefit. It is recognised that LA buy-in can assist effective delivery, providing credibility to the scheme, additional community benefits, coordinating action, and from the householders' perspective, capturing their engagement. Engaging private households in CESP schemes has presented challenges. Addressing this in forthcoming policies aiming to tackle fuel poverty can help mitigate risks for delivery partners.

25. If the Mayor is able to highlight the potential to those households who are off the gas grid for alternative low carbon cheaper heating technologies, a large proportion of London households could benefit, as the grid decarbonises. For the estimated 50% or urban dwellings in London that have no gas connection, alternative technologies and measures can be considered in order to help reduce fuel poverty if households are provided with support to access efficient and low carbon heating. Heat pumps can present an adaptable, cost effective solution for retrofitting London homes and flats. Heat pumps can be suitable for rolling out via modular installations according to requirements of the location and heat demand. This may be particularly beneficial for London in view of the specific infrastructure challenges of a densely populated urban environment. They may therefore, provide a more flexible solution in comparison with technologies such as CHP and district heating which have very specific location requirements such as space for supporting infrastructure and proximity to sufficient heat loads to make the schemes viable.

26. EDF Energy recognises the valued development of policy to decarbonise heat and the introduction of support such as the Renewable Heat Incentive (RHI) to bring low carbon heating solutions to market and for wider deployment, alongside the launch of the Green Deal in 2012 and the future Energy Company Obligation, providing further opportunities in London. We believe that through heat pumps, this in turn can also provide low carbon heating solutions for London homes. Experience in international markets such as Sweden and France demonstrate that heat pumps can be deployed at scale and this has been demonstrated by rapid growth in sales. In 2008, 130, 000 heat pumps were sold in France alone[4].

[4] p172 -Meeting Carbon Budgets – the need for a step change – Progress report to Parliament Committee on Climate Change October 2009

27. Through working together applying an integrated holistic strategy, EDF Energy believes the opportunities in London can be maximised to achieve successful results through effective delivery.

EDF Energy
June 2011

SSE response to the London Assembly's investigation into fuel poverty

SSE, formerly Scottish and Southern Energy, welcomes the opportunity to respond to the London Assembly's investigation into fuel poverty in London. With Scottish Power, our competitor, having recently raised energy prices, fuel poverty will become a more prominent issue in public policy, and the London Assembly is right to investigate how this will affect London, with its unique demographic variations of income and energy efficient properties.

SSE are supportive of ambitions, notably under the Government's recently closed consultation in the Hill's Fuel Poverty Review, to go back to first principles regarding finding a workable and effective long term solution on fuel poverty. Any solution must resolve the key problem: finding the vulnerable and assisting them in a tailored way which suits their individual needs

Whilst we acknowledge the vital role energy companies can play in alleviating and potentially eradicating fuel poverty, Government at all scales, including the Mayor and the 33 Local Authorities in Greater London must take leadership in taking ownership of the societal problem of poverty, with energy companies assisting via their expertise in helping households with energy efficiency.

Central in efforts to combat fuel poverty is the Government's Green Deal and the Energy Company Obligation (ECO), building on the 700,000 households SSE has provided with insulation measures under CERT and CESP since 2008. SSE also undertakes significant activity to assist its vulnerable customers including our flagship social tariff, energyplus Care which offers the deepest discount (currently 30% off standard prices) to vulnerable customers available in the UK.

The London Assembly, the Mayor of London and the Greater London Authority have a unique opportunity to push the Government to ensure that difficulties faced by the 33 local authorities within Greater London in tackling fuel poverty can be addressed. SSE welcomes this investigation and hopes that the points raised below will assist the Assembly in achieving its objectives.

What impact does fuel poverty have on London in particular, compared to other UK regions?

Many parts of the UK share London's problem of having a large numbers of people defined as being in fuel poverty. However, due to London's size and in particular, the size of its low income populations, London does have large numbers of people defined as in fuel poverty.

Yet it should be noted that London has advantages in tackling fuel poverty. Firstly, London has a relatively mild climate in comparison to other regions in the UK, along with its urban heat island effect which prevents the extreme drops of temperature seen in rural areas of the surrounding Home Counties.

Secondly, the population density, which allows for more efficient installation of energy efficiency measures and the increased viability of the development of district heating networks used with in conjunction with CHP.

Finally, the unique opportunity that London has with the strategic overview the London Assembly, the Mayor of London and the Greater London Authority can bring to fuel poverty alleviation. These institutions together can hold a considered overview of London's fuel poverty strategy, and hold investigations like this consultation to explore the options available.

An area to be considered is whether fuel poverty is a distinct entity on its own, i.e. whether it is noticeably different from other components of poverty. SSE would note that fuel poverty has distinct impacts, such as its adverse impacts on health, which it means that it must also be considered distinctly from other aspects of poverty. For example, if people are under-

heating their homes there can be severe impacts, such as respiratory illnesses which can result in winter-related deaths.

Beyond these difficulties of how to consider fuel poverty, the current definition of fuel poverty (where someone is defined as fuel poor if they spend over 10% of their income on energy bills) itself and its application have also caused problems and unintended consequences. Three of these issues are listed below:

- **The Moving target** – Because of the nature of the fuel poverty definition, some people will drift in and out of fuel poverty depending on such things as their employment status and the time of the year/weather. This means that finding people can be difficult, as can getting customers (whose circumstances have changed for the better) off their existing assistance packages.

- **The 9.9% problem** – Under the current definition those spending 9.9% of their income are treated totally differently to those who spend 10%, while those spending 10% are treated the same as those spending 20% or more. This "one-size-fits-all approach" is clearly at odds with solving complicated personalised problems like fuel poverty.

- **10 times the focus** – Currently, the definition means that policies that take £1 off the price people pay for their energy are worth the same (in policy terms) as policies which result in £10 being added to someone's income. This means that civil servants and Ministers are currently incentivised towards often less sustainable "money off bills" solutions if they want to meet their targets.

What action is your organisation currently taking to target fuel poverty among vulnerable groups?

SSE currently undertakes a vast quantity of activity designed to help our vulnerable customers. Our flagship social tariff, energyplus Care offers the deepest discount (currently 30% off standard prices) to vulnerable customers available in the UK. We currently offer this to customers spending 20% or more of their income on their energy bills. We also offer those spending between 15 and 19% a £100 rebate, and those spending between 10 and 14% a £50 rebate.

Outside of these core discounts, we also offer a trust fund, SSE Sustainable, and provide tailor-made payment arrangements, discounted appliances, benefits-entitlement checks and debt-write-offs on a case by case basis taking account of energy bill affordability. We also participate in a range of energy efficiency programmes, estimating that to date we have assisted 735,000 households with cavity wall insulation and loft insulation.

It should be noted that the UK Government has recently mandated how suppliers should assist their vulnerable customers going forward. This will be mandated through the Warm Homes Discount which is designed to replace much of what SSE and the rest of industry is currently doing. (For further information on the scheme see http://www.decc.gov.uk/assets/decc/Consultations/warm-home-discount/1307-gov-response-warm-homes-disc-cons.pdf)

Total industry spend on fuel poverty for 2010/11 was agreed with Government in 2008 to reach £150 million a year by 2011. Under the mandated model, it will reach £300 million for 2013/14.

Additionally, the gas distribution network business (Scotia Gas Networks) also offers free or low-price gas connections which can remove people from fuel poverty by helping customers switch to gas heating. This is a less prominent problem within London, due to the London's significant benefit of having access to an extensive gas distribution network.

Overall, SSE undertakes significant activity in order to protect our vulnerable customers, whether through social discounts and tariffs, personalised payments or our Trust Fund. However, there needs to be consideration of where ownership of fuel poverty lies. It would

seem that poverty in itself, which clearly overlaps heavily into fuel poverty, is "societies' problem", while the efficient usage of fuel is obviously an area where SSE and other energy companies are best placed to assist with the policy solution.

From SSE's perspective, the most important approach to alleviate fuel poverty is to improve energy efficiency, as energy prices are set to rise into the future, and supplementing energy use through income will not alleviate fuel poverty in the long term and will not contribute to the challenges to mitigating the effects of climate change.

SSE alongside the other large energy suppliers, undertakes energy efficiency installation programs under CERT (Carbon Emissions Reduction Target) and CESP (Community Energy Saving Programme). Since the programmes were first introduced in 2008, SSE has installed over 700,000 installation measures. SSE are actively looking to undertake more energy efficiency projects in London, particularly through CESP, and would welcome any assistance that the Mayor could provide in locating appropriate projects. CERT and CESP are due to be scrapped in 2012, alongside Warm Front in 2013, to be replaced by the Green Deal with vulnerable and hard-to-treat consumers being supported with the ECO. It is fundamental that the Green Deal and ECO are appropriately set up to achieve the Government's objective of alleviating fuel poverty, with SSE favouring that the ECO, funded by suppliers focuses on vulnerable consumers first before including hard-to-treat homes.

What challenges does your organisation face in delivering measures to tackle fuel poverty?

The greatest flaw about the current policy approach to date is that although a target was set up, Governments have failed to actually find a mechanism for finding people within the fuel poverty definition. This meant that, while Governments focussed on measures designed to tackle the four causes of fuel poverty outlined above, no one body has ever co-ordinated a holistic response to find and treat fuel poverty.

In fact, historically, a growing number of obligations have been put on to suppliers, including the provision of energy efficiency measures and the provision of fuel poverty spend, however, up until only very recently were suppliers actually given any tools with which to find those potentially in fuel poverty. Given that energy companies (rightly) do not hold much information on their customers beyond their name, address (which don't necessarily correlate with those actually living in the household who may need assistance) and payment records, this has made the job of finding the fuel poor a non exact science carried out by energy companies SSE has worked around this, such as by training our customer service and community staff to proactively identify potentially vulnerable customers; through developing relationships with external agencies (such as CAB) for referring customers and by marketing our social assistance packages to our customer base.

In the last couple of years there has been some slight movement in this area, with the Government's Warm Home Discount Scheme (and the preceding trial) resulting in suppliers being provided with some information on low income pensioners. These customers are then to be given a rebate on their bills.

How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

In SSE's view a far more targeted system is needed to specifically address fuel poverty. The solution needs to be better linked with benefits data, better focused on finding the "right solution" for each customer and better linked in with energy efficiency schemes and helping people to make the right personal choices.

SSE does not believe that this can be performed adequately through energy companies and the myriad of other advice centres, correspondingly our proposal is for a National Fuel Poverty Agency (as part of National Government or the voluntary sector) to be set up, specifically to focus assistance to the people who need it most.

We see the role of the Fuel Poverty Agency to be as follows:

- The first port of call for anyone struggling to pay their bills once their supplier has got them on the best tariff for their needs

- Ensuring that the individual is on any benefits that they are entitled to. SSE undertook 120 benefits checks last year (costing £2,640 in total), where 55 people received, on average, £1,100, meaning that they benefitted by £60,500.
- Ensuring that those individuals who are struggling with their bills are on a "priority list" for receiving energy efficiency measures through the new Energy Company Obligation (which SSE believes should be purely targeted at those in fuel poverty).
- Ensuring that the individual receives a core element of financial advice. This could be linked to other Financial Inclusion institutions
- Linked with efforts on water poverty, which has similar, but not identical characteristics

The key point is that the Agency will be able to better find customers and make better assessments of need than energy companies and will have a range of options for improving peoples' circumstances, far exceeding those offered by energy companies. It also overcomes many of the perceived problems associated with enhanced data sharing with energy companies.

Clearly, central Government funding is unlikely to be forthcoming in huge quantities. Correspondingly, while it would be clearly preferable for this to be funded through the tax base, SSE appreciates that bills may have to be used in the first instance. However, re-directing money from their Winter Fuel Payment (£2 billion per year) should also be considerations.

SSE believes that the Agency should not be focussed on delivering to the current target. It should be focused on those who need assistance most first, then work its way up to those with less need. SSE thinks that to date fuel poverty has been handled too disparately. The Mayor should spend effort challenging Government to set up such a body as this is the only way of really tackling the issue. If the Mayor wanted to take a lead, there is the possibility of trialling the Agency on a London-wide basis first.

Outside of the above, there may be a role for the Mayor in resolving some additional issues. The first is an issue with the difficulties in obtaining parking permits, which is a significant barrier for energy efficiency installers in London. The obvious preferred solution for energy efficiency installers would be for free parking during working hours across London, but this would be a very generous allowance from the local authorities, which are suffering from extensive funding deficits.

Although the cost of parking is a barrier, the significant issue is the bureaucracy involved. Installers often find themselves working across London and annual parking permits are administered per local authority. This acts as a disincentive for installers to proactively work outside of their local area or in London at all. SSE would recommend that the Mayor attempts to implement a London wide parking permit for Green Deal installers, with the proceeds being split amongst the 33 authorities. This would remove a somewhat unnecessary bureaucratic barrier that potentially prevents the deployment of the Green Deal, which will be the most efficient way to alleviate fuel poverty in London.

Secondly, the establishment of a Fuel Poverty and Energy Efficiency Forum to improve communication between the Mayor, Local Authorities and energy companies on fuel poverty alleviation strategy in London. At the moment energy companies liaise with individual local authorities on specific energy efficiency projects and would welcome the opportunity to have a high level dialogue with other stakeholders, which could assist in finding energy efficiency projects within London, helping energy companies by making it easier to find carbon savings cheaper.

How effectively are the Mayor's programmes contributing to reaching the national target to eradicate fuel poverty by 2016?

SSE welcomes the projects the Mayor has implemented in aiming to alleviate fuel poverty through energy efficiency, particularly RE:NEW. SSE would recommend an expansion of the RE:NEW project to provide assistance to the implementation of the Green Deal and an ECO style top up fund to ensure that the whole of London is well placed to take on the energy

efficiency opportunities under the Green Deal and reduce the energy demand of London's housing stock.

What role should the Mayor have in reducing fuel poverty in London?
The Mayor could play a major role in establishing the Fuel Poverty Agency above. Spending effort challenging Government to set up such a body would be extremely worthwhile as this is the only way of really tackling the issue over the longer term. The Mayor could take a lead, there is the possibility of trialling the Agency on a London-wide basis first and initiating the necessary data sharing with National Government and energy companies.

As mentioned previously the Mayor has a unique opportunity to have a considered overview of the challenges that local authorities have in tackling fuel poverty. The Mayor has the ability to attempt collate resources of London's 33 local authorities in the targeting of fuel poverty and assisting the Agency and others to successfully assist the fuel poor.

SSE would urge the Mayor to consider using London as a springboard for energy efficiency measures across the country, by encouraging the implementation of the Green Deal through assisting Green Deal installers through the approaches outlined previously and making the national Government aware of the barriers facing local authorities, which are working together collectively to deliver energy efficiency measures in the greater challenge of eradicating fuel poverty and mitigate climate change.

Summary
SSE welcomes the existing efforts undertaken by the Mayor and would encourage the Mayor to endeavour use London as a benchmark for fuel poverty alleviation. SSE would reiterate That fuel poverty is a societal problem not entirely distinct from other components of poverty.

To assist energy companies to deliver energy demand reduction, energy companies need to be able to target consumers in fuel poverty, and information is key. The most efficient method of targeting fuel poverty is through sharing of benefits data, and SSE would call on the Mayor to use his influence to encourage Government to improve access to aide targeting of energy efficiency measures to the fuel poor.

For more information please contact Rufus Ford – rufus.ford@sse.com; 0207 953 4064

London Assembly – Investigation into fuel poverty in London

Carillion Energy Services – Background

Carillion Energy Services welcome the opportunity to respond to the London Assembly's investigation into fuel poverty in London.

In order to put our comments into context, it may be helpful to outline briefly our role in the provision of energy services across the UK and Ireland.

Carillion Energy Services was formerly Eaga plc prior to its acquisition by Carillion in April 2011. Carillion is one of the UK's leading support services companies with a substantial portfolio of Public Private Partnership projects and extensive construction capabilities. The Group has annual revenue of over £5 billion, employs around 46,000 people and operates across the UK, in the Middle East, Canada and the Caribbean.

Carillion Energy Services, a division of the group are a leading independent energy services provider and one of the largest installers of renewable technologies and domestic heating services in the UK. We currently manage the fuel poverty initiative Warm Front on behalf of Department of Energy and Climate Change and we also have experience of working for the Welsh Assembly Government on the Home Energy Efficiency Scheme, the Warm Homes initiative in Northern Ireland and the Central Heating and Warm Deal programme in Scotland. We also worked closely with Utilities and Local Authorities in managing the delivery of energy efficiency programmes.

Carillion Energy Services are committed to helping the environment and combating climate change; we provide renewable energy solutions to private housing, specifically through the installation of solar thermal panels and air/ground source heat pumps. Our Clean Energy Programme works in conjunction with the Government's Feed-in-Tariff to install solar photovoltaic panels on social housing properties, we are working with a number of social landlords to provide free electricity to social tenants and have completed over one thousand installs to date.

Within our Carbon Services team, we support the largest number of area-based programmes in the UK, leveraging multiple funding sources to

accelerate delivery against policy objectives and drive the Government's climate change and carbon reduction agendas. Our work with the UK's major utilities and energy suppliers allowed us to deliver a carbon saving of 11.9 million tonnes of Carbon Dioxide and 1.7 million innovative energy saving products in the financial year 2009 / 10.

For further information on Carillion Energy Services and our work across the principal market sectors of Defence, Education, Health, Facilities Management

& Services, Rail, Roads, Building, Civil Engineering and Utilities Services please visit – http://www.carillionplc.com/

Response to individual questions

How many households are in fuel poverty in London?

The latest DECC statistics show that in 2008 there were 328,207 households in the Greater London Government office region in fuel poverty, representing 10.8% of all households in the region. This is the second lowest figure for any Government Office region, behind the South East.

Given the increase in energy prices since this time, it is a reasonable assumption that the number of households in fuel poverty will have increased from this figure.

What impact does fuel poverty have on London in particular, compared to other UK regions?

The impact on fuel poverty from the perspective of the person in fuel poverty is the same in London as it is in any other region of the UK. Where London is distinct from other regions of the UK is that as the most densely populated region, the effects of fuel poverty can be more concentrated, with the associated stresses this places on the health and other services.

We believe that fuel poverty is distinct from income poverty due to the unique link between income, household energy efficiency and fuel prices. It is true however, that those experiencing income poverty are often also in fuel poverty. CSE has recently found *"clear evidence of the relationship between income poverty and cold homes. Households on the lowest incomes, of less than £6,000 per year, were especially likely to have found their fuel bills to be*

a heavy financial burden (50 per cent had done so), to have cut back on heating in the previous year (46 per cent), and to have lived in homes that were colder than they wanted them to be during the previous winter (63 per cent)."[1]

It is also important to recognise that fuel poverty also has an impact upon health to a greater degree than income poverty.[2] A Friends of the Earth study highlights that – "*children in bad housing conditions, including cold homes, are more likely to have mental health problems, such as anxiety and depression, to contract meningitis, have respiratory problems, experience long-term ill health and disability, experience slow physical growth and have delayed cognitive development."*[3]

Who are the fuel poor (how are households distributed across age, ethnicity, and socio-economic groups, and housing tenure)?

Based upon our experience of managing Warm Front and external evidence, we believe that the elderly and those with young families are particularly vulnerable to fuel poverty. However we also recognise that other groups' particularly single householders, the disabled and rural householders are at risk as a result of increasing fuel prices.

DECC's statistics show that the majority of households in fuel poverty are consistently in the lowest three income deciles. In 2008, the number of fuel poor households in the lowest three deciles rose to 3million, representing 89% of all fuel poor households.

In 2008 slightly over half of all fuel poor households had an occupant who was aged over 60 or over, whilst over a quarter has at least one occupant aged 75 or over.

How do London households experience fuel poverty and what support do they want to tackle it?

The underlying factors that contribute to fuel poverty continue to be a combination of household income, energy prices and the quality of the

[1] Fuel Poverty Perspective, CSE, William Baker, Page 3

[2] More information on this is available from Dr Vivienne Press – *fuel poverty+health – A guide for primary care organisations, and public health and primary care professionals,* (http://nhfshare.heartforum.org.uk/RMAssets/Tools/Fuel_Poverty/FPbook.pdf

[3] Shelter study (2006) 'Chance of a lifetime: the impact of bad housing on children's lives.', quoted in 'The Health Impacts of Cold Homes and Fuel Poverty', Professor Sir Michael Marmot, Department of Epidemiology and Public Health, http://www.foe.co.uk/resource/reports/cold_homes_health.pdf, 2011, Page 29

housing stock. The mix of these factors that contribute to a household in London being in fuel poverty will be unique to that particular household.

In terms of delivering solutions to tackle fuel poverty we see a growing need to adopt a more creative approach that focuses on innovative solutions, segmentation and better targeting of measures.

When Warm Front ends in 2013, it will be the first time since 1978 that there has been no Treasury funded initiative in this area. The new Energy Company Obligation (ECO), irrespective of the agreed delivery framework, will need clear, easy to administer, scalable eligibility criteria to swiftly identify those low income vulnerable households for whom the Green Deal won't necessarily work. Green Deal is a demand lead proposition, principally for households who fall into the "able to pay" sector, whereas the ECO will effectively pick up from where CERT, CESP and Warm Front have left off.

The use of proxy measures, such as means-tested benefit entitlement, combined with the exclusion of those households where the property is already energy efficient, is a pragmatic proxy measure to determine those households to whom assistance should be available. In reality, these homes are likely to be on the lowest incomes (otherwise they would not qualify for the benefits in the first place), and live in the lowest standard of housing in terms of energy efficiency, and therefore at greatest risk of being in, or near, fuel poverty.

Energy companies' action on fuel poverty

What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?

It is for the individual energy companies to decide and justify how they spend their supplier obligation monies in London.

In order to highlight some of the actions we are taking in London, we would like to take this opportunity to highlight our Clean Energy Programme, and the potential opportunities it presents to not only London Boroughs but also individuals by utilising other mechanisms to deliver cheaper energy to those who could benefit the most.

The Carillion Energy Services 'Clean Energy Programme' uses Feed in Tariffs to fund the installation of solar photovoltaic systems onto the roofs of social housing, allowing social housing tenants to get the benefit of free electricity, cutting their bills by 18% to 19%; reducing the risk of fuel poverty for them.

At the same time for the social landlord, this investment is fully funded by private funding so the social landlord will get a free upgrade to their properties at no cost to themselves.

The initiative also secures significant carbon savings as well as promoting social mobility, addressing fuel poverty and enhancing financial inclusion.

Carillion Energy Services has now completed around 1,200 installs through the Clean Energy Programme and is working in partnership with seven social housing providers, and in advanced negotiations with a number of others.

An example of this project in action is the Chale Community Project where 67 houses on the Spanners Close Housing Estate in Chale on the Isle of Wight. The Ellen McArthur Foundation (EMF) and Southern Housing Group (SHG) worked in partnership to secure funding from the Department of Energy and Climate Change to retrofit the houses and reduce fuel poverty, and act as a blueprint for other communities. The estate comprises of social rent residents, with a mix of terraces and semi-detached properties and flats built in the 1970's, a community almost completely dependent on electricity for all their fuel needs.

Carillion Energy Services won the contract to supply and fit air-source heat pumps to each home. In addition, the community benefitted from our Clean Energy Programme, which fitted 62 homes with Solar PV panels at no cost to the project. These were funded by the Feed in Tariffs (FiTs) which incentivise green energy generation. The impact of this project can be measured four ways; energy efficiency, social cohesion, fuel poverty and job creation.

Almost every resident is reporting that once the cold weather had kicked in that they were able to use more rooms in their home. Gone are the days when the whole house gathered in the one room that was kept warm.

What challenges do energy companies in London face in delivering measures to tackle fuel poverty?

Traditionally, one of the biggest problems with targeting is that people do not consider themselves to be fuel poor and therefore do not seek help. To address this issue we work with local authorities, community groups and other partners to make sure those in need are aware of the help available.

Mayor's role

How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

One of the biggest difficulties in reaching the fuel poor is that schemes, in particular Warm Front, can only offer assistance if the households make themselves known to the scheme and are claiming the relevant qualifying benefits.

The extension of data sharing capability, either between DWP and the energy suppliers, or DWP and a Managing Agent (as is the case on the Digital Switchover Scheme, which CES manage), would allow those most likely of those being in fuel poverty to be targeted in a systematic way rather than relying on the scatter gun approach of waiting for individual households to present themselves for assistance. We recognise however that such changes can only come from central Government.

The Mayor may wish to consider how he can work with a range of companies, not just the energy suppliers, to deliver innovative and targeted schemes under the new Energy Company Obligation.

Different deliver partners can bring expertise in tackling fuel poverty, especially given that one of the main concerns being voiced about the new ECO is about parties other than the energy companies getting access to ECO funding. We would welcome the chance to discuss how this could happen in more detail.

How effectively are the Mayor's programmes contributing to reaching the national target to eradicate fuel poverty by 2016?

The Government has two statutory based fuel poverty targets in England, namely

- 2010 - no vulnerable households to be in fuel poverty
- 2016 - no household to be in fuel poverty

The aim contained in the Mayor's Draft Climate Change Mitigation and Energy Strategy to link fuel poverty programmes is welcomed, as is the commitment to address the household income factor in fuel poverty by increasing the number of people receiving the London Living Wage.

It is clear that the 2016 target will be challenging to achieve and with the expectation of continuing rises in energy costs, it is clear that there needs to be greater focus on innovative solutions, segmentation and better targeting of measures.

What role should the Mayor have in reducing fuel poverty in London?

We support the aim in the Mayor's Draft Climate Change Mitigation and Energy Strategy to *'minimise fuel poverty by linking fuel poverty programmes where appropriate with energy efficiency and wider carbon reduction plans'*.

A major issue for householders looking for assistance can often be the number of different schemes that offer some sort of assistance, and a central body such as the Mayor co-ordinating and linking schemes to the benefit of the householder is something to be welcomed.

We also support the objective set out in *Equal Life Chances for All*, to reduce poverty by increasing the number of people receiving the London Living Wage.

We would highlight the role Benefit Entitlement Checks can play in increasing the disposable income of vulnerable households

The NAO report 'The Warm Front Scheme' published in February 2009, noted that:

...the Scheme is only available to approximately 43 per cent of all vulnerable households in fuel poverty, and 35 per cent of all fuel poor households. One of the reasons is that many people do not claim benefits to which they are entitled: the Department for Work and Pensions has calculated, for example, that at least a third of people eligible for pension credit did not claim it in 2006-07.

It went on to note that those applying to the Scheme are offered a benefit entitlement check and that:

In 2007-08, eaga estimate that 5,500 customers who were not initially eligible for the Scheme, became eligible as a result of a benefit entitlement check, and that these checks have resulted in potential annualised additional benefits to claimants of approximately £35 million.

One of the biggest groups for whom benefit uptake is an issue are low income pension aged households. Through a combination of personal pride in not wanting to take money off the state, a perceived social stigma of claiming benefits or asking for help, and not understanding the complexities of the benefit system, a large number of households who could be eligible for assistance remain out of reach of assistance and in fuel poverty. The decision by DECC to remove benefit entitlement checks as part of the Warm Front scheme can only make this situation worse.

The average increase in benefits for households in Greater London that received a benefit check under the Warm Front scheme was £40.85 per week. Whilst the service is no longer provided as part of Warm Front, we now provide this as a service to other utilities such as SW Water who recognise the benefits that the service offers its customers.

Response to London Assembly investigation into fuel poverty in London
Islington Council
June 2011

CONTENTS

Islington Council welcomes this opportunity to contribute to London Assembly's investigation into fuel poverty in London. Tackling fuel poverty and improving seasonal health are council priorities and we have dedicated significant resource to tackling this problem in our borough.

1. Numbers in fuel poverty

Like the GLA, we take into account the high cost of housing in London when attempting to measure fuel poverty. Although Department of Energy and Climate Change figures estimate that fuel poverty in Islington was 12.5% in 2008[1] our own (conservative) estimate was that fuel poverty was around 22% (19,500 households). We have invested significantly in insulating our own stock over the past few years, stabilising this number to some extent in spite of fuel price rises however modelling work suggests that this will increase dramatically by the end of the decade.
Should the current Hills Fuel Poverty Review suggest a diluted definition of fuel poverty we recommend that the GLA retains its own current definition as this is well understood in London and allows us to track progress over time.

2. Those most at risk of fuel poverty

We believe that the following groups are most at risk of fuel poverty and its health impacts:

- Private tenants
- Older people
- People with support needs
- Lone parent families or low income families with young children
- People with cardiovascular or respiratory disease
- People with sickle cell disease or thalassaemia
- People living in older properties

3. The impact of fuel poverty and cold homes

Excess winter mortality

Excess winter mortality figures have tended to be broadly the same for Islington as for London as a whole. Between 2006 and 2008 deaths were 15% higher during winter. This figure is higher still for those aged 75, with a 23% higher rate of winter deaths between 2003 and 2008. Those over 75 account for 77% of all excess winter deaths[2]. Almost three-quarters of these deaths were attributable to cardiovascular disease and respiratory disease and these are closely linked to cold and damp homes.

Excess winter mortality is linked to poorly heated housing and low household income is a determinant of low indoor temperature. Those living in deprived communities are more likely to have many of the preconditions that lead to excess winter mortality and chronic obstructive pulmonary disorder (COPD) and cardiovascular disease levels are both associated with socioeconomic status[3] [4]. Evidence suggests that there is an approximately 50% increase in mortality in the coldest homes[5].

Winter hospital admissions

The elderly and the very young are both at higher risk of excess winter emergency hospital admissions. Hospital admission rates in Islington during the winter of 2008/09 were 31% higher for children under 5 and 18% higher for those aged over 75[6]. Respiratory and cardiovascular diseases again account for most of these admissions although we believe that the rate of admissions amongst young children may be largely caused by respiratory conditions resulting from cold and damp homes.

Damp and mould

Mould growth is less common in homes which have better insulation, good ventilation and air circulation and good heating not using unflued appliances. The presence of mould can have detrimental physical and psychological impacts and dust mites flourish in damp homes, which may contribute to asthma and eczema levels[7] [8]

Falls

Falls are the most serious and frequent home accident amongst older people as finger strength and dexterity deteriorate as temperatures drop[9]. Around 30% of those aged over 65 will fall each year (amounting to just over 5,000 people in Islington and 270,000 in London annually), with this rate doubling in nursing homes[10]. Over 96% of hip fractures are fall related and around 20% of hip fracture patients die within a year as a result of their fracture and 50% lose the ability to live independently[11].

Mental health

A study conducted in Tower Hamlets found significant contributions to depression from cold and damp homes[12] and another study of five cities indicated that people living in cold homes were likely to suffer from anxiety and depression[13].

Children and young people

Damp conditions are linked to childhood illness: mould resulting from dampness can lead to the development of asthma and this may stay with children for life, even when the child moves into a warmer, more energy efficient home[14]. There is also some evidence that children from colder homes are more likely to be admitted to hospital in early childhood, more likely to be underweight and experience higher absence rates from school due to respiratory illness[15] [16].

One large-scale English study found that adolescents living in cold homes had a seven times greater multiple mental health risk, thought to be due to the lack of personal space in poorly-heated homes where the family cluster in one room. Such overcrowded homes are to be found disproportionately in London[17].

4. The challenges facing London

A recent report identified many challenges to the effective alleviation of fuel poverty in London[18]. Despite having 15% of England's population, less than 5% of insulation jobs funded through the Carbon Emissions Reduction Target (CERT) took place in Greater London. Contributing causes are outlined below.

a. Wall type

Loft and cavity wall insulation currently attracts the majority of funding under CERT and these measures are frequently not suitable for London homes. Although there are opportunities for cavity wall insulation in London, many homes were built before 1964 and hence 57% have hard-to-treat solid walls. Solid wall insulation rarely attracts energy supplier funding therefore areas with high levels of solid walled properties lose out significantly on CERT funding.

b. Flats

London has a high proportion of flats, which are harder to retrofit, with just under 1 million purpose built flats and almost 400,000 converted flats[19]. There are several issues with works to flats such as the requirement of scaffolding, coordinating works between several parties and the allocation and management of funding between the able to pay and the priority group. The issues around leasehold law remain to date relatively unexplored but are likely to present the greatest challenges of retrofitting flatted buildings as most leases only allow for repairs and maintenance and are silent on the issue of improvements such as added insulation. In the absence of a legal review of this matter additional support for freeholders and leaseholders are required to tackle common parts of flatted buildings and a mechanism or obligation on the utilities to fully fund blocks of flats in the private sector would enable further CERT funding to be allocated in London.

c. Access and parking

Access and parking can be limited and costly and is acknowledged as a barrier to delivery and a disincentive for contractors to carry out works in London. A requirement for London to receive a proportional share of supplier obligation funding would require suppliers and their contractors to overcome these barriers.

d. The private rented sector

20% of households are privately rented in London compared to 12% nationally[20]. Properties in the sector are in worse overall condition than in other sectors (social housing or owner occupied), are poorly insulated and often house vulnerable families[21].The private rented sector has historically been hard to tackle due to the split incentive between landlord and tenant i.e. the landlord pays for any improvements but the tenant benefits from the saving from any installed energy efficiency measures through reduced fuel bills. Increased CERT activity in London providing part funded or fully funded measures under could help overcome this barrier and thus lead to reduced CO_2 emissions and further alleviate fuel poverty.

e. Conservation areas

It is estimated that around half of all dwellings in English conservation areas are in London, with 80% of these in Inner London boroughs[22]. With internal wall insulation and external wall insulation on the rear of buildings this need not be a barrier to insulation when the right skills and techniques are utilised and energy and conservation professionals work together.

f. Community Energy Saving Programme (CESP)

CESP was designed to finance longer payback measures such as solid wall insulation in the 10% most deprived Lower Super Output Areas (LSOAs) in England and Wales and 15% most deprived in Scotland but typically finances only around £15 per tonne of CO2, an amount generally inadequate to cover the cost of insulation measures in London. The cost of achieving CO2 savings in Westminster, for example, is estimated at £1,200-£1,500 per tonne of CO2. Other London boroughs have found CESP to be uneconomic and it will remain so without significantly greater funding.

Ofgem revealed in May 2011 that, despite London having 18% of the most deprived LSOAs in Great Britain, only 4% of schemes took place there during 2009 and 2010[23].

5. The Islington approach

The levels of deprivation in Islington, coupled with the numbers of hard to treat properties, mean that we have a take a specific approach.

Energy Advice Team
For over 20 years we have had our own dedicated advice helpline and drop-in facility for assisting residents with saving energy. Our advice line alone assisted over 1,400 residents with energy efficiency in 2010/11. We have also operated the Camden Energy Advice Helpline for over a decade with a similar number of enquiries each year.

Energy Doctor in the Community
Our intensive outreach service visits locations across the borough and delivers presentations in community venues, aimed at areas with vulnerable populations and groups working with vulnerable residents. Contacts are then followed up with phone calls. In 2010//11 we reached 750 residents.

Energy Doctor in the Home
Our home visiting service is aimed at vulnerable residents at risk of fuel poverty. The Energy Doctors visit homes and provide advice on saving energy and using heating most efficiently as well as fitting smaller measures such as draughtproofing and radiator panels. Clients are also identified for larger works such as heating and insulation improvements. In 2010/11 almost 800 residents were visited by the scheme.

Private sector housing
We have our own energy efficiency grant, Safe & Warm, available to owner-occupiers on means-tested or disability benefits. The eligibility criteria are far wider than that for Warm Front and the scheme provides heating and insulation improvements. In 2010/11 110 households had heating and insulation improvements carried out, around 4 times the number of households assisted through Warm Front. We are very proactive in private sector housing enforcement and offer partial grants for private landlords.

Social housing improvements
We have put significant effort into insulating and improving heating systems in our own stock. In 2010/11 we insulated over 6,800 lofts and cavity walls and replaced almost 1,000 boilers.

Warming by Degrees
In the first four months of 2010 this project delivered smaller energy efficiency measures to 1,250 homes in the south of the borough. Leads were generated

through door-knocking and the project was targeted at hard to treat homes.

Solid Wall Insulation Programme
We are currently running what we believe is the largest internal solid wall insulation programme to ever take place. During the final stages of our Decent Homes Programme around 60 solid walled council houses are being insulated, delivering significant energy savings for the residents.

Fuel Debt Action Plan
We have a specific Fuel Debt Action Plan, agreed with advice providers in the borough, which aims to ensure that clients in fuel debt are offered affordable warmth advice as a preventative measure wherever possible. Working with National Energy Action we have provided fuel debt training to a number of frontline advisory staff across the borough.

Fuel Switching Service
We promote our own freephone and online fuel switching service to encourage residents to switch to a cheaper energy supplier.

Seasonal Health Interventions Network (SHINE)
Working with health, social care and voluntary sector partners is crucial in addressing fuel poverty and excess seasonal deaths. During the winter of 2010/11 Islington Council and NHS Islington piloted a single point referral system allowing key front-line staff to make referrals for a package of affordable warmth, health, income and community support interventions. The programme is targeted at those over 75, people with cardiovascular or respiratory disease and low income families with young children as all of these groups have high winter mortality or morbidity levels. Over the 4-month winter period 408 referrals were received and over 1,200 interventions carried out. The project has now been made permanent and will be expanded upon this year. *Further details are attached.*

6. Action needed

1. There has to be increased delivery of funded insulation measures in hard to treat housing through the Green Deal and Energy Company Obligation.

2. A regional supplier obligation for London should be set for London. This should deliver insulation funding to London at a minimum of the same proportion as its population although additional funding could be provided to compensate for historical disadvantage and as a reflection of the number of hard to treat homes. The Secretary of State has the power to set a regional obligation through secondary legislation and the Mayor should lobby him to do so.

3. A mechanism needs to be found for funding the insulation of whole private or mixed tenure blocks.

4. Fuel poverty should be mapped across London using the GLA rather than government definition.

5. The Mayor should create an Affordable Warmth Road Map for London, setting out action required to eradicate fuel poverty in the capital by a given date.

6. The Mayor should establish a rolling programme of Energy Action Zones in each borough, led by the boroughs themselves, with the aim to fuel poverty-proof all homes in such zones. The first round of these zones would be in wards or areas with the highest levels of fuel poverty. Economies of scale would be expected in the improvement of hard to treat properties. Unlike the Low Carbon Zones these should have the alleviation of fuel poverty as their central aim and should be more ambitious in scope than RE:NEW.

7. Due to the large number of hard to treat properties in London, the Golden Rule for the Green Deal is less likely to be met for many Londoners. We are concerned that large amounts of the Energy Company Obligation will then go to subsidising measures for the affluent rather than to assist poorer and less financial attractive residents.

8. With the setting of an energy efficiency threshold for Warm Front of SAP 55 we believe that London will lose out disproportionately due to a high number of flats. No allowance is made for the higher cost of accommodation in London. The Mayor should monitor Londoners' take-up of Warm Front and analyse the extent to which poorer households are missing out.

9. Action must be taken to ensure that health and social care partners are aware of the importance of 'prescribing warmth'. We would suggest programmes similar to our own Seasonal Health Interventions Network are adopted across London and that efforts are made to firmly link the fuel poverty and seasonal mortality agendas. Due to the complexity of local service provision this would be best provided at sub-regional level or below.

10. With the removal of benefit entitlement checks from Warm Front assessments and significant welfare benefit changes due it must be ensured that an income maximisation element is retained in all schemes to address fuel poverty.

11. The Mayor should lobby for improved standards in private sector housing, particularly in regards to the following:

    a. Bringing forward start date for the minimum energy efficiency standard to 2016 at the latest, rather than 2018, and a gradually increasing standard
    b. Bring forward start date for local authorities and tenants to demand energy efficiency improvements from landlords to 2012 rather than 2015
    c. Ensure local authorities have the right to carry out works in default as an
    d. alternative to simply fining a landlord
    e. Protection from retaliatory eviction for tenants demanding energy efficiency improvements
    f. The introduction of a landlord register

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SHINE

Seasonal Health Interventions NEtwork

Refer via:
💻 www.islington.gov.uk/shine
✉ shine@islington.gov.uk
☎ 020 7527 2121
FAX: 020 7527 2332
💻 IAS eReferral

Referrals from partner agencies

Self-referrals

High-risk groups:
- Those aged over 75
- Those with respiratory disease
- Those with cardiovascular disease
- Low income families with children under 5

SHINE Hub

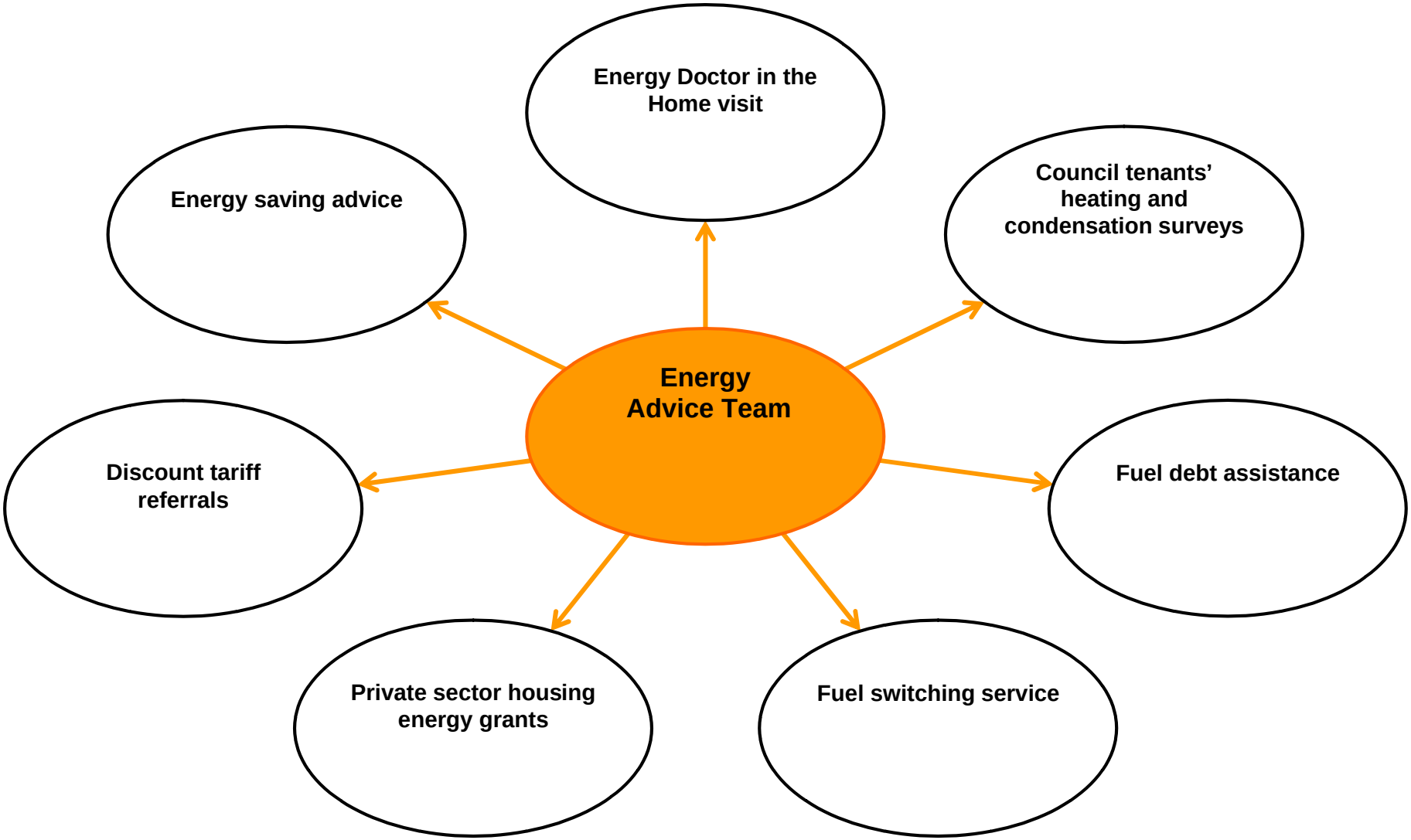
Client contacted within two weeks of receipt of referral and telephone assessment for interventions carried out. Hub collates information and reports back.

Energy Advice Team*	Welfare Rights (benefit check)	Community Pharmacist (med. use review)	GPs (med. review, flu jab)	NHS Health Checks	REACH Team (falls prevention; telecare)	Envmtl health (private sector hsg)	Fire Brigade (fire safety check)	Debt and financial advice	Floating Support
Energy and water companies' priority registers	Message in a Bottle	Disability Action in Islington	Age UK Home from Hospital	London Taxicard	Befriending Services	Disabled Facilities Grant	airTEXT (air quality alerts)	Police Home Security Check	Handyperson Service

*See overleaf for full service

NB: A light orange box indicates that those services will be signposted to

Full illustration of services available through Energy Advice Team



Seasonal Health Interventions Network (SHINE)

Phase 1 Evaluation

April 2011

John Kolm-Murray, Seasonal Health & Affordable Warmth Co-ordinator
020 7527 3800 **john.kolm-murray@islington.gov.uk**

Summary

The Seasonal Health Interventions Network (SHINE) was established to tackle excess seasonal deaths and hospital admissions and fuel poverty in a holistic and systematic manner amongst Islington's vulnerable population. Phase 1 ran from December 2010 to March 2011 and was well-received by the first cohort of referrers and clients, with over 400 referrals made and over 1,200 interventions assessed for. Satisfaction with the service was also high amongst both referrers and residents. The project has been successful in engaging with its target groups and adding value to existing services.

1. Objective of the Project

SHINE was established to underpin multiple aims of the Seasonal Health and Affordable Warmth Strategy by developing a systematic, single point referral system.

SHINE aims to improve the health and wellbeing of vulnerable Islington residents by providing a single access gateway for the provision of affordable warmth, health, income maximisation, safety and security measures in the home. The network enables health, social care and community staff to refer clients for a wide range of services quickly and easily using through one referral point.

2. Background

2.1 The Idea

Islington was visited by the Health Inequalities National Support Team (HINST), who commended our existing work on affordable warmth but made a number of recommendations aimed at systematically reducing our seasonal excess deaths. These formed the kernel of a joint Seasonal Health and Affordable Warmth Strategy, published in October 2010. Where we departed significantly from the recommendations of the HINST was in the format of delivering systematic interventions. HINST recommended that key staff made referrals themselves for up to nine interventions; we believed that this would not be systematic enough and we had to reduce the burden as much as possible to incentivise staff to make referrals. From this a plan for a single point referral system was developed.

2.2 The Evidence Base

Similar networks have been developed in other areas, notably Camden, Greater Manchester, Luton and York. Whilst the scope and interventions offered varied considerably between these schemes, and the schemes themselves changed as they grew, there was sufficient evidence that a direct referral model is successful in targeting interventions. This is described more fully in Section 3 below.

2.3 The Advent

The Seasonal Health Interventions Network (SHINE) began on 1st December 2010 and the SHINE Hub was located in the then Green Living Advice Team (now Energy Advice Team). A package of 13 interventions was developed and almost 200 key staff trained in using the network. A target of 300 referrals received and processed was set for the four month duration of Phase 1 from December to March inclusive.

2.4 The Target

The target of 300 was exceeded in mid-February, over six weeks ahead of schedule. This compares extremely favourably with similar projects in other areas. By 31st March 408 referrals had been received, 36% above target.

2.5 The Interventions

Expanding upon the recommendations of the HINST, the following list of interventions was compiled:

1. Affordable warmth advice
2. Benefit check
3. Medicines utilisation review
4. Medication review
5. Flu and pneumococcal vaccination
6. Health interventions plan
7. Falls prevention assessment
8. Telecare
9. Befriending services
10. Message in a Bottle
11. Advice and support for people with disabilities
12. Private sector housing hazards assessment
13. Fire safety check

With the exception of Interventions 3-5, all were made by direct referral. We believed that merely signposting vulnerable individuals would not achieve the objective of systematic interventions but 3-5 were too complex to implement direct referrals for at this stage due to multiple independent providers and the need for the provider to have knowledge of the patient's medical history.

Further interventions were added during December and January but these are not included in this evaluation.

14. airTEXT (air quality alerts)
15. Home from Hospital Service
16. London Taxicard
17. Disabled Facilities Grant

By 31st March clients had been referred for a total of 1,229 interventions, an average of 3.01 interventions per client.

2.6 The Referrers

A number of teams were recruited to the network in Phase 1.

- Green Living Advice Team
- Community Rehabilitation Team
- Reablement Service
- Whittington Hospital Social Work Team
- REACH Team
- Access Service
- District Nursing Service
- Homes for Islington Housing Support Team
- Homes for Islington Income Recovery Team
- Energy Doctors in the Home
- Social Services Locality Teams
- Welfare Rights Unit
- Friendship Phone Network
- Dorcas Project
- Finsbury & Clerkenwell Volunteers
- Disability Action in Islington
- Residential Environmental Health Service
- Help on Your Doorstep
- Islington Working for Parents

There were approximately 200 staff involved in the network.

2.7 Client group profile

SHINE has been quite successful in reaching out to its key target groups, with significant numbers of those aged over 75 referred in particular.

Table 1: Clients referred to SHINE by key characteristic

Characteristic (* = key target group)	**%**
Aged 75 or over*	43
Diagnosis of cardiovascular disease*	16
Diagnosis of respiratory disease*	17
Female	68
Non-White British	45
Aged between 55 and 74	23
Children younger than 16 at home	26
History of falls in the past year	16
On four or more medications	37
Balance problems	25
Disabled	53
Diagnosis of Parkinson's disease	2
In receipt of means-tested or disability benefits	90
Social housing tenants	76

2.8 Interventions take-up

As Table 2 below demonstrates, there were different levels of take-up for different interventions. The most important point to note here is that not all clients are eligible for all interventions. Clients not of pensionable age (around 40%) are not normally offered the majority of interventions. Taking this into account take-up rates amongst specific target groups was actually high.

Table 2: Take-up of interventions (%)

Affordable warmth advice	97
Benefit check	26
Medicines utilisation review	29
Medication review	23
Flu and pneumococcal vaccination	23
Health interventions plan	1
Falls prevention assessment	14
Telecare	5
Befriending services	11
Message in a Bottle	42
Advice and support for people with disabilities	8
Private sector housing hazards assessment	5
Fire safety check	33

3. Best Practice from Elsewhere

3.1 Camden

In 2005 Camden established their WISH scheme (Warmth, Income, Security, Health) as a single point referral system. The project was not so overtly focussed on reducing seasonal excess morbidity and mortality but offered a very similar range of services to SHINE. In the first full year (2005/06) of the service they received 280 referrals, passing them on to eleven agencies.

3.2 Greater Manchester

In 2004, Oldham Council began an affordable warmth referral scheme which by 2009 included all boroughs in Greater Manchester. In the first full year of the project (2005/06) 257 referrals were received across three boroughs and passed to thirteen agencies. Being focussed more on affordable warmth it provided on-referrals for benefits, debt, energy efficiency, fire safety, emergency heating and home repairs. In 2008 this developed into the Affordable Warmth Referral Mechanism (AWARM), funded by the Department of Health for two years. By 2009/10 the number of referrals had reached 1,690 across ten boroughs.

3.3 York

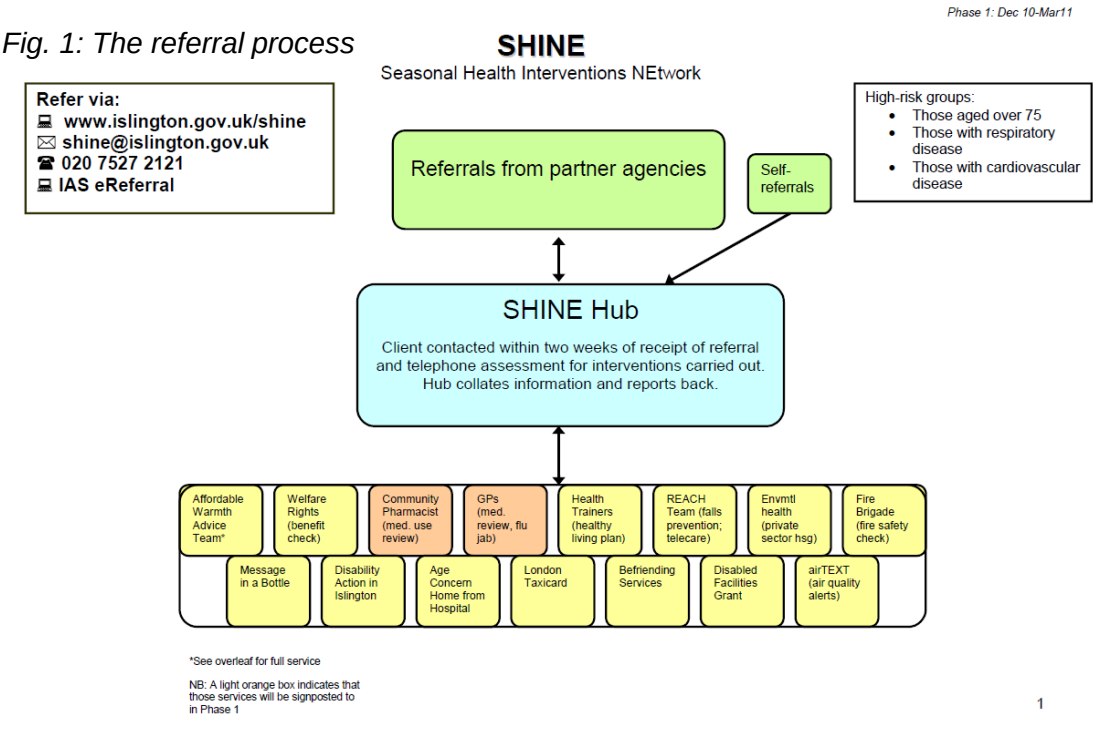
In July 2009, York adopted a model promoted by National Energy Action called Hotspots. Hotspots processes referrals for benefits, energy efficiency, fire safety and home repairs across a total of six agencies. Over the 18-month period from July 2009 to December 2010 620 referrals were received.

3.4 Luton

Luton has operated an affordable warmth referral scheme since 2001. The scheme was initially focussed on securing referrals for energy efficiency, income maximisation and social services support. Since 2001 the scheme has received around 5,000 referrals.

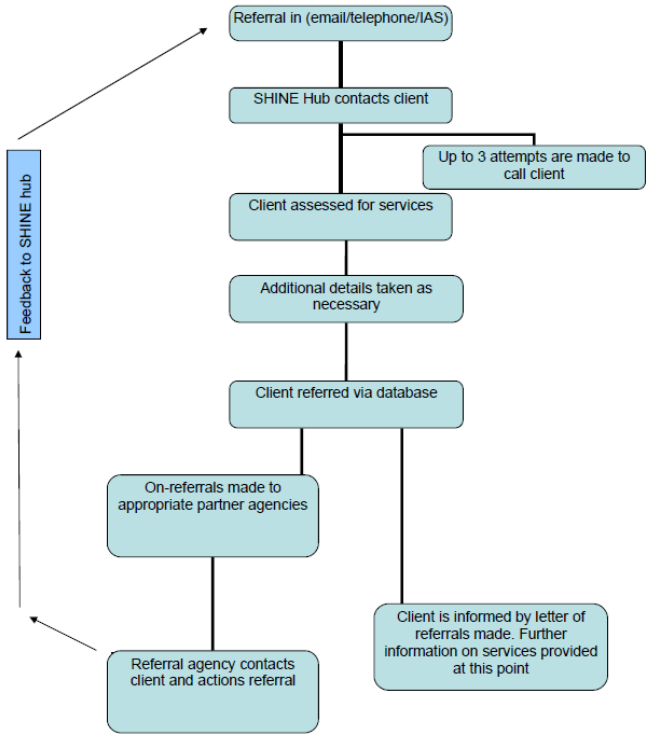
4. The Mechanics of SHINE (as at 1st March 2011)

Fig. 1: The referral process



5.2 The SHINE process within the Hub

Fig. 2: The process within the SHINE Hub



5. The Evaluation

5.1 The purpose of the evaluation

- To identify what elements of SHINE are working well and what elements are not
- To inform Phase 2

5.2 The timescale of the evaluation

The evaluation began on 1st March 2011 but only service providers and recipient agencies recruited during December 2010 and January 2011 were included. Only residents referred by 31st January 2011 were surveyed to allow time for most interventions to take place.

6. Evaluation Results

6.1 Group A: The Referrers

200 members of the referral network were sent a short survey. Responses were received from 43 people (22%).

- 60% of respondents reported that they had made referrals to SHINE. 78% of these had made fewer than 5 referrals.
- 30% said that they were familiar with SHINE. 35% were unfamiliar.
- 96% found it easy to make SHINE referrals. 4% found it difficult.
- 62% agreed that SHINE helped them in assisting their service users. 3% disagreed.
- 72% agreed that SHINE added value to their service. 0% disagreed.

Fig. 3: Likelihood of making referrals to services without SHINE

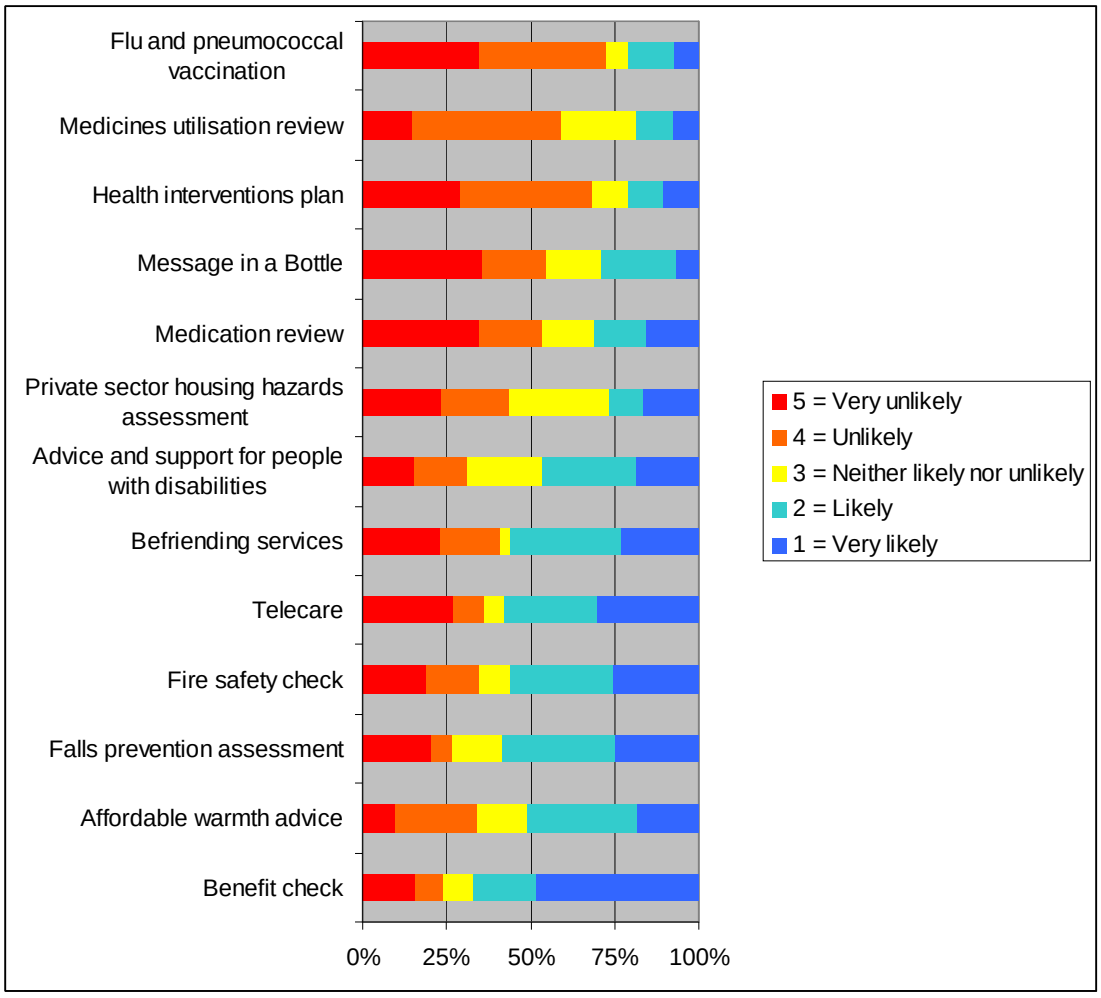


Fig. 3 above shows referrers' perceptions of how likely it is that they would have referred to SHINE interventions in the absence of the network. It demonstrates SHINE's potential for significantly increasing referrals across the board.

6.2 Group B: The Interventions Provider

Ten interventions providers were sent a short survey. Five of these interventions providers responded (50%).

- 75% agreed that SHINE added value to their service. 0% disagreed.
- 80% reported that some of the referrals they received were inappropriate.

- 60% reported that some of the clients referred were already known to their service.

6.3 Group C: The Service Users

The 267 service users referred through SHINE during December 2010 and January 2011 were sent a short survey. Responses were received from 86 people (32%).

- 60% were not aware of the services they were referred to beforehand. 34% were aware.
- 60% said that it was unlikely they would have accessed the services otherwise. 40% said that they would have.
- 89% found the referral scheme useful. 11% did not find it useful.
- 85% were satisfied with the services that they were referred for. 9% were unsatisfied.

7. Outcomes: Two Case Studies

With over 400 referrals and 1,200 interventions it is not possible or desirable in this document to give a detailed account of all cases but the below case studies provide examples of the sort of work being carried out by SHINE.

Mrs W of N7 has cardiovascular disease, is disabled and aged between 55 and 74. She is on 4 or more medications and reports balance problems. She was referred for befriending services, Telecare and an Energy Doctor in the Home visit. She is currently on the waiting list for telephone befriending with the Friendship Phone Network and they are pursuing information around decorators for her. REACH are currently processing her referral for Telecare, and the Energy Doctor visited Mrs W and installed a variety of water and energy saving devices. Staff in the SHINE Hub signposted her to her GP to have a flu vaccination and discussed grants that were available to her as well as actions she could take herself to make her home warm and comfortable.

Ms S of N5 is disabled, receives benefits and reports problems with her balance. She was referred to Disability Action in Islington (DAII) for support, for a Falls Assessment, a benefit check, an Energy Doctor in the Home visit and also referred for a CHEEP (Council Housing Energy Efficiency Programme) grant for heating controls. DAII provided her with information and advice. REACH are currently processing the client for a Falls Assessment and the client is due to have an Energy Doctor visit shortly. The Energy Advice Team advised her on small measures and behavioural advice on draught proofing her property and heating her home.

No More Lagging Behind: Securing London's fair share of insulation funding

Irene Fernow (Westminster City Council)
John Kolm-Murray (London Borough of Islington)

May 2011

1. Summary

Despite having 15% of England's population, less than 5% of jobs funded through the Carbon Emissions Reduction Target (CERT) have taken place in Greater London. With each household required to contribute through their energy bills, Londoners have lost out on millions of pounds compared to other English regions and are effectively subsidising the other regions. This briefing examines the causes of London's shortfall and makes a number of recommendations to compensate for the region's challenges. Fairer distribution of CERT must take place to reduce fuel poverty and carbon emissions across London.

2. Fuel poverty in London

Fuel poverty statistics published by DECC[1] in October 2010 show that 10.8% of Londoner's were in fuel poverty[2] in 2008. The Greater London Authority takes into account London's high housing costs and estimated that this figure was actually 24% in 2008[3]. The UK Fuel Poverty Strategy published in 2001 sets the target[4] of eradicating fuel poverty as far as reasonably practicable by 2016[5]. There are currently no reporting requirements for local authorities on fuel poverty figures following the recent disbanding of national indicators including NI187: Tackling fuel poverty[6]. Despite the lack of reporting requirements many local authorities have an ongoing commitment to reduce fuel poverty and will continue to carry out activities through political and local leadership.

In contrast to rural areas, where much fuel poverty can be attributed to the properties not being supplied by mains gas, fuel poverty in London can be strongly attributed to the high proportion of hard to treat properties. London has significantly more hard to treat properties than any other English region, at 71%.[7] Most of these properties are hard to treat due to having solid walls and would therefore be best addressed by solid wall insulation. Inner London, where hard to treat properties are particularly common, contains 4 of the 10 most deprived local authority areas in England. With the regulator Ofgem predicting that energy bills could rise by up to 25% above inflation by 2020 solid walled homes will be increasingly disadvantaged compared to those properties that are easier to treat.[8]

3. Domestic energy consumption and climate change

The Climate Change Act 2008 set legally binding emission reduction targets by the Government for a reduction of 34 percent in greenhouse gas emissions by 2020 and for a reduction of at least 80 percent in greenhouse gas emissions by 2050. The Mayor of London has further set a target for the city to reduce its CO_2 emissions by 60% by 2025. In 2007 London household energy use made up 38 per cent of the total emissions produced by the city compared to 27% nationally[9]. In 2008 100 authorities signed up to National Indicator (NI) 186 'per capita CO2 emissions[10] in their Local Area Agreements (LAA). LAA and all NIs have now been dropped by Government but local authorities remain a key player in achieving Governments greenhouse gas emissions reduction targets.

Reducing household energy consumption is central to efforts to mitigate climate change nationally and reduce London's CO_2 emissions and will further help decrease fuel poverty by reducing household energy bills[11]. Not all sectors are well placed to achieve such reductions and household emissions is one of the areas that are expected to be required to go beyond the 80% reduction target in order for the overall target to be meet.

4. Carbon Emissions Reduction Target (CERT)

The Carbon Emissions Reduction Target (CERT) requires all domestic energy suppliers with a customer base in excess of 50,000 customers to make savings in the amount of CO_2 emitted by householders and is one of the key national initiatives to do so. Suppliers meet this target by promoting the uptake of low carbon energy solutions to household energy consumers, thereby assisting them to reduce the carbon footprint of their homes. CERT, the third supplier obligation phase[12], was introduced in 2008 and comes to an end in December 2012. Under the current obligation domestic energy suppliers are required to save a total of 293 million tonnes of CO_2. CERT is funded through a levy on the end users utility bills for gas and electrics, to be £61 per household by 2012[13].

CERT funded measures must be approved by OFGEM who administer the scheme and approved measures must demonstrate an ability to reduce CO_2 emissions when used in an average home. To date utilities have predominantly focused on the deployment of the most cost-effective measures with the highest attached carbon saving such as loft and cavity wall insulation. A CERT update from Ofgem in February 2011[14] show that 61% of CERT CO_2 savings have been achieved through insulation and 26% from lighting[15], this translates to 1,412,524 cavity walls 1,743,104 loft insulations (excluding DIY) and only 35,815 solid walls to date.

Whilst full details are not yet available the Energy Company Obligation (ECO) is expected to succeed CERT in late 2012, in tandem with the Green Deal programme.

5. The causes of London's CERT shortfall

London receives less CERT funding than any other region, according to a report recently published by the Energy Saving Trust (EST). The report is based on data from the Home Energy Efficiency Database (HEED) (Q8) and provides an update on the number of reported lofts and cavities insulated under CERT[16]. The figures show that out of a total of 1,911,677 insulation measures undertaken in England only 91,368 of these were in London, this is substantially lower than neighbouring regions and the five local authorities with the lowest insulation rates are all in London (see Appendix 1).

Low CERT expenditure in London can be attributed to a number of factors such as the nature of the housing stock, access, ownership and parking.

a. Wall type

Loft and cavity wall insulation currently attracts the majority of funding under CERT and these measures are frequently not suitable for London homes. Although there are opportunities for cavity wall insulation in London, many homes were built before 1964 and hence 57% have hard-to-treat solid walls. Solid wall insulation rarely attracts energy supplier funding therefore areas with high levels of solid walled properties lose out significantly on CERT funding.

b. Flats

London has a high proportion of flats, which are harder to retrofit, with just under 1 million purpose built flats and almost 400,000 converted flats[17]. There are several issues with works to flats such as the requirement of scaffolding, coordinating works between several parties and the allocation and management of funding between the able to pay and the priority group. The issues around leasehold law remain to date relatively unexplored but are likely to present the greatest challenges of retrofitting

flatted buildings as most leases only allow for repairs and maintenance and are silent on the issue of improvements such as added insulation. In the absence of a legal review of this matter additional support for freeholders and leaseholders are required to tackle common parts of flatted buildings and a mechanism or obligation on the utilities to fully fund blocks of flats in the private sector would enable further CERT funding to be allocated in London.

c. Access and parking

Access and parking can be limited and costly and is acknowledged as a barrier to delivery and a disincentive for contractors to carry out works in London. A requirement for London to receive a proportional share of supplier obligation funding would require suppliers and their contractors to overcome these barriers.

d. The private rented sector

20% of households are privately rented in London compared to 12% nationally[18]. Properties in the sector are in worse overall condition than in other sectors (social housing or owner occupied), are poorly insulated and often house vulnerable families[19].The private rented sector has historically been hard to tackle due to the split incentive between landlord and tenant i.e. the landlord pays for any improvements but the tenant benefits from the saving from any installed energy efficiency measures through reduced fuel bills. Increased CERT activity in London providing part funded or fully funded measures under could help overcome this barrier and thus lead to reduced CO_2 emissions and further alleviate fuel poverty.

e. Conservation areas

It is estimated that around half of all dwellings in English conservation areas are in London, with 80% of these in Inner London boroughs[20]. With internal wall insulation and external wall insulation on the rear of buildings this need not be a barrier to insulation when the right skills and techniques are utilised and energy and conservation professionals work together.

f. Community Energy Saving Programme (CESP)

CESP was designed to finance longer payback measures such as solid wall insulation in the 10% most deprived Lower Super Output Areas (LSOAs) in England and Wales and 15% most deprived in Scotland but typically finances only around £15 per tonne of CO2, an amount generally inadequate to cover the cost of insulation measures in London. The cost of achieving CO2 savings in Westminster, for example, is estimated at £1,200-£1,500 per tonne of CO2. Other London boroughs have found CESP to be uneconomic and it will remain so without significantly greater funding.

Ofgem revealed in May 2011 that, despite London having 18% of the most deprived LSOAs in Great Britain, only 4% of schemes took place there during 2009 and 2010[21].

6. Making CERT fairer for London

The future of the supplier obligation post CERT is as yet unclear but the Government confirms that a new obligation will be put in place. The obligation on utilities to make savings in the amount of CO_2 emitted by householders is paid for by the householder. To date London has received a very limited amount of the funding available despite Londoner's paying the same as households in other regions and some form of ring fencing of any future schemes is required. Despite having 15% of

the population of England, less than 5% of CERT jobs were carried out in London (see Appendix 1).

If utilities were required to spend a fair share of the monies by region the scheme would not only be fairer for consumers but it is likely that there would also be an increase in the spend on hard to treat measures such as solid wall insulation. Increased spend on hard to treat measures would have the added benefit of contributing to the development of the market, drive innovation and provide ecommies of scale.

Funding which can be used to improve the thermal efficiency of the London housing stock has the potential to mitigate climate change through reduced energy consumption to heat and cool homes in the summer which would also assist Londoner's in fuel poverty.

Increased allocation of current and future supplier obligation funding for London would enable London local authorities to reduce fuel poverty and carbon emissions. With such a high proportion of hard to treat homes in London measures will have to be taken to ensure Green Deal take-up, since the higher cost of carrying out the measures in such properties will make the offer less attractive and mean that costs outweigh savings.

7. Recommendations

We call for the following:

1. Increased delivery of funded insulation measures in hard to treat housing through the Green Deal and Energy Company Obligation.

2. A regional energy supplier obligation for London. This should deliver insulation funding to London at a minimum of the same proportion as its population although additional funding could be provided to compensate for historical disadvantage and as a reflection of the high number of hard to treat homes.

3. A mechanism for funding whole private sector blocks.

4. Area-based insulation programmes for Inner London to overcome its particular challenges. These should aim for economies of scale to reduce the cost of insulating hard to treat homes and could be delivered by larger energy supplier contributions to CESP or similar.

APPENDIX 1

Notes: CERT totals are for 2008-2010 and from Energy Saving Trust (2010)
Household numbers are those for 2008 from DCLG projections to 2033 (2010)
'Outer Ring' is defined as all local authority areas bordering Greater London
CWI = Cavity wall insulation LI = loft insulation

Borough	Households	CERT CWI no.	CERT CWI (%)	CERT LI no.	CERT LI (%)
City of London (not counted)	*7000*	*n/a*	*n/a*	*n/a*	*n/a*
Camden	103000	1459	1.42	216	0.21
Hackney	90000	459	0.51	465	0.52
Hammersmith & Fulham	76000	134	0.18	471	0.62
Haringey	98000	389	0.40	1031	1.05
Islington	87000	706	0.81	328	0.38
Kensington & Chelsea	85000	245	0.29	160	0.19
Lambeth	126000	1988	1.58	1319	1.05
Lewisham	115000	942	0.82	1825	1.59
Newham	92000	267	0.29	1793	1.95
Southwark	124000	474	0.38	666	0.54
Tower Hamlets	93000	372	0.40	301	0.32
Wandsworth	126000	420	0.33	1807	1.43
Westminster	120000	71	0.06	145	0.12
INNER LONDON	**1335000**	**7926**	**0.59**	**10527**	**0.79**
Barking & Dagenham	68000	907	1.33	2038	3.00
Barnet	137000	1296	0.95	3031	2.21
Bexley	93000	1776	1.91	3081	3.31
Brent	98000	2117	2.16	2914	2.97
Bromley	133000	3157	2.37	4590	3.45
Croydon	146000	1864	1.28	3730	2.55
Ealing	124000	981	0.79	2218	1.79
Enfield	117000	874	0.75	2876	2.46
Greenwich	97000	737	0.76	1741	1.79
Harrow	86000	1060	1.23	2238	2.60
Havering	96000	2241	2.33	4165	4.34
Hillingdon	102000	2009	1.97	2900	2.84
Hounslow	92000	879	0.96	1733	1.88
Kingston upon Thames	68000	853	1.25	1425	2.10
Merton	87000	451	0.52	1788	2.06
Redbridge	101000	654	0.65	2698	2.67
Richmond upon Thames	83000	536	0.65	1455	1.75
Sutton	82000	829	1.01	1859	2.27
Waltham Forest	91000	558	0.61	2655	2.92
OUTER LONDON	**1901000**	**23779**	**1.25**	**49135**	**2.58**
Brentwood	30000	1740	5.8	1038	3.46
Broxbourne	36000	1556	4.32	1269	3.53
Dartford	39000	915	2.35	1426	3.67
Elmbridge	54000	1414	2.62	1483	2.75
Epping Forest	52000	1740	3.35	1388	2.67
Epsom & Ewell	29000	777	2.68	894	3.08
Hertsmere	40000	1668	4.17	1341	3.35

Mole Valley	35000	1275	3.64	1310	3.74
Reigate & Banstead	55000	1484	2.70	1939	3.53
Sevenoaks	46000	1593	3.46	1624	3.53
Slough	48000	2135	4.64	1408	3.06
South Bucks	26000	1165	4.48	1178	4.53
Spelthorne	39000	1402	3.59	1407	3.61
Tandridge	33000	1167	3.54	1231	3.73
Three Rivers	35000	1248	3.57	1413	4.04
Thurrock	64000	2169	3.39	1580	2.47
Welwyn Hatfield	45000	1760	3.91	1093	2.43
OUTER RING			**AVE: 3.66**		**AVE: 3.36**
GREATER LONDON	**3236000**	**31705**	**0.98**	**59663**	**1.84**
SOUTH EAST	**3480000**	**134241**	**3.86**	**128460**	**3.69**
EAST OF ENGLAND	**2406000**	**83434**	**3.47**	**103461**	**4.30**
ENGLAND	**21731000**	**864220**	**3.98**	**1047457**	**4.82**

APPENDIX 2: CERT-FUNDED INSULATION JOBS IN LONDON MAPPED

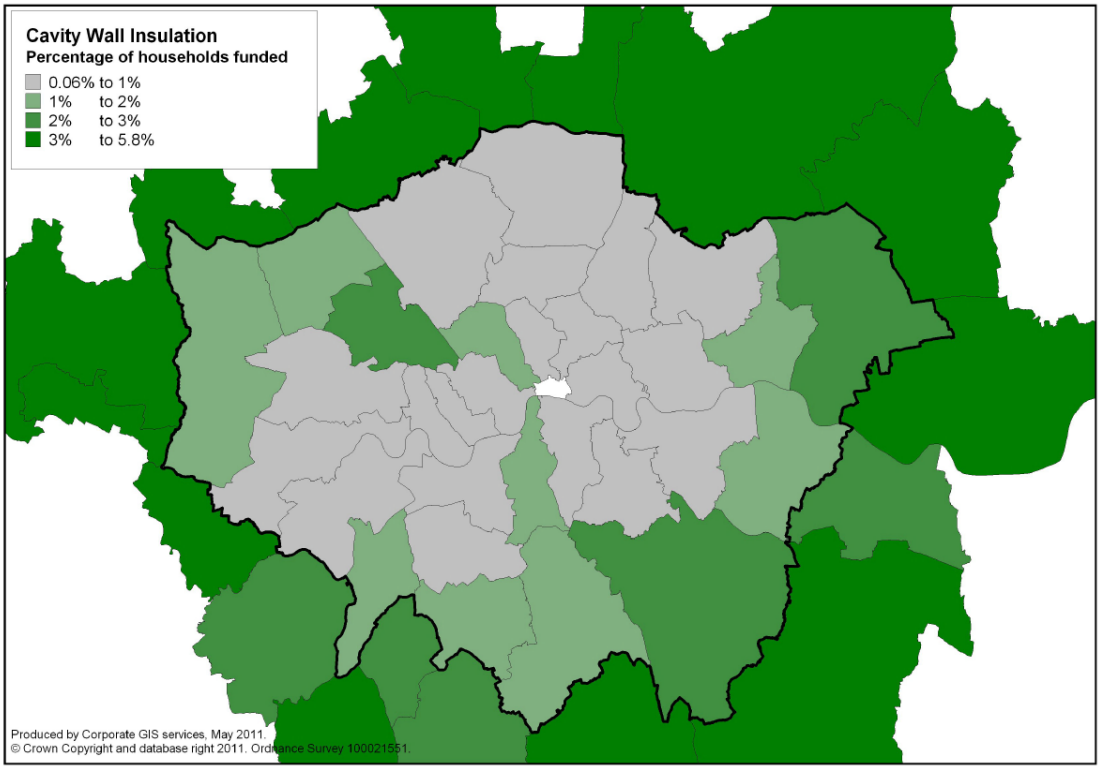


Fig 1. CERT-funded cavity wall insulation jobs 2008-2010: London and environs

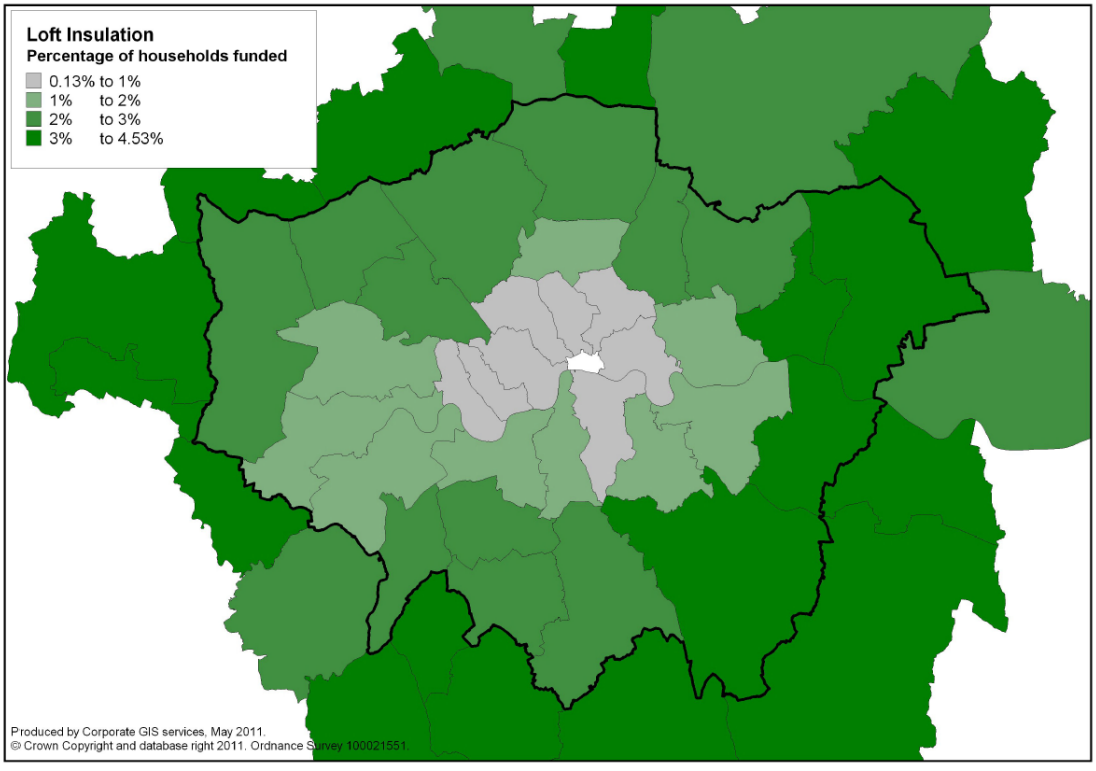


Fig. 2. CERT-funded loft insulation jobs 2008-2010: London and environs

1 , Trends in fuel poverty, England: 2003 to 2008. DECC. http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx

2 A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area, and 18 degrees for other occupied rooms).

3 Fuel Poverty in London: Figures and tables illustrating the challenge of tackling fuel poverty, July 2009 http://legacy.london.gov.uk/mayor/publications/2009/docs/fuel-poverty-jul09.pdf

4 The Government intends to initiate an independent review of the fuel poverty target and definition before the end of the year.

5 The interim target of eradicating fuel poverty by 2010 amongst vulnerable households was not meet.

6 Prior to NI 187 reporting was carried out annually by local authorities under the Home Energy Conservation Act 1995 (HECA) in 2005 which required local authorities to report on domestic energy efficiency improvements.

7 A study of Hard to Treat Homes using the English House Condition Survey. Part 1: Dwelling and Household Characteristics of Hard to Treat Homes. BRE, 2008 http://www.bre.co.uk/filelibrary/pdf/rpts/Hard_to_Treat_Homes_Part_I.pdf

8 'Ofgem publishes a comprehensive review of Britain's energy supplies'. Ofgem press release, 09/10/2009.

9 'Britain's CO2 emissions could be cut by 80%, Daily Telegraph, 27/11/2007, http://www.telegraph.co.uk/earth/earthnews/3316111/Britains-CO2-emissions-could-be-cut-by-80.html. 38% of London's total CO2 emissions in 2006 came from domestic consumption

10 Letter from DCLG to Local Authority Chief Executives, 17/11/2008, http://www.communities.gov.uk/documents/housing/pdf/1149883.pdf

11 Programmes top reduce household energy consumption: Fifth report of session 2008-09, House of Commons Public Accounts Committee, February 2009. http://www.publications.parliament.uk/pa/cm200809/cmselect/cmpubacc/228/9780215526618.pdf

12 The original Energy Efficiency Commitment 1 (2002-2005) required all electricity and gas suppliers with 15,000 or more domestic customers to achieve a combined energy saving of 62 TWh and in the Energy Efficiency Commitment 2 (2005-2008) energy saving targets were raised to 130 TWh suppliers, and here suppliers with at least 50,000 domestic customers (including affiliated licenses) were eligible for an obligation.

13 'Paving the way for a Green Deal'. Department of Energy and Climate Change, June 2010.

14http://www.ofgem.gov.uk/Sustainability/Environment/EnergyEff/CU/Documents1/CERT%20Q9%20Update.pdf

15 Please note that low energy lighting is no longer a qualifying measure under CERT

16 CERT report from HEED by region Energy Saving Trust. http://www.energysavingtrust.org.uk/business/Business/Information-centre/Homes-Energy-Efficiency-Database-HEED/CERT-reports-from-HEED/CERT-report-from-HEED-Q8-by-region

17 Pan-London Homes Energy Efficiency Programme: Overview Presentation. London Councils. http://www.londoncouncils.gov.uk/London%20Councils/Capital%20Ambition/5DRCustomerInsightPresentation23Sept2009.ppt

18 Housing tenure of Households, borough, Greater London Authority (Aug 2010). http://data.london.gov.uk/datastore/package/housing-tenure-households-borough

19 Minimum Energy Efficiency Standards for Private Rented Homes, Friends of the Earth (Aug 2010) http://www.foe.co.uk/resource/briefings/private_rented_homes.pdf

20 Bottrill, C. 'Homes in Historic Conservation Areas in Great Britain: Calculating the Proportion of Residential Dwellings in Conservation Areas'. Environmental Change Institute, University of Oxford. Aug. 2005.

21 Ofgem's Report on the Community Energy Saving Programme (CESP 2009-2012, to 31 December 2010. Ofgem, May 2011.

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Ms J Sloman
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Date: 10th June 2011
Our ref: GLA / Fuel Poverty
Direct dial: 020 8489 1468
Email: John.Mathers@haringey.gov.uk

Dear Ms Sloman,

RE: London Assembly Investigation into Fuel Poverty

I would like to begin by saying that I very much welcome the decision of the London Assembly to investigate Fuel Poverty within the capital, and am grateful for the opportunity to submit my views.

1) Data

Numerical estimates of fuel poverty in England are derived from a series of models, each of which relies on inputs from a variety of sources, many of which are approximations. For example, the energy supplier (and hence the tariff) used by a household is not taken into account, but a standard figure is assigned to each household dependent on region and method of energy bill payment. Nonetheless following review by the UK Statistics Authority in early 2010 the Fuel Poverty Statistics were granted National Statistics status.

Hence, although we can perhaps be confident that the data on fuel poverty, though historical, is accurate I don't think it helpful that there are numerous definitions of fuel poverty in current usage. I particularly don't think it is helpful for there not to be agreement on whether housing costs should be included or not and would like to see this clarified. I would like to see a definition based on disposable income (i.e after housing costs) as I think that this would better enable comparison of fuel poverty levels throughout the country, as it is housing costs which vary most significantly.

I don't think that fuel poverty in London is different to fuel poverty in other areas of the country, save that housing costs are higher and hence this further supports the idea of using disposable income rather than any other definition of income.

2) Energy Companies' Action on Fuel Poverty

This is something that I feel very strongly about. In previous years successive Governments have sought to shift responsibility for tackling fuel poverty to the energy companies, which to my mind is a huge error of judgement. Energy companies exist solely to generate profits for shareholders. They resent the obligations placed upon them, seek to discharge them as economically as possible and ultimately recharge all the costs that they incur back to their customers.

a. CERT

   The energy companies have met 26% of their CERT obligation through the distribution of 276, 476, 195 low energy light bulbs.

b. CESP

   The energy companies have collectively decided that Local Authorities need to contribute at least 50% towards any potential CESP scheme, which has resulted in only 27 schemes being approved by OFGEM as at April 2011. Furthermore due to the match funding obligation these 'CESP schemes' are typically Decent Homes schemes already planned and funded by Local Authorities for which a utility company has provided a small amount of additional funding for some additional CESP qualifying measures.

c. Feed in Tariffs

   The feed in tariffs are extremely generous, guaranteed for 20 years and paid by energy suppliers. However, this has resulted in the anomalous and manifestly unfair situation whereby vulnerable low income households contribute towards the energy bills of wealthy households that are able to install solar panels.

Overall I don't think that it is helpful to place further obligations on energy suppliers and generators, in part because 20% of energy bills are already due to Government obligations, but also because it is disingenuous to try and shift the responsibility for tackling fuel poverty in this manner. I think it of paramount importance to reduce energy bills, in particular for vulnerable households, as much of the increase in the incidence of fuel poverty can be attributed to rising fuel bills; homes are generally becoming more energy efficient, incomes are more or less stable and fuel consumption is reducing year on year.

What I would like to see is the energy companies forced to ensure that anyone deemed to be vulnerable is on the best possible tariff for their particular circumstances, and perhaps even a special tariff introduced for those in fuel poverty, which should have the

costs of contributing to climate change efforts etc. stripped out and be very nearly what the cost price is to the supplier.

Historically London has received very little funding from the CERT programme, to which London households have contributed disproportionately. Furthermore it looks as if London households will not benefit to any great extent from CESP, despite there being a significant number of CESP eligible Lower Super Output Areas within the capital. This is in part due to the fact that much of the housing stock in London is 'hard to treat' consisting of solid wall properties and few loft spaces.

Henceforth I would like to see the London Mayor vigorously lobby Government so as to ensure that future schemes cater for the housing stock in London, and hence enable London to receive a fair share of what is on offer.

3) Mayor's Role

In recent years the Mayor has given his backing to several highly successful climate change / carbon reduction schemes; RE:NEW and Low Carbon Zones being perhaps the best known pan – London programmes. Whereas I appreciate that any scheme to reduce carbon emissions will reduce the incidence of fuel poverty by making a property more energy efficient, I would very much like for the Mayor to instigate a programme explicitly targeted at addressing fuel poverty in London. For example I would like to see a series of 'Affordable Warmth Zones' established across London, selected, funded and monitored in much the same way as the Low Carbon Zones.

I very much hope that this investigation is the first step towards the Mayor taking more of an interest in Fuel Poverty and that the topic will become much more of a priority, having been marginalised to some degree in recent years by the shift in focus towards carbon reduction and climate change mitigation. Important though these efforts may be, fuel poverty and not climate change was responsible for 2,100 excess winter deaths in London.

Yours sincerely,

John Mathers
Fuel Poverty Officer

The new name for AGE London

Submission to the London Assembly's Investigation on Fuel Poverty in London

Age UK London (AUKL) is the regional body of all Age UKs and Age Concerns within London. AUKL works with borough Age UKs/Age Concerns to promote the interests of older people and campaign on strategic issues of ageing and demographic change within the capital. Locally, Age UKs/Age Concerns provide services for older people and work in partnership with colleagues in all sectors to promote issues important to older people. We also work to support the organisational development of local Age UKs, Age Concerns and partners.

AUKL very much appreciates the opportunity to contribute to the Assembly's investigation into fuel poverty in London.

Looking at some of the questions asked by the Committee:

- What impact does fuel poverty have on London in particular, compared to other UK regions?

Older people suffer the vast majority of excess winter deaths across the UK. In 2009-10, 2200 of 2400 excess winter deaths in London were of people aged 65 or older. (23,000 of 25,400 in England and Wales). Half of the excess deaths in London and just over half in England and Wales, were of people aged 85+.

- How do London households experience fuel poverty and what support do they want to tackle it?

Fuel poverty is caused both by many older people's low incomes, and by the rising cost of energy bills. A large proportion of older people do not claim the full benefits to which they are entitled.

Many older people find utility bills and energy tariffs difficult to understand and are not getting the best possible deal. Web-based information is particularly difficult for many older people to access. Similarly, some are disadvantaged in dealing with telephone call centres.

Many older Londoners live in homes where it is difficult to improve energy efficiency: for example homes with solid walls where cavity wall insulation cannot be fitted.

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Chair: Glyn Kyle
Chief Executive: Samantha Mauger

Both older tenants and older homeowners can suffer fuel poverty: many older homeowners are “asset rich and income poor” and therefore unable to afford insulation or other home improvements from their incomes.

Older people who are just above the income threshold for means tested benefits or access to particular schemes are often left unable to access any help.

Some older people and disabled people face health-related barriers to having home improvements done. For example some people are unable to have loft insulation installed because they are unable to clear heavy and bulky objects from their loft.

- What role should the Mayor have in reducing fuel poverty in London?

We call on the Mayor to continue the very welcome work he has done with partners to encourage older people and others to claim the welfare benefits to which they are entitled.

The Mayor’s draft Climate Change Mitigation and Energy Strategy focuses mainly on objectives other than reducing fuel poverty, while aiming to help Londoners reduce their fuel bills through more energy efficient housing. However the London 2025 vision it expresses calls for Londoners to have access to the means of making their homes energy efficient and information on how to do so and the support that is available. We call on the Mayor to develop priority actions making this a reality for Londoners of all ages and income groups.

We also think that the Mayor should consider developing a Fuel Poverty Strategy to combat the increased risk of fuel poverty currently facing lower income people of all ages and other vulnerable groups. This should complement and link up with the Climate Change Mitigation and Energy Strategy.

Age UK London, 14 June 2011

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Dear Jo,

Please find below Energy UK's response to the Health and Public Services Committee's investigation into fuel poverty.

If you have any questions or I can be of further assistance then please do not hesitate to contact me on 020 7104 4158 or at peter.kocen@energy-uk.org.uk.

Yours sincerely

Peter Kocen
Public Affairs Manager

Background

1. Fuel poverty is a serious and complicated issue, defined as affecting those people who pay more than 10% of their income on fuel to maintain a satisfactory heating regime. [1]. There are three main drivers of fuel poverty:
    a. Household income
    b. Quality of housing
    c. Cost of energy

2. In order to tackle fuel poverty effectively, programmes much focus on all three aspects, however it is accepted that energy efficiency measures are the most sustainable approach to tackling fuel poverty. Energy suppliers have themselves had a great deal of experience in delivering alleviation measures and are keen to see a more effective, coordinated approach being taken by government at all levels. On the income side, the current economic climate will also have a negative effect, either directly by depressing the level of wages and salaries in London, or else through downward pressure on future pension and benefit levels. Those in fuel poverty would be well served through the better targeting of existing measures and increasing the energy efficiency of housing stock.

3. Energy companies have cooperated fully with steps taken by the Government to encourage mechanisms to support those in fuel poverty or at risk of becoming fuel poor. In 2009-10, Britain's main energy suppliers spent £153m on voluntary programmes to help their most vulnerable customers – exceeding the Government's target of £125m. £128m, 84% of total expenditure, was contributed through social and discounted tariffs and rebates. At the end of March 2010, almost 1.6m customer accounts were benefiting from social and discounted tariffs and rebates, compared to 1.3m at the end of March 2009.

4. A number of suppliers also provide help through trust funds, including direct assistance to customers in debt and funding for projects aimed at those facing fuel poverty or financial hardship. Suppliers provided a total of £12.5m of support through trust funds over the last year and also £12m of other assistance.

[1] The Government's Fuel Poverty Review under Professor John Hills is considering the development of possible formulations for a future definition.

5. From this year, energy suppliers will provide greater help with the financial costs of energy bills to more of the most vulnerable fuel poor households through the Warm Home Discount – with total support of £250 million in 2011/12 rising to £310 million in 2014/15 (that is a total of around £1.1 billion over four years). Energy UK hopes that more customers will benefit from better targeting under this new scheme which builds on piloted data-sharing under the Energy Rebate Scheme.

6. Through the Energy Rebate Scheme, during 2010 energy suppliers worked with DWP to give 250,000 pensioners on the guaranteed element of pension credit a rebate of £80. Suppliers also followed up the rebate by contacting those customers to offer them energy efficiency measures and to place them on the Priority Service Register.

Targeting

7. The Warm Home Discount scheme is made up of four categories of spending: Core Group, Broader Group, Legacy Spending and Industry Initiatives. A sub-set of those eligible for State Pension Credit constitute the Core Group enabling a focus on low income older pensioners. They will be targeted through a statutory data-matching scheme. Whilst this scheme will help to better target those either in fuel poverty or at risk of becoming fuel poor, the fact remains that owing to the amount of data required, it is extremely difficult to identify which households spend more than 10% of their income on energy costs.

8. Households also move in and out of fuel poverty as circumstances change. Given these challenges, proxies need to be used to identify groups of households with a high (or relatively high) propensity to fuel poverty. Assistance can then be directed at those who make up these "at risk" groups.

9. An expansion of data-sharing powers would enable better the Government to target of support at wider subsets of the most vulnerable households with a high incidence of fuel poverty (i.e. in addition to the sub-set those in receipt of pension credit in respect of the Warm Home Discount).

10. However, and as the Government acknowledged, *"(a)ll of the proxies for targeting the fuel poor will be imperfect: there will always be some fuel poor households that fall outside the target group"*.[2]

11. Low income is highly correlated with fuel poverty, with around 77% of those in the lowest income decile being fuel poor. With this in mind, one effective proxy for fuel poverty is eligibility for means-tested benefits. Government, and not suppliers, has this information and is therefore best placed to target these groups. Taking this into account, the most effective and least

[2] http://www.decc.gov.uk/assets/decc/legislation/energybill/1_20100226093304_e_@@_energybillia.pdf

regressive way of targeting and providing assistance to the fuel poor will be through the tax and benefits system.

12. Energy UK also supports Fuel Direct as a means for households in debt and receiving benefits to pay for their continuing energy usage and past debt. Fuel Direct can be a viable option for assisting debt repayment and preventing further debt; Energy UK encourages voluntary sector organisations to persuade their clients of the benefits of Fuel Direct.

13. On energy efficiency, the energy companies play a major role in promoting measures to their customers though the existing CERT and CESP schemes. Last year the Government consulted on proposals to extend the Carbon Emissions Reduction Target (CERT) through to the end of 2012. The CERT extension introduced an increased focus on the vulnerable through a new target for suppliers to meet 15% of the increase in the CERT (16.2 MtCO2) by installing measures that benefit a Super Priority Group of lower income pensioner and family households who are considered most vulnerable to fuel poverty.

14. The Community Energy Savings Programme (CESP) targets households across Great Britain, in areas of low income, to improve energy efficiency standards and reduce fuel bills. CESP is funded by an obligation on energy suppliers and electricity generators, and some CESP schemes are planned for London. Another of the objectives under this scheme is to foster greater partnership working between energy companies and local authorities.

15. Although CERT and CESP are not identifying mechanisms, they are a step in the right direction as they provide guidance as to how the Government would like suppliers to target support. However, CERT and CESP are based on Carbon Targets rather than fuel poverty reduction. Ofgem monitors suppliers' schemes under the two obligations and makes sure that they are delivered in an efficient way financially.

Future support programmes – Energy Company Obligation

16. A new energy efficiency scheme is being legislated for in the current Energy Bill, namely the Energy Company Obligation (ECO). This will work alongside the new Green Deal also being enacted under this legislation. This new obligation should build on the experiences of the CERT and CESP schemes, including lessons learnt about how to promote effective working at city and local levels of government.

17. Energy UK welcomes the Government's view that the ECO should be based upon a continued delivery obligation, it has been suggested that ECO could provide a number of functions – supporting vulnerable groups as a replacement for Warm Front, subsidising solid wall insulation and supporting the Green Deal.

NEA

I thought I would also provide a bit of top line data, following today's price rise. NEA believe the announcement this morning adds £71 to the average British Gas electricity bill and £121 to the average Standard Credit Gas Bill. The average paid is now £791. British Gas (Combined Standard Credit Gas and Electricity Bills is now) - £1,303 an increase of £192 from £1,111). In terms of the impact on fuel poverty, if all suppliers follow suit and increase their prices at the same rate we've seen from British Gas and Scottish Power, fuel poverty in England will increase from approximately 4.1m households to 5.1m. UK wide these increases will push an additional 1.2m household's into fuel poverty (from approximately 4.9m to 6.1m households). This is at a time when:

- All sectors of the economy are struggling with their energy costs
- Energy prices are at an unprecedented level and all projections indicate a continued upwards trend
- Energy debt Is soaring
- Fuel poverty is at an all time high and the Government is on course to miss its legal commitments
- The quality of the UK housing stock (social housing and private) is still appallingly low, especially for some of the most vulnerable and low-income consumers
- Further analysis of the costs EMR proposals as a whole need to be undertaken
- The need to introduce ambitious mitigating policies to diminish the risks to vulnerable consumers is not even part of the national policy debate

I also thought I would mention that the question of affordability will still be on the agenda next week when Chris Huhne announces proposals on Tuesday to develop and deliver a new market framework that will provide incentives for supplies of low-carbon energy, the Government's much awaited Electricity Market Reforms (EMR). Whilst NEA recognises the need for reforms to the current market arrangement and even a consolidation of incentive schemes, the EMR poses a number of potential threats to vulnerable consumers. There were some figures presented in the distributional analysis within an earlier EMR consultation impact assessment (the CPS impact assessment) which indicates the impact of the CPS proposals alone would severely impact on the poorest households, in particular those pensioners living on their own, and could push 100,000 – 200,000 households into fuel poverty. In themselves, these figures are hugely alarming.

Apparently there will not be an attempt in the EMR document to provide an aggregated view of the expected fuel poverty increases (let alone plans for an suitable mitigating policy specifically focused on low income and vulnerable groups). There is also a significant risk that, unless remedial actions are taken, this mechanism could also simply act as a windfall for existing generators to the detriment of low-income and vulnerable consumers (especially Carbon Price Support).

What we need in the short-term is:

- Government to divert the additional revenues accruing from VAT on domestic gas and electricity to fund energy efficiency programmes for low - income households. NEA anticipates that if all suppliers follow with increases of this magnitude then Government will receive at least an additional £230 million in VAT receipts. This

could be added to the Warm Front budget to provide a transition fund until the Energy Company Obligation takes effect from 2012/13
- Government to commit to retaining the higher rate of Winter Fuel Payment for financially disadvantaged older households

Longer -term

- An Energy Company Obligation which is both adequately resourced and ring-fenced to fund a comprehensive energy efficiency programme for low-income households.
- A clear road map showing how the Government's target to eradicate fuel poverty by 2016 can still be met

Please let me know if you wish to discuss this next.

Kind Regards

Peter

Peter Smith

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Response to the GLA fuel poverty review from LB Newham

According to the latest statistics from DECC, as at 2008, Newham has the highest level of fuel poverty in London with 13.7% of all households being classed as fuel poor.

Newham is a deprived borough (102 out of 159 LSOA areas being classed as in the top 10% most income deprived nationally) and there is also a high incidence of poor quality, energy inefficient housing. Newham has 16 out of the top 20 LSOA areas (highlighted in green) for fuel poverty in London.

LSOA Code	LA Name or Newham Ward	Estimated number of households	Estimated number of households in fuel poverty	% of households fuel poor
1612	Greenwich	491	115	23.4%
3562	**Green Street East**	**555**	**123**	**22.2%**
3573	**Green Street West**	**502**	**110**	**21.9%**
3016	Lambeth	1,106	240	21.7%
3571	**Green Street West**	**498**	**106**	**21.3%**
3585	**Manor Park**	**394**	**83**	**21.1%**
3564	**Green Street East**	**627**	**129**	**20.6%**
3588	**Manor Park**	**433**	**88**	**20.3%**
3531	**East Ham North**	**424**	**83**	**19.6%**
3567	**Green Street East**	**505**	**99**	**19.6%**
3568	**Green Street West**	**608**	**119**	**19.6%**
0863	Camden	513	100	19.5%
3524	**East Ham Central**	**490**	**95**	**19.4%**
3521	**East Ham Central**	**587**	**113**	**19.3%**
3560	**Green Street East**	**463**	**89**	**19.2%**
3570	**Green Street West**	**469**	**90**	**19.2%**
3561	**Green Street East**	**480**	**91**	**19.0%**
3579	**Little Ilford**	**466**	**87**	**18.7%**
4420	Waltham Forest	621	116	18.7%
3581	**Little Ilford**	**442**	**82**	**18.6%**

Reasons for high incidence of fuel poverty in Newham:

- High levels of income deprivation
- Large number of 'hard to treat' properties, e.g. Victorian terraces, high rise blocks
- Large number of Private Rented Sector (PRS) properties (approx. 35% and rising)
  - The PRS tends to have the worst standards of energy efficiency and thus highest levels of fuel poverty. It is also the hardest sector to reach. There will be an incentive in a number of years, as it has been proposed in the Energy Bill that no properties with an EPC rating of F or G will be allowed to be rented out by 2018. However, this is a few years away so many landlords will not be motivated by this as yet

Efforts to target fuel poverty in Newham:

- We hold an energy efficiency database of all properties in Newham. We currently have 100% coverage of our own stock and approximately 55% coverage over all sectors – the highest in London
  - This enables us to target specific areas which have high percentage of energy inefficient properties
- Area based, targeted heating and insulation scheme – in partnership with London Warm Zone since 2001

TM 12/07/11

    - Free insulation for vulnerable groups. This has now been expanded to include the additional groups of families with children under 16 with and an income of >£25k and also 60-69 year olds not in full time employment
    - Loft clearance issues cannot be underestimated. Our new insulation contractor offers loft clearance which has seen uptake increased considerably. They charge £100 for this which we cover
- We are targeting wards which have clusters of LSOA areas with the highest levels of fuel poverty. For example, we have chosen Green Street East and Little Ilford Wards as our RE:NEW areas. These are 'hard to reach' areas, with high incidence of PRS properties thus having the extra incentive of the RE:NEW measures may help to engage with these residents.
- Little Ilford Ward also includes our pilot scheme of the *Neighbourhood Improvement Zone* (NIZ) which tackles a predominantly and problematical Private Rented Sector area
    - This scheme uses powers under Section 80 of the Housing Act (2004) which allow Local Authorities to designate selective licensing areas
    - This is the first selective licensing scheme in London and the South-East, and believed to be the first nationally to address energy efficiency.
    - The Mayor of Newham, Sir Robin Wales, has spoken about selective licensing in the NIZ to the recent Planning and Housing Committee meeting at the GLA. He also stated that he wished to expand accreditation to all private landlords within Newham
    - This is an innovative approach and may help tackle fuel poverty by enforcement; however it is a time consuming (and thus costly) approach.
    - It is being used as a case study by National Energy Action (NEA)

Problems encountered in the Private Rented Sector:

- Split incentive – landlord may have to pay to improve energy efficiency of property, but the tenants benefit from reduced energy bills
- Landlords are often not professional but marginal thus have little capital available for improvements
- Fear of eviction from tenants if they challenge the landlord to improve energy efficiency standards
- Language & social barriers
- Transient population
- Reluctance to engage with authority due to 'right to remain' issues

Fuel poverty & health:

There was a very interesting and potentially influential report published recently on the health effects of cold housing on health (please see attached email). This was carried out by the Marmot Review Team at UCL and was commissioned by Friends of the Earth. This is well worth a read, I have summarised their findings below:

It concluded:

- Countries which have more energy efficient housing have lower Excess Winter Deaths (EWDs)
- There is a strong relationship between cold temperatures and cardio-vascular and respiratory diseases
- Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems than children living in warm homes

- Cold housing negatively affects children's educational attainment, emotional well-being and resilience
- Mental health is negatively affected by fuel poverty and cold housing for any age group
- Investing in the energy efficiency of housing can help stimulate the labour market and economy, as well as creating opportunities for skilling up the construction workforce
- **Advocates aligning the agendas of climate change and health inequalities**

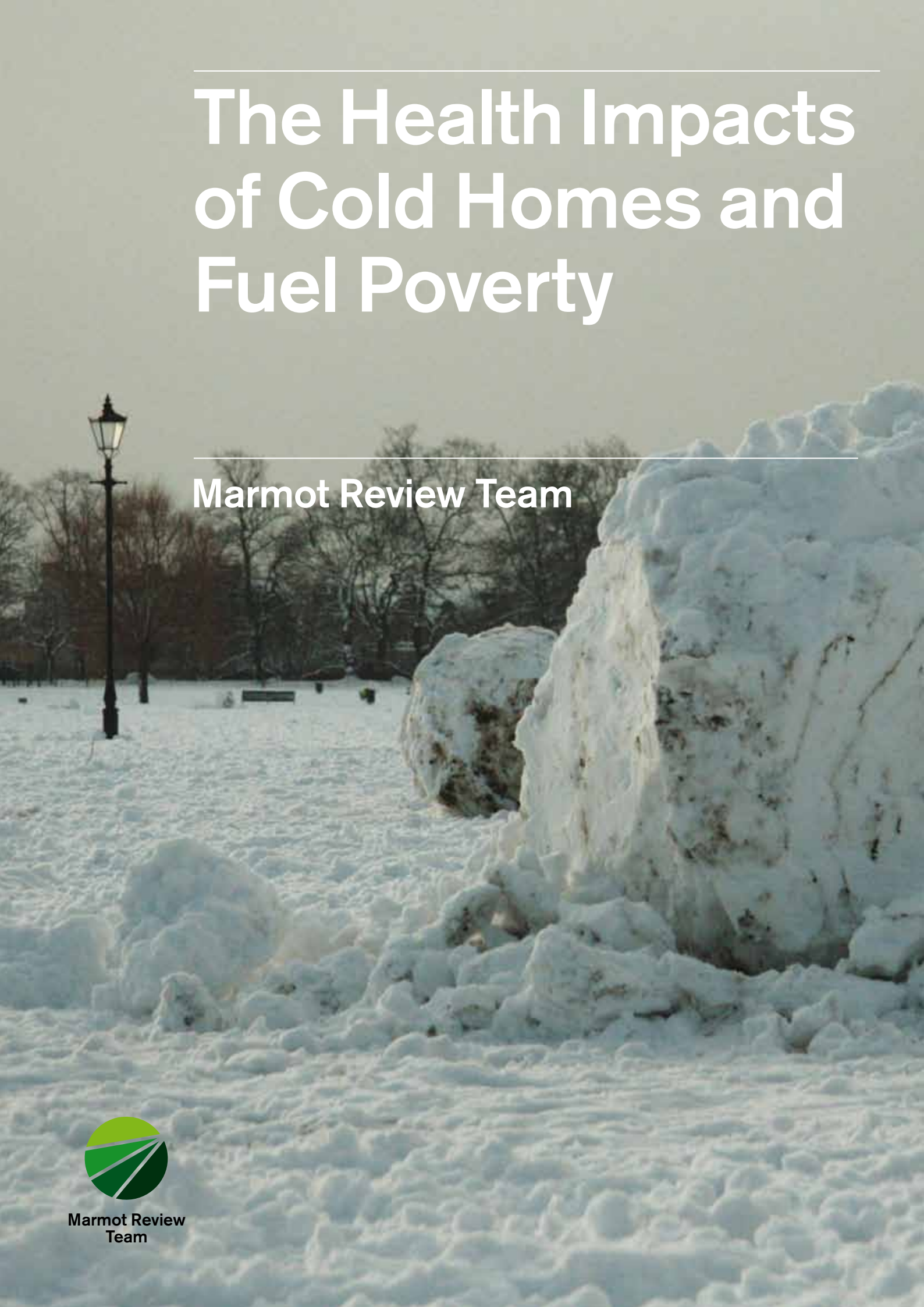
Other points:

- You may already be aware of this but British Gas is offering free loft & cavity wall insulation to *all* customers, regardless of them being in the priority groups. – Could the GLA have an enabling role in this?
- London has received disproportionately less funding from energy schemes CERT & CESP – John Kolm-Murray at LB Islington is writing a report on this
- The CESP programme has been an abject failure in London – could the GLA intervene to help increase the number of projects?
- District heating & the establishment of an ESCo can reduce fuel bills considerably. Should housing developments be future proofed to enable incorporation of DH?

Final thoughts

- All efforts to eradicate fuel poverty so far have been thwarted by the continual rise of energy prices - which are only set to increase further
- Many of the yearly excess winter deaths – 35,000 in 2008/09 – could be prevented through warmer housing [Public Health White Paper, 2010]
- It has been estimated that raising all properties in England to SAP 81 (equivalent to EPC band B) would lift 83% of households out of fuel poverty [Source: Consumer Focus]
- Improving the energy efficiency of the existing stock is a long-term, sustainable way of ensuring multiple gains, including environmental, health and social benefits

The Health Impacts of Cold Homes and Fuel Poverty



Marmot Review Team

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The Health Impacts of Cold Homes and Fuel Poverty

Written by the Marmot Review Team for Friends of the Earth

Friends of the Earth

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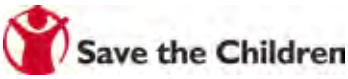

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Foreword

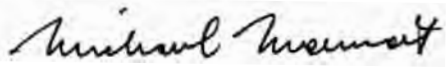
I am delighted that Friends of the Earth have commissioned us to write this report. Fuel poverty is a long-standing health issue: the impact of cold housing on health and the stresses brought on by living in fuel poverty have been recognised for decades by researchers, medical professionals and policy makers alike. At the same time, it is an issue that often gets dismissed as the 'tough nature of things' because our housing stock is old and cold housing is so widespread that many have come to regard it as a normal state of affairs.

It should not be so. Cold housing and fuel poverty can be successfully tackled through policies and interventions if there is a will to do so. There is a social gradient in fuel poverty: the lower your income the more likely you are to be at risk of fuel poverty. I have always said that inequalities that are avoidable are fundamentally unfair - fuel poverty is avoidable and it contributes to social and health inequalities.

When we published Fair Society, Healthy Lives, one of our recommendations was to "improve the energy efficiency of housing across the social gradient" in order to achieve affordable warmth and a reduction in energy usage as well as fuel poverty. We advocated aligning the agendas of climate change and health inequalities by exploiting low carbon solutions, based on the principles of sustainable development. We do so again in this report: improving the energy efficiency of the housing stock brings multiple health and environmental gains.

Building on the evidence presented in the Review of Health Inequalities, this report brings new light to the issue of cold housing and fuel poverty; it highlights not only the variety of health outcomes that are caused and aggravated by cold housing, but also how children, the elderly and the vulnerable are greatly affected by fuel poverty.

Public health must address the social determinants of health: this report comes at a crucial time in policy making for public health as the White Paper is setting the new framework for reducing health inequalities. The proposed outcomes framework includes five domains, among these is the wider determinants of health, and I am so pleased that one of the indicators under this heading is fuel poverty – it initiates the momentum for a renewed effort to tackle such an important factor and it provides a drive to addressing this issue at both the national and local level.



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Executive Summary

This report reviews the existing evidence of the direct and indirect health impacts suffered by those living in fuel poverty and cold housing. It makes the case for aligning the environmental and health agendas and reviews the evidence on the health benefits of reducing fuel poverty and improving the thermal efficiency of the existing housing stock.

The main findings on the direct health impacts of cold housing and fuel poverty are:

— Countries which have more energy efficient housing have lower Excess Winter Deaths (EWDs).
— There is a relationship between EWDs, low thermal efficiency of housing and low indoor temperature.
— EWDs are almost three times higher in the coldest quarter of housing than in the warmest quarter (21.5% of all EWDs are attributable to the coldest quarter of housing, because of it being colder than other housing).
— Around 40% of EWDs are attributable to cardio-vascular diseases.
— Around 33% of EWDs are attributable to respiratory diseases.
— There is a strong relationship between cold temperatures and cardio-vascular and respiratory diseases.
— Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems than children living in warm homes.
— Mental health is negatively affected by fuel poverty and cold housing for any age group.
— More than 1 in 4 adolescents living in cold housing are at risk of multiple mental health problems compared to 1 in 20 adolescents who have always lived in warm housing.
— Cold housing increases the level of minor illnesses such as colds and flu and exacerbates existing conditions such as arthritis and rheumatism.

The main findings on the indirect health impacts of cold housing and fuel poverty and on other social benefits deriving from improved housing are:

— Cold housing negatively affects children's educational attainment, emotional well-being and resilience.
— Fuel poverty negatively affects dietary opportunities and choices.
— Cold housing negatively affects dexterity and increases the risk of accidents and injuries in the home.
— Investing in the energy efficiency of housing can help stimulate the labour market and economy, as well as creating opportunities for skilling up the construction workforce.

Many different population groups are affected by fuel poverty and cold housing, with various levels of health impacts relating to different groups:

Children

Significant negative effects of cold housing are evident in terms of infants' weight gain, hospital admission rates, developmental status, and the severity and frequency of asthmatic symptoms.

Adolescents

There are clear negative effects of cold housing and fuel poverty on the mental health of adolescents.

Adults

There are measurable effects of cold housing on adults' physical health, well-being and self-assessed general health, in particular for vulnerable adults and those with existing health conditions.

Older people

Effects of cold housing were evident in terms of higher mortality risk, physical health and mental health.

Improving the energy efficiency of the existing stock is a long-term, sustainable way of ensuring multiple gains, including environmental, health and social gains.

Government policy documents and reports, including the Chief Medical Officer report of 2009 and the recent Public Health White Paper, recognise the tangible impact of cold housing and fuel poverty on people's health and well-being.

We could prevent many of the yearly excess winter deaths – 35,000 in 2008/09 – through warmer housing...
[Public Health White Paper, 2010]

Government policies, actions and financial support for interventions aimed at reducing fuel poverty and improving the energy efficiency of existing stock need to match its stated commitment to both the public health and climate change agendas.

The Government's current support and financial commitment to addressing the problem of poor thermal efficiency of housing remains inadequate, given the potential it has to improve the health and well-being of the population and help mitigate climate change.

A renewed effort is needed to support programmes and policies which have shown to be successful in increasing energy efficiency of homes and improving the health of their residents, such as the Warm Front Programme, and in encouraging local government action in addressing fuel poverty, such as the *National Indicator 187 – Tackling Fuel Poverty*.

1
Introduction

Living in cold conditions is a risk to health. The aim of this report is to review the existing evidence of the direct and indirect health impacts suffered by those living in fuel poverty and cold housing. Many such households will be living in homes that have poor thermal efficiency and are therefore hard or expensive to heat, as well as accounting for a significant share of CO_2 emissions from the housing stock (1), thus negatively contributing to climate change.
In 2008, 18% of households in the UK were estimated to be living in fuel poverty (2). Fuel poor households must choose either to spend more than 10% of their income on heating, which has a detrimental impact on other aspects of health and well-being, or to under-consume energy and live in a cold home to save money. Deprived and vulnerable households – especially those who do not have access to social housing - are more likely to live in energy inefficient housing, and less likely to have the resources or the resilience to deal with the negative impacts of cold homes and reduced income.

The World Health Organisation (WHO) recommends that indoor temperatures are maintained at 21 degrees in living rooms and 18 degrees in bedrooms for at least 9 hours a day.

Fuel poverty is defined as having to spend 10% or more of a household's net income to heat their home to an adequate standard of warmth (3). Over the years this definition has been accepted by various Government departments with responsibility for fuel poverty[1]. However, there has been disagreement about what constitutes a household's income: the Government's definition includes housing benefit, council tax benefit, income support, and mortgage payment protection insurance, although many estimates are calculated with a formula that excludes housing subsidy.

Being in fuel poverty is the product of three factors:

1 The energy efficiency of the house which determines how expensive it will be to heat.

2 The cost of heating fuel.

3 The household income, which determines how much a 10% spend on heating would be.

Improving the energy efficiency of the housing stock is an essential step to reduce the number of households in fuel poverty, mitigate climate change and bring associated health benefits. Poverty more widely affects health, but fuel poverty should be considered distinctly because:

— Not all who are income poor are also fuel poor.
— Factors other than income poverty can be tackled to reduce fuel poverty.
— Although their causes are inter-related, the effects of fuel poverty are distinct from the effects of income poverty. They relate to specific health conditions rather than health as a whole and negative health outcomes are more immediate than the outcomes caused by income poverty.
— Fuel poverty is more amenable to change than income poverty.

This report makes the case for aligning health and environmental agendas, and reviews the evidence on the health benefits of reducing fuel poverty and improving the thermal efficiency of the existing housing stock.

Excess winter deaths (EWDs) and health conditions attributable to cold housing will be described and assessed based on existing evidence. The primary and secondary benefits of improvements in energy efficiency will be examined. Further, the report reviews the evidence on the proportion of households in fuel poverty affected by different health conditions and estimates the proportion of EWDs attributable to cold homes. The report also analyses the relationship between energy rating and the predicted health improvement which could be obtained through increased energy efficiency of housing stock.

2
The policy context

There are three possible ways to move the majority of the population out of fuel poverty: one is to increase income (the Winter Fuel Payment is an example), a second is to regulate fuel pricing and third is to improve energy efficiency of homes. Reducing fuel poverty exclusively through financial support is dependent on the economic situation, energy prices, and political will. Further, it will not tackle CO_2 emissions as it allows people to use more energy to reach a comfortable level of heating thereby increasing carbon emissions. On the other hand, making homes more energy efficient is a long-term, sustainable solution, which will allow people to use less energy to heat their homes adequately with a positive impact on carbon emissions.

The EU policy directive 2010/31/EU on the energy performance of buildings of 19 May 2010 (EPBD) requires member states to set requirements for the energy performance of new buildings (4). When undergoing major renovation, the energy performance of the building or the renovated part should be upgraded to satisfy current minimum requirements. Building elements that form part of the building envelope and have a significant impact on the energy performance of that envelope (for example, window frames) should also meet the minimum energy performance requirements when they are replaced or retrofitted. The directive also requires member states to develop a common methodology for calculating the energy performance of buildings, which has to be implemented by July 2013 and will have an impact on current methods used for Energy Performance Certificates (EPCs).

Only since the Code for Sustainable Homes (5) was introduced in 2007 have English energy standards for new buildings approached levels similar to those of other Northern European standards. The strict targets imposed by the Code make it extremely unlikely that anyone living in properties built according to its standards will fall into fuel poverty: it has initiated the most significant change in the thermal efficiency of the housing stock. However, the proportion of homes built since its introduction is minimal in comparison to stock built prior to 2007, which houses most of the population.

In 2000 the UK Government set out the Decent Homes Standard. This is a measure by which the quality of homes is rated, and includes statutory minimum standards for housing as well as thermal comfort – encompassing both efficient heating and insulation. Regulations aimed to ensure that all social housing met standards of decency by 2010, and the target was extended to include a minimum of 70% of private dwellings occupied by vulnerable households[2] also meeting the standard. These targets have not been achieved: it was estimated that 3.8% of Registered Social Landlord (RSL) properties and 12%-14% of council properties would be non-decent as of the end of 2010 (6) and a renewed policy effort, coupled with better levers and incentives is needed in order to reach such targets.

Improving standards and energy efficiency of properties in the private rental sector has proven particularly difficult as private landlords are only required to upgrade homes in line with health and safety regulations rather than any thermal efficiency standards.

Case study: The Housing Health and Safety Rating System (HHSRS)

The HHSRS system came into effect on 6 April 2006 and replaced the fitness standard as the statutory element of the Decent Homes Standard.

However, HHSRS is a risk assessment procedure and does not set a standard. It measures the risks within the home against a series of hazards which range from indoor pollution to hygiene to structural safety and also include:

— Excessive Cold Temperature: Hazards arising from consistently low indoor temperatures.

— Damp and Mould Growth etc: Includes risks from house dust mites, mould and fungal spores.

It has been identified that the majority of failures in achieving a certain rating relate to the inadequate thermal efficiency of housing.

For further information visit:
http://www.communities.gov.uk/publications/housing/hhsrsoperatingguidance

Even when health and safety regulations are contravened, private tenants may not exercise their right to address the problem because they fear eviction, from which they are not protected under UK law. It has often been reported that landlords take advantage of legislation to evict a tenant inappropriately if they have recently taken steps to enforce their statutory rights on disrepair and health and safety issues (7). The recent EPBD builds on the previous directive (2002/91/EC), which specifically mentions rented buildings with the aim of ensuring that property owners, who do not normally pay charges for energy expenditure, are required to take necessary action to comply with minimum standards (8).

"A Citizen's Advice Bureau in West Sussex reported a couple with two young children whose property was in serious disrepair. When the landlord refused to carry out essential repairs, the clients complained to Environmental Health who issued a schedule of works to be done. The landlord then served a Section 21 Notice on the clients. When the bureau contacted the homelessness department on the clients' behalf, the homelessness officer said it was common practice for landlords to seek to evict tenants who involved Environmental Health." (Crewe 2007)

The Fuel Poverty Strategy was launched by the Government in 2001 in response to the legal duty put on the Government by the Warm Homes and Energy Conservation Act of 2000 to eliminate fuel poverty by 2016. This strategy included improving the energy efficiency of homes in order to reduce fuel consumption and therefore reduce levels of vulnerability to fuel poverty. Progress was initially made in reducing the number of households in fuel poverty during a period when energy prices were stable, but since 2004 this trend has reversed due to fuel price increases.

The previous Government's support for improvement in energy efficiency of the existing stock was mainly through the Warm Front Scheme, which provided grants to eligible households to improve either home insulation or heating systems and recently piloting systems for hard to treat properties. Applications to the Warm Front programme were recently suspended but have now re-opened with tighter eligibility criteria. However, the Comprehensive Spending Review suggests that the programme will be phased out from 2013–2014, thus completely removing central government funding to improve energy efficiency. Meanwhile, other programmes to tackle energy efficiency of housing and fuel poverty are ongoing and place the obligations on energy suppliers. These are the Carbon Emissions Reduction Target (CERT), an obligation on suppliers to install energy efficiency measures, although only a proportion (40%) of this programme is aimed at priority groups[3], and the Community Energy Saving Programme (CESP), which also requires gas and electricity suppliers to deliver energy saving measures to consumers in specific low income areas.

Pilot schemes aimed at involving communities in reducing CO2 emissions have been led by Government departments as well as private partners. These provided the communities with information and funding to reduce their CO2 emissions and much funding was invested in improving the energy efficiency of their housing. Such projects include DECC's Low Carbon Communities Challenge, NESTA's Big Green Challenge and British Gas' Green Streets. The Department of Health also funded a pilot project aimed at identifying and targeting the population suffering from cold housing and fuel poverty through the development of a partnership between PCTs and Local Authorities – this project is described in the case study box below.

Although the CESP is likely to benefit a number of low-income households, at present there is no open programme aiming to reduce fuel poverty by targeting people on low incomes. There is a risk that households on higher incomes and in better quality homes living in low income areas will benefit more from this programme, rather than those who are most in need. Additionally, many low-income households live in areas outside the designated areas of deprivation. They will be missed by a programme targeting low-income areas rather than low-income households.

At the time of this report's publication, the Energy Bill is passing through Parliament. This seeks provision for merging the CERT and CESP programmes, which are running through to 2012, into the Energy Company Obligation (ECO). It sets out the Green Deal framework to enable provision of improvements to the energy efficiency of domestic, as well as non-domestic properties, which would be financed by the private sector and repaid by a charge on energy bills. The bill sets out powers for the Secretary of State to introduce regulations on energy efficiency in the private rented sector no earlier than 2015. These could prevent residential landlords from refusing tenants' reasonable requests for energy efficiency improvements and require them to improve some of the least energy efficient properties. However the use of powers is dependent on the outcome of a review and other strict conditions.

National Government also provides financial support to cope with energy bills through the Winter Fuel Payment – a yearly one-off payment for all those who have reached pension age. This is supplemented by the cold weather payment during periods of extreme cold weather for households in receipt of certain benefits such as pension credits, income support, jobseeker's allowance and employment and support allowance. However, the efficiency of such schemes in reaching the populations in need is contested, as shown Table 1.

Case study: Working in partnership to reduce fuel poverty

The programme originates from the UK Public Health Association (UKPHA) Health Housing and Fuel Poverty Forum, funded by Defra. The forum, made up of national figures from the health, housing and energy sectors, and practitioners from across England, developed the 'Central Clearing House' model. Their research concluded that a model of local area partnerships that linked health, housing and fuel poverty services was the most effective approach for directing services to the vulnerable. The CCH model identified the key systems and processes necessary to access the vulnerable fuel poor, identify high risk groups, streamline referral and delivery systems and implement monitoring and evaluation processes.

The CCH model was piloted in Manchester, with the implementation of the Affordable Warmth Access Referral Mechanism (AWARM). Funded by the Department of Health, the pilot was a partnership with Salford City Council and Primary Care Trust.

Greater Manchester invested approximately £100,000 each year into AWARM. Since April 2008 AWARM activity resulted in over £600,000 of investment in new and replacement central heating systems and insulation. During the first year of the project over 1000 referrals were made by frontline professionals from social services, voluntary, local government, housing and health sectors. In 12 months the programme trained 1,359 professionals, a third in health, with the remainder in social services, voluntary/community services, local government and housing. The lessons learned from the pilot include:

— There are numerous opportunities to share data between local authorities, GPs and PCTs to improve how referrals are targeted.
— A pop-up system on GP patient electronic records would help to immediately direct referral to a one-stop-shop.
— Involving energy companies as active project partners can help identify novel ways to target vulnerable individuals and neighbourhoods.

The funding ended in 2010, yet the project improved local delivery systems and increased the numbers receiving funding to reduce fuel poverty. Like many other ill health prevention projects, funding was invested only in a pilot, regardless of the outcomes. In this case, this means a project showing successful short-term outcomes may not be rolled out.

For more information see www.ukpha.org.uk/fuel-poverty.aspx

Table 1 Targeting efficiency of existing fuel poverty schemes

Scheme name	**Targeting efficiency**	
	% of recipients that are fuel poor	% of fuel poor that are eligible
Winter Fuel Payments	19% (Boardman, 2010)	50%*
Warm Front	25 – 40% (NAO, 2009)	35% (NAO, 2009)
Home Energy Efficiency Scheme (Wales)	30% (WAG, 2005)	54% (Boardman, 2010)
EEC2 Priority Group (Includes people on passport benefits)	20%	58–70% (Boardman, 2010 and Lees, 2008)
CERT Priority Group (Includes those on passport benefits and all over 70s)	24% (England) (Tandy, 2010)	Unknown

Source: Association for the Conservation of Energy (9)
* All over 60s received WFPs, 50% of the fuel poor are estimated to be over 60 (Boardman, 2010)

Further, the Warm Homes Discount is a new mandatory scheme that requires energy suppliers to provide a fixed amount rebate to vulnerable customers. This replaces the voluntary scheme of social tariffs previously provided by energy suppliers on an ad-hoc basis in different areas and for different households. The Feed-in Tariffs (FIT) and Renewable Heat Incentive (RHI) aim to provide financial support for those who install renewable energy systems which qualify for support under the schemes. The schemes are designed to support meeting the requirements of the EU Renewable Energy Directive, which sets a binding target of having 20% of the EU's energy consumption coming from renewable sources. It is expected that households and landlords will take advantage of the scheme; it is likely that such a scheme will appeal to those for whom other options to improve energy efficiency are not viable or cost-efficient, such as those in older rural housing or who are not connected to the grid.

Local government action has been driven by National Indicators 186 and 187, which monitor CO_2

emissions and levels of fuel poverty respectively at the local level, as well as by the requirements of the Home Energy Conservation Act (HECA), which placed an obligation on local authorities to draw up plans to increase domestic energy efficiency in their areas by 30% between 1995 and 2010. Some local authorities have been very pro-active in encouraging residents to access funding to reduce energy use and fuel poverty. These have been awarded Beacon status for best practice in tackling fuel poverty and have produced a toolkit for other local authorities to develop effective strategies to reduce fuel poverty taking account of local circumstances. However, further progress of local action on fuel poverty is likely to be hampered by the funding cuts to Local Government, the abolition of HECA and the fact that National Indicator 187 will become optional from 1 April 2011.

3
Climate change and health

Protecting and improving health, reducing health inequalities, and the mitigation of climate change have a shared agenda. Measures and policies intended to respond to climate change can help reduce health inequalities and vice versa (10). There is sufficient evidence to link the agendas and argue for concerted Government action to tackle fuel poverty and thereby improve quality of life and health, as well as reducing CO_2 emissions: climate change is predicted to result in an increase in deaths, disability and injury from extreme temperature and weather conditions, heat waves, floods and storms including health hazards from chemical and sewage pollution (11). Less direct long-term impacts include the effects on mental health of flooding and other climate-related events, which could cause anxiety and depression (12).

Domestic energy use is responsible for around a quarter of the UK's CO_2 emissions. The greatest share of such emissions – over 70% - is through space and water heating (12). It is estimated that poor insulation means around £1 in every £4 currently spent heating UK homes is wasted. A third of CO_2 emissions from housing relate to domestic space heating and could be reduced through making the existing stock more energy efficient (13). Improving energy and fuel efficiency are the mechanisms to reduce fuel poverty and improve health and these efficiencies are also beneficial to the climate change agenda.

Those likely to be most vulnerable to the health impacts of climate change are those already deprived by their level of income, quality of homes, and their health (14) – the same groups more likely to live in fuel poverty. People on low incomes in the UK are more likely than the better-off to live in urban areas which will be worse hit by extreme weather events, and therefore to be at greater risk of heat stroke (15), such as during the heat wave of summer 2003. They are more likely to live in homes that are less well protected (15) and in areas that are more exposed to weather extremes and flooding (16). They are also less likely to have access to insurance against risks associated with climate change such as storm and flood damage (17). Improving the thermal performance of homes can help mitigate climate change, while protecting households from summer overheating as well as winter cold.

There is a strong relationship between the individual house and its immediate neighbourhood not just in terms of vulnerability to climate change, but also in terms of domestic energy use. How a neighbourhood is planned and designed can take more or less advantage of natural resources such as solar energy and green cover, which can also aid energy conservation as well as mitigating climate change. Consideration must be given to the wider environment when considering interventions to improve energy efficiency, reduce fuel poverty and mitigate climate change.

4
Fuel Poverty and Energy Efficiency

This section describes how fuel poverty is distributed across the population and how this relates to certain housing characteristics, including age of property, tenure and thermal efficiency.

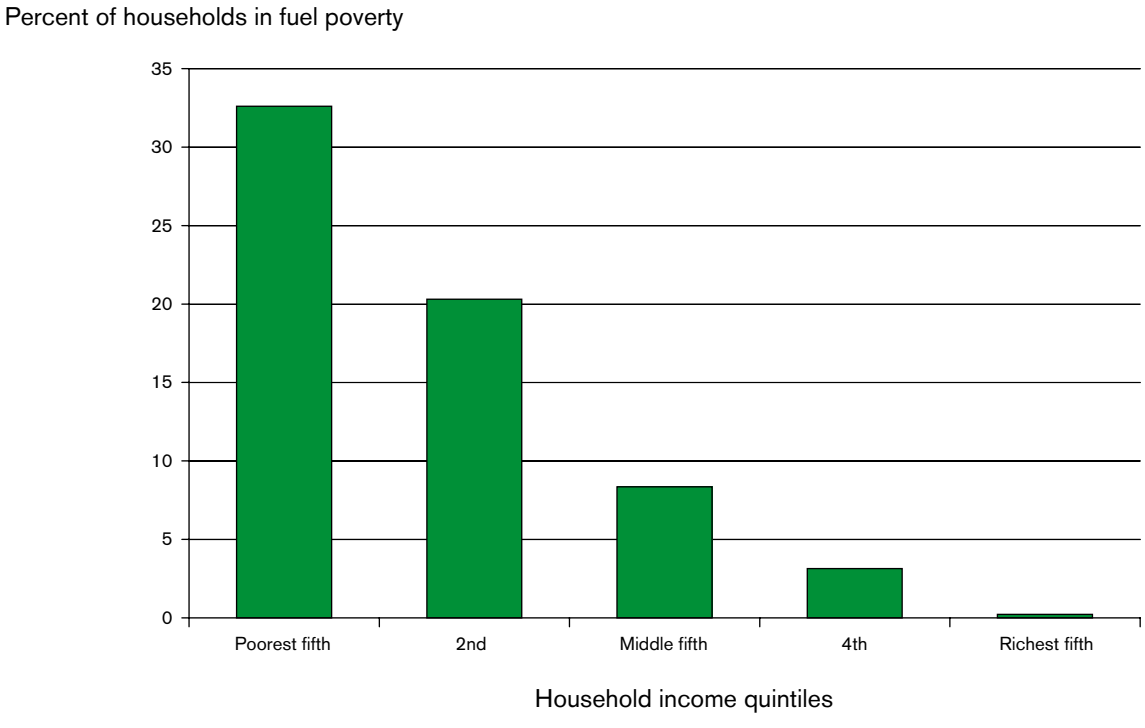
As the graph below shows, the risk of fuel poverty rises sharply as household income falls – very few households with above-average incomes are in fuel poverty.

Other factors besides household income affect whether a household is in fuel poverty or not, such as housing costs and type of ownership. Barnes, Butt & Tomaszewski (19) used the Families & Children Survey to estimate that children in families with a black mother, a lone parent, or with a number of debts were twice as likely to experience persistent cold indoor temperatures than other children.

As a proportion of the total number of households for a given tenure (for example private rented, owner occupier or social housing) households living in private rented accommodation have a higher likelihood of living in fuel poverty – 19% of households in private rented were in fuel poverty compared with 11% in other tenures (20). There are various reasons for this: tenants in the private rental sector can be put off seeking help to improve the energy efficiency of their homes because they may not see it as worth the effort or investment if they plan to move, they may not know it is an option that they could take advantage of, subject to the agreement of the landlord, or they may even fear eviction if some cost or disruption might fall on the landlord. Financial incentives are also low for landlords, who are put off improving properties by the upfront costs while most financial benefits will be to the tenants through lower energy bills.

Despite policies such as Warm Front and the Winter Fuel Payment, the number of fuel poor households in England dramatically increased

Figure 1 The risk of fuel poverty according to household income, 2009



Note: Percent in fuel poverty relates to households in fuel poverty after deducting housing costs
Source: ONS (18)

between 2004 and 2010 from 1.2 million to 4.6 million (20). The winter of 2009/10 saw 25,400 deaths in England and Wales (21). Much of the increase in fuel poverty in 2008/9 was due to the increased costs of energy and it is estimated that in the long term, energy costs will increase (20), potentially increasing a typical annual energy bill by 50% (20).

One of the most sustainable ways of tackling fuel poverty and limiting the impact of fuel price increases is to build energy efficient housing and retrofit the existing housing stock to an energy efficiency level that would make it extremely hard for people to fall into fuel poverty, as space heating accounts for the greatest share of energy use in homes – over 50% (12). This is known as 'fuel poverty proofing' and it has been estimated that raising all properties in England to SAP 81 (equivalent to Energy Performance Certificate band B) would lift 83% of households out of fuel poverty (22).

While new homes need to become highly energy efficient by 2020, in line with European directives, typical energy efficiency for the existing stock is much lower than current building regulations require. The Standard Assessment Procedure (SAP) is the Government's approved mechanism for measuring home energy efficiency: it calculates a home's typical annual energy costs for space and water heating as well as lighting. The SAP scale runs from 1 (low) to 100 (high). Energy Performance Certificate (EPC) bands are based on the SAP scores, and run from G (low) to A (high). Current building regulations require a SAP rating of between 65 and 81 as a base-line, ie. a level above EPC band D – more than 50% of the existing housing stock falls well below this standard, as shown in Table 2 below.

F and G band homes have very low standards of energy efficiency. There is a broad correlation between these homes and those which constitute a category 1 hazard for excess cold, as defined in English and Welsh environmental health legislation.

Damp and mould are more likely to occur in cold, poorly insulated homes, and thermal efficiency is strongly linked to the age of the property: on average properties that were built before the 1920s fall within the F and G categories and average indoor temperatures are lower the older the property, as shown in Table 3 below.

F and G rated homes are characterised by a number of elements which mark them as poor in energy efficiency. The Energy Saving Trust (1) has highlighted that properties falling into these two categories tend to be:

— Large or medium sized, semi or detached houses, gas heated and double-glazed, but with an unfilled cavity wall, which are generally rated as F. These are estimated to be about a third of all properties falling in categories F or G.
— Properties which lack gas- or oil- fired heating system. These are estimated to be about half of F–G rated homes.
— Smaller homes (flats or terraces), which are electrically or oil-heated and are single glazed. These tend to fall in the G banding, but are estimated to be only a small number.
— Large, semi or detached houses, generally

Table 2 Percentage of homes in England by EPC banding and SAP rating, 2008. Source: EST 2010 (1)

EPC	SAP	% homes in England
A/B	81+	0.3
C	69–80	10.0
D	55–68	35.4
E	39–54	37.4
F	21–38	13.4
G	1–20	3.5

Percentage of homes in England by EPC banding and SAP rating, 2008. Source: EST 2010(1)

Table 3 Indoor temperature by age of property (23)

Ages of property	Number of dwellings	Mean measured temp (°C)	Temp under standard conditions	% of households with hall temp <16°C at standard conditions
Pre 1900	660	17.3	16.7	38.8
1900–44	1,157	17.5	16.8	36.0
1945–64	853	17.6	17.0	35.8
1965–80	621	19.1	18.4	17.6
Post 1980	116	19.5	18.7	14.7

electric or oil-heated, with solid walls, either double or single glazed. The average SAP for single glazed homes of this type is under 20. These tend to be large and old rural homes.

Whether households living in such properties are in fuel poverty depends on the household's income. A number of households living in large and older properties at the higher end of the housing market may not be in fuel poverty due to high incomes. However, the fact remains that households living in such properties are either in fuel poverty or at risk of quickly falling into fuel poverty if their family circumstances or income change. Moreover, such properties are detrimental to the environment as – in order to keep warm - the households residing in them are bound to emit more CO_2 than they would if their home's efficiency was improved.

Rural Homes

Fuel poverty is a particularly concerning problem in rural areas, where it is estimated that half of homes in sparsely populated English communities have an energy efficiency rating of below SAP30, which is considered a significant health hazard. In 2006, 21% in rural areas were in fuel poverty compared with 11% in suburban and 10% in urban areas (24). Rural homes are likely to be detached and larger in size than urban homes (25), meaning that they are more difficult and more expensive to heat, or to make more energy efficient.

Access to mains gas is rare in most areas more than about 5 or 10 miles from an urban area (25) , meaning many rural homes must pay more for their fuel and a high percentage of them are in fuel poverty (The House of Commons Select Committee on Energy and Climate Change, March 2010, cited in (26)). They are heated by electric, oil or solid fuel, which tends to be more expensive and less efficient.

Many rural homes are older buildings. They are more likely to have solid walls (almost all homes built before 1919 are solid walled), which are generally less well-insulated than cavity walls (as can be found in nearly all homes built after 1945) (25). While over 60% of homes in urban areas and rural towns are cavity walled and on mains gas, this is true of only 32% in villages and 21% in hamlets (25).

These factors mean that it is on average more difficult and more expensive to improve the energy efficiency of a rural home and need to be considered when developing policies and interventions aimed at reducing fuel poverty.

5
Direct health impacts of living in a cold home

The direct health impacts of living in a cold home can be divided into higher risk of mortality and increased morbidity rates. There is a longstanding body of evidence describing the relationship between higher mortality rates in winter and cold temperatures (27) as well as higher morbidity rates (28). Fuel poverty itself is also detrimental to health, especially mental health, through the financial stress that it causes to households.

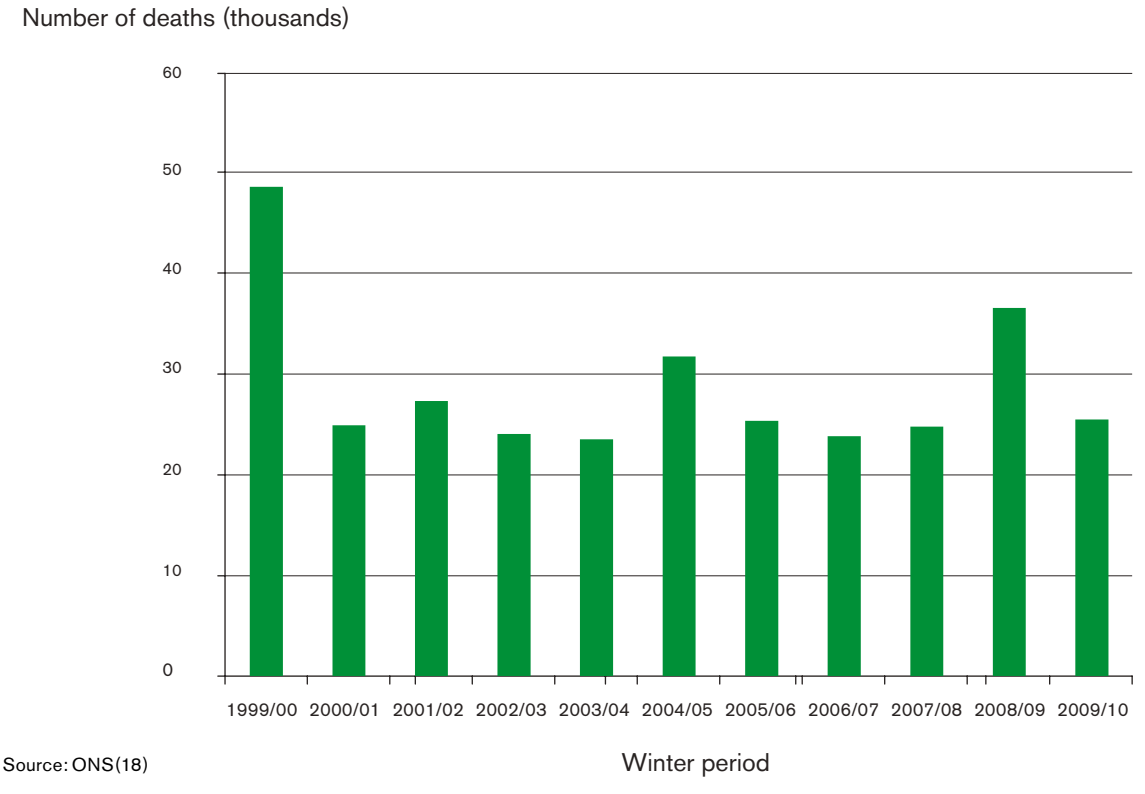
> We could prevent many of the yearly excess winter deaths – 35,000 in 2008/09 – through warmer housing...
> [Public Health White Paper, 2010]

5.1 Mortality: Excess Winter Deaths

The graph below shows the levels of excess winter mortality over the past ten years. In 2009/2010 there were an estimated 25,400 excess winter deaths. Although this represents a 30% decrease from the previous year due to low levels of influenza (21), the level remains persistently high when compared to other European countries (see Table 5)

The Office for National Statistics calculates excess winter deaths as the difference between the number of deaths in December – March and the average of deaths in the preceding August – November and the following April – July. If a two month period is taken instead of the four months, the peak of excess winter deaths is consistently more than 40% higher than the summer trough (23). Each centigrade degree reduction below 18°C in temperature in the UK corresponds with an extra 3500 deaths (29).

Figure 2 Excess winter deaths 1999–2010



Source: ONS(18)

There are many factors which play a part in excess winter deaths: increases in deaths from respiratory and circulatory diseases cause most of the excess winter mortality, influenza is a contributing factor rather than a main cause of death (18). Cold weather, and in particular cold homes, is believed to be a main factor in causing the winter increase of respiratory and circulatory diseases (30).

It has been noted by researchers that EWDs do not usually relate to socio-economic deprivation (32–35). This is because socio-economic deprivation indices do not include an energy efficiency variable and although deprivation and fuel poverty are related, they are not the same – the lack of a significant relationship between deprivation and excess winter mortality suggests that in the UK those who are deprived often live in social housing, which is, on average, more energy efficient.

Wilkinson and associates (23) analysed 80,331 deaths from cardiovascular disease in England, between 1986–96, linked by postcode of residence to data from the 1991 English House Condition Survey. Deaths from cardiovascular disease were 22.9% higher in winter months than the average for the rest of the year. There was a statistically significant excess winter mortality seen with the age of the property (28.8% in properties built before 1850 compared to 15% in properties built after 1980) and with poor thermal efficiency ratings, where a gradient can be seen with SAP rating.

Further, there was a strong association between excess winter deaths and lower indoor temperatures, with residents of the 25% coldest homes having around 20% greater risk than those in the warmest. 'The findings provide strong, although not conclusive, evidence that winter mortality and cold-related mortality are linked to sub-optimal home heating' (23).

"Diseases of the circulation – including heart attack and stroke – account for around 40% of excess winter deaths. Around one third of excess winter deaths are due to respiratory illness…" [Chief Medical Officer Report, 2009]

Circulatory diseases are believed to cause around 40% of excess winter deaths, while respiratory diseases are responsible for about a third (31). Deaths directly attributed to influenza or hypothermia represent a small proportion of excess winter mortality (32). While there is a clear link between marked winter mortality peaks and the incidence of influenza, cold housing still plays a role in the development of health complications from influenza, and there is still excess winter mortality in years when influenza incidence is at a low level. For example, in Scotland in 2000/2001 there were an estimated 1500 to 3000 EWDs while flu rates were lower than 150 per 100,000 (32).

The elderly are subject to the greatest increase in deaths in winter, with 20,200 more deaths in the UK among those aged over 75 years during the winter of 2005/06 compared with levels in the non-winter months. Older people are more likely to be vulnerable to cold weather, partly because they are more likely to have existing medical conditions. Further, their temperature control is weaker because of less subcutaneous fat, making them vulnerable to hypothermia (29). In older people, a 1°C lowering of living room temperature is associated with a rise of 1.3mmHg blood pressure, due to cold extremities and lowered core body temperature (33). Older people are more likely to be fuel poor, as they are likely to spend longer in their homes than other people and therefore require their houses to be heated for longer periods (34).

Other groups are also vulnerable, including children and people with long term illness (30). In addition, many of the most vulnerable members of society spend longer in the home than most, and therefore require the heating on all day, and not just in the morning and evening (31).

Table 4 Excess winter deaths by age of property (23)

Property age (n=80,331)	Winter deaths	% excess in winter	Risk (95% confidence interval) relative to baseline group	P-value for trend*
Pre 1850	701	28.2	1.0	0.001
1850–99	5,469	25.6	0.98 (0.88–1.09)	0.001
1900–18	3,063	24.1	0.97 (0.87–1.08)	0.001
1919–44	6,978	26.0	0.98 (0.89–1.09)	0.001
1945–64	6,709	23.9	0.97 (0.87–1.07)	0.001
1965–80	6,612	17.1	0.91 (0.82–1.01)	0.001
Post 1980	935	15.0	0.90 (0.79–1.02)	0.001

* The p-values test for a trend of increasing or decreasing risk across ordered groups (for example, increasing age). However, in the case of region, there is no logical order and the p-value tests whether the winter excess varies between regions.

The number of excess winter deaths attributable to cold housing

Excess winter deaths occur in both cold and warm housing. However, there is a greater risk of death in colder housing than in the warmest housing. The authors of this report have estimated that 21.5% of all EWDs can be attributed to the coldest quarter of housing, due to it being cold, over and above the amount of deaths which would have occurred had these houses had the same winter excess as the warmest housing. This means that EWDs in the coldest quarter of housing are almost three times as high as in the warmest quarter.

This estimate was based on existing estimates of the risk of excess winter deaths due to living in cold housing, as calculated by Wilkinson in 2001. More recent estimates are not available as there are no comprehensive sets of measured indoor temperatures since the English House Condition Survey stopped collecting such data in 1996.

Wilkinson estimated that, in winter, death rates in the 25% of coldest homes rose to 1.5 times the summer minimum for all types of housing. The corresponding risk ratio for the 25% of warmest homes was 1.3. His estimate was based on mortality rates for the period 1986–1996 in England and Wales and a household sample of 3337.

We used these risk ratios to calculate estimates of excess winter deaths in cold housing and of numbers expected if rates for warm housing applied. The difference between these estimates is the number attributable to the house being cold rather than other factors (e.g. flu epidemics, air pollution, cold outside temperature, etc.). This value was than divided by the average EWDs for the period 1986–1996 in order to calculate the proportion of EWD attributable to cold housing in this period (21.5%). The details of the calculations and key assumptions used to develop the model and calculate the estimate are given in the appendix.

International comparisons

Healy carried out an analysis of excess winter deaths, describing variations in excess mortality in southern, western and northern European countries (35). Table 5 below shows the different levels of excess mortality rates: it is clear that these do not necessarily match different climatic conditions – meaning that often higher rates are found in countries with less severe, milder winter climates ("the paradox of excess winter mortality"), such as Greece, the UK, Spain, Ireland and Portugal. These findings highlight that colder countries, which have had higher building standards than the UK for many years, have much lower rates of excess winter deaths.

For this study levels of fuel poverty were calculated using a set of indicators which included housing conditions, affordability of home heating and energy efficiency levels based on a consensual approach[5] (35). It is suggested by this study that the paradox of excess winter mortality being highest in warmer countries could be explained by the fact that countries with milder climates often have the worst domestic thermal efficiency. Table 6 below shows the countries' differences in thermal efficiency variables and how they relate to the coefficient of seasonal variation[6]: the study shows that cross-country levels of cavity wall insulation, double glazing, and floor insulation are all significant at the 5% level in the model.

The study also analyses the impact of different lifestyle factors on excess winter mortality, in particular smoking and obesity. Interestingly, it shows that there is no relationship between these factors and excess winter mortality despite the fact that these factors are strongly associated with higher non-seasonal mortality rates. The study concludes that variations in mortality rates are due to differences in indoor temperatures, healthcare spending and socio-economic circumstances.

Other studies have supported Healy in associating excess winter deaths with internal temperatures,

Table 5 Coefficient of seasonal variation in mortality (CSVM)[4] in EU–14 (mean, 1988–97) (35)

	CSVM	95% CI
Finland	0.10	0.07 to 0.13
Germany	0.11	0.09 to 0.13
Netherlands	0.11	0.09 to 0.13
Denmark	0.12	0.10 to 0.14
Luxembourg	0.12	0.08 to 0.16
Belgium	0.13	0.09 to 0.17
France	0.13	0.11 to 0.15
Austria	0.14	0.12 to 0.16
Italy	0.16	0.14 to 0.18
Greece	0.18	0.15 to 0.21
UK	0.18	0.16 to 0.20
Spain	0.21	0.19 to 0.23
Ireland	0.21	0.18 to 0.24
Portugal	0.28	0.25 to 0.31
Mean	*0.16*	*0.14 to 0.18*

demonstrating a strong association between excess winter mortality and levels of domestic heating (33) or protection from low outdoor temperatures (36).

Summary

- Countries which have more energy efficient housing have lower EWDs.
- There is a relationship between EWDs and low SAP rating/low indoor temperature.
- EWDs are almost three times higher in the coldest quarter of housing than in the warmest.
- 21.5% of all EWDs are attributable to the coldest quarter of housing, because of it being colder than other housing.
- Around 40% of EWDs are attributable to cardio-vascular diseases.
- Around 33% of EWDs are attributable to respiratory diseases.

5.2 Morbidity: Health Conditions

The main health conditions associated with cold housing are circulatory diseases, respiratory problems and mental ill-health. Other conditions influenced or exacerbated by cold housing include the common flu and cold, as well as arthritis and rheumatisms. The level to which such conditions rise during the winter months and their relationship with cold housing is harder to measure than for mortality, which is systematically recorded. The literature on excess winter morbidity is reviewed below.

Low indoor temperatures have been shown to be associated with poor health (41), excess winter mortality (37), as well as a variety of social and economic problems for residents (38). Trends such as the ageing population, rising unemployment, and an increase in numbers of people working from home will make the need for a warm home even more crucial (39). There are recommendations from the World Health Organization (WHO) to keep indoor temperatures above 18 degrees, but there are also some critical thresholds around acceptable temperatures in relation to health (40). For instance, the longer an individual is exposed to cold temperatures, the greater risk of harm to health (41). The impact is exacerbated for vulnerable individuals and the colder the temperature the greater the risk of harm:

- Temperatures that are lower than 16 degrees appear to impair respiratory functions.
- Temperatures below 12 degrees place strain on the cardiovascular system.
- Temperatures below 6 degrees place people at risk of hypothermia.

Liddell (42) has reviewed the main large scale studies of the health impacts of fuel poverty carried out over the past 10 years. These were the Warm Front Evaluation, the Scottish Central Heating

Table 6 Coefficient of seasonal variation in mortality and domestic thermal efficiency in EU–13 (35)

	CSVM	Cavity wall insulation (% houses)	Roof insulation (% houses)	Floor insulation (% houses)	Double glazing (% house)
Finland	0.10	100	100	100	100
Germany	0.11	24	42	15	88
Netherlands	0.11	47	53	27	78
Sweden	0.12	100	100	100	100
Norway	0.12	85	77	88	98
Denmark	0.12	65	76	63	91
Belgium	0.13	42	43	12	62
France	0.13	68	71	24	52
Austria	0.14	26	37	11	53
Greece	0.18	12	16	6	8
UK	0.18	25	90	4	61
Ireland	0.21	42	72	22	33
Portugal	0.28	6	6	2	3

Programme (CHP), the New Zealand Housing, Insulation and Health Study (HIHS), and Housing, Heating and Health Study (HHHS), a NATCEN longitudinal study of housing conditions and their association with English children's well-being, and the US Children's Sentinel Nutritional Assessment Programme (C-SNAP).

Liddell concludes that, despite the risks to physical health from cold homes, improvements to energy efficiency and the reduction of fuel poverty achieved by some of the programmes had a modest measurable impact in improving the physical health of adults. However, the potential for measuring such effects is hampered by methodological limitations in the evaluations, including the sample sizes of the studies. Measuring the health impact of improvements in energy efficiency and reduced fuel poverty is particularly difficult for adults who may have long term health conditions related to cold housing which are the result of lengthy exposure to cold houses. The impacts are easier to measure in children, who are more readily susceptible to changes, and for the elderly who are at higher risk of mortality or developing life-threatening conditions. The main findings across the studies are summarised in the points below, while some of the detail is discussed further in this report:

— Significant effects on the physical health of the **young** were evident, especially in terms of **infants**' weight gain, hospital admission rates, and caregiver-rated developmental status, as well as self-reported reduction in the severity and frequency of **children**'s asthmatic symptoms.
— Mental health impacts emerged as extremely strong amongst both **adults and adolescents**.
— After improvements have been made to homes, health improvements for **adults** were measurable, although modest, and mostly related to perceptions of physical well-being and self-assessed general health.
— Large-scale studies suggest that impacts of cold temperatures as a function of poor housing on mortality and morbidity are almost certain across the whole population.

Circulatory diseases

Much of excess winter mortality can be attributed to cold temperatures, and a significant proportion can be attributed to cold housing. Excess winter deaths that are attributable to circulatory diseases are estimated to be between 40% (43) and 50% (44). Cold affects circulatory health because temperatures below 12 degrees celsius result in raised blood pressure (Collins et al., 1985, cited in (44)) caused by the narrowing of blood vessels, which also leads to an increase in thickness of the blood as fluid is lost from the circulation. This, with raised fibrinogen levels due to respiratory infections in winter, is associated with increased deaths from coronary thrombosis in cold weather. Increases in blood pressure, along with increased blood viscosity, increases the risk of strokes and heart attacks (31).

Barnett et al. (45) studied people aged 35–64 in 21 countries who had had a coronary event between 1980–95 and found a small overall increase in the number of heart attacks in cold periods (26.3% events were in 25% of periods). More significantly, fatal events (compared with non-fatal events) were more common in cold than warmer periods. The researchers also found that women were 1.07 times more likely to suffer a coronary event in a cold period than men.

It has been suggested that exposure to cold temperatures only brings forward those events that would have happened within the next couple of weeks (the mortality displacement hypothesis). However, in a Barnett and associates (45) study of cold weather and coronary events, there was no increased odds (above the population average) of experiencing a coronary event during a cold period for people who had previously had heart attacks. This suggests that the cold temperature mechanism affects both high and low risk groups equally.

Although the relationship between cold temperatures and circulatory diseases is evident, there is little research on the relationship with cold housing. One study, which monitored cardio-vascular health in the elderly population (aged 75 and over) monthly for one year, found that there was no relationship between indoor temperature and excess circulatory ill-health (46). However, there are shortcomings to this research, such as the fact that measures were taken only once a month during a mild winter, and the population in the warm housing was in residential or sheltered accommodation, which means that they might have been more vulnerable to ill-health in the first place.

More recently, research using case control study has shown significant improvements in circulatory health through improvements in the thermal efficiency of housing (47). In this study the blood pressure of individuals subject to interventions fell significant and there were improvements to their general health including self-reported reduction in the use of medication and hospital admissions, while no changes were recorded for the control subjects whose housing had not been upgraded.

During the summer months, heat waves can be detrimental to people's health, and cause additional avoidable deaths. During the heat wave of August 2003, when temperatures were much hotter than usual, it is estimated that there were 2139 excess deaths in England and Wales (48), mostly through circulatory diseases**.** This was particularly significant for those over 75 years of age, and those living in the London region (48), showing that vulnerability to excess heat was found among the elderly population, which is also the most vulnerable to cold temperatures**.** However, urban areas were at higher risk of excess heat. Although many energy efficiency improvements are likely to protect from extreme outdoor temperatures, hot or cold, the problem of summer excess deaths should be taken into consideration when carrying out home energy efficiency improvements, particularly when considering materials used and the adequacy of ventilation.

Despite evidence of unusually hot summers causing excess summer deaths in the UK, these excess summer death rates are relatively low in comparison to excess winter deaths. Excess summer mortality sometimes receives considerable media attention as it did during the heat wave of August 2003. Excess summer mortality occurs to a lesser, though still notable, extent in England and Wales. Circulatory morbidity and mortality are higher in the winter than even the warmest of UK summers. The increase in the number of heart attacks during the winter months and an analysis of excess non-fatal heart attacks and strokes in relationship to cold housing is an obvious avenue of research to explore the causes of increased cardio-vascular morbidity during the winter months.

Respiratory problems

Cold air affects the normal protective function of the respiratory tract, with increased bronchoconstriction, mucus production and reduced mucus clearance. The relationship between respiratory problems and cold temperatures is evident in the seasonal level of contact between sufferers and the healthcare services. Increased contact for adults during the winter months has been related to fuel poverty (49), and increased contact and symptoms for children has been strongly associated with cold housing (42).

Hajat, Kovats & Lacowycz (50) found that GP consultations for respiratory tract infections can increase by up to 19% for every one degree drop in mean temperature below five degrees celsius. Hospital admissions for respiratory conditions and ischaemic heart disease (reduced blood supply to the heart) also increase substantially during winter months (51).

Afza & Bridgman (52) support this in their paper which looks at the contribution of respiratory disease to the burden of excess winter (November-February) hospital admissions in the North Staffordshire district, 1995–2000. They found that respiratory disease related emergency admissions increased twofold in the winter months. Cold, damp houses also promote mould growth, which lowers resistance to respiratory infections, thus increasing the risk of respiratory morbidity during winter (31).

A study by Gilchrist (53) focused on measuring morbidity in relation to fuel poverty: costing emergency respiratory admissions followed by the probability of dying following admission. The paper could not conclude whether there was a relationship between mortality and fuel poverty, but it showed that morbidity counts rise with increasing fuel poverty risk, with a notably large effect in December, over and above the underlying effect of winter itself. Effects were particularly relevant for age and gender, with higher counts for older people and lower counts for women.

A time series analysis of short-term effects of temperature on daily GP consultations made by people over 65 for lower (LRTI) and upper respiratory tract infections (URTI) was conducted over a ten year period (1992–2001) in 16 urban UK locations (54). This showed an association between low temperatures and an increase in LRTI consultations in all 16 locations. A slightly weaker relationship was observed in the case of URTI consultations.

Importantly, a large scale study which looked at residents aged over 65 in the London Borough of Newham, calculated 'excess winter morbidity' (EWM) based on emergency hospital episodes for all respiratory diagnosis codes, and ranked this against a Fuel Poverty Index (FPI) which included factors of energy efficient housing, low income, householder age and under-occupation. The FPI was shown to be a predictor of EWM, indicating supporting evidence of a relationship between energy-efficient housing and winter respiratory disease among older people (28).

> "I'm all right, but I worry about my husband because he's got bronchitis. In the summer, he can do the dishes in the kitchen. But in the winter, he can't because it's too cold in there because of the draught coming in from the roof." (Susan, retired couple) [Harrington et al, 2005]

Barnes, Butt & Tomaszewski (19) used the Families & Children Survey to estimate that 13% of children spent at least a year living in inadequately heated accommodation between 2001–05. Damp is more likely to occur in cold, poorly insulated homes, and this often results in mould which may trigger an allergic response such as asthma. Children living in damp, mouldy homes are between 1.5 and 3 times more prone to coughing and wheezing – symptoms of asthma and other respiratory conditions – than children in dry homes (55) (Peel et al 1998, cited in (19)). Children persistently living in accommodation with inadequate heating and poor conditions were more than twice as likely to suffer from chest and breathing problems, such as asthma and bronchitis (19).

A child who develops asthma this way is likely to have it for many years and possibly life, and this is particularly concerning given 2009 estimates that 1.1 million children in the UK are affected by asthma (39). Brambleby and associates (56) estimated the cost of asthma is at least £847 millions per annum, just under 1% of the national NHS budget in 2008 (39).

Adequate heating systems have been shown to improve asthma symptoms and home energy improvements have reduced the number of sick days off school by 80% in children with asthma or recurrent respiratory infections (57).

The Warm Front Programme showed that a majority of participants suffering from respiratory problems reported improvements in breathing, however a small but significant proportion felt that the new heating systems aggravated their chest conditions (58). Bone and associates (59) also highlight

a number of concerns surrounding home energy-efficiency measures and their negative impacts on health. Insufficient ventilation in increasingly airtight houses may lead to increased levels of indoor pollutants such as radon, carbon monoxide, nitrogen dioxide, and formaldehyde, and the higher relative humidity might promote growth of mould and dust mites, which are implicated in the development and worsening of asthma.

Risk of overheating in heatwave conditions, increasing the risk of illness and death from conditions, most commonly cardio-vascular and respiratory disease, is a further concern. These impacts, however, are not a result of home energy-efficiency measures per se, but rather inappropriate choice and maintenance of ventilation systems and design and refurbishment of buildings, and these are the issues that should be addressed. These findings around worsening of respiratory health in a minority of cases receiving increased air-tightness in the home reiterate the importance of ensuring adequate and high-quality refurbishments of the existing stock.

Mental health

A study carried out by Shelter in 2006 suggested that children in bad housing conditions, including cold homes, are more likely to have mental health problems, such as anxiety and depression, to contract meningitis, have respiratory problems, experience long-term ill health and disability, experience slow physical growth and have delayed cognitive development (60). These adverse outcomes reflect both the direct impact of the housing and the associated material deprivation.

> *Interviewer*: If you are cold in your house, what effect does that have on your life in general?
> *Respondent*: It makes you feel depressed, very much so. (Edwin, single middle aged)
> [Harrington et al, 2005]

The Warm Front and the Scottish CHP evaluation assessed mental health impacts on adults and both found that effects were prominent in the mental health domain, in particular for borderline anxiety and depression. In the short and medium term, receiving a Warm Front package is associated with significantly better mental health. The study showed that as average bedroom temperature rose, the chances of occupants avoiding depression increased. Residents with bedroom temperatures at 21°C are 50% less likely to suffer depression and anxiety than those with temperatures of 15°C (61).

Even greater impacts were found in the New Zealand HIHS study. This could perhaps be accounted for by the fact that all households were at clinical risk in the New Zealand study. "It is possible that the joint effects of fuel poverty and ill health (especially if one is perceived to exacerbate the other) generate a significantly greater toll on mental health than might be evident in a more diverse range of healthier households." (42)

The NATCEN study found that lack of affordable warmth was associated with multiple mental health risk for young people, meaning that they manifested four or more negative mental health symptoms: 28% were classified as having such risk, compared to 4% of young people who had always lived in warm homes (19). A significant proportion of children living in cold homes felt unhappy in their family – 10% as opposed to 2% of the group living in warm homes. Complementary studies point to the fact that young people living in cold homes try to find respite and privacy in other venues outside home, where they are more exposed to mental health risks (62,63).

Other conditions

Medical conditions exacerbated and/or complicated by exposure to cold and which show winter associations include diabetes complications, certain types of ulcer exacerbations, osteoarthritis knee pain severity and hip fracture (29). Chronic conditions may also lower body metabolism which means the body generates less heat, while stroke, Parkinson's disease and dementia restrict activity, slowing body heat generation and conservation (29). Cold housing may also delay recovery following discharge from hospital (64).

As part of the Warm Front health impact evaluation, Gilbertson and associates (58) conducted semi-structured interviews with 49 households which received home energy improvements under the scheme from five urban areas. Almost all reported improved and more controllable warmth. Two thirds of participants reported improved comfort, while those with limited mobility all acknowledged the warmer home environment as beneficial. 20% reported less minor illness during the winter. The Warm Front health impact evaluation also found improvements to mental health and emotional security. 24.5% reported feeling more relaxed and content, 55.1% reported feeling better, and 26.5% reported better mood and temperature (58).

> *Interviewer*: How important is being warm for you?
> *Respondent*: Very, because I can't stand the cold very much because I get pains in my legs from the cold. (Claire, young mother, living with husband and children) [Harrington 2005]

The Warm Front health impact evaluation found that 24.5% of respondents reported easing of chronic conditions such as arthritis (30).

A survey-based evaluation of a programme to tackle fuel poverty by installing energy efficiency measures in homes in a rural community in Northern Ireland demonstrated that energy efficiency intervention can lead to improvements in

health and well-being, increased levels of comfort in the home and a reduction in the use of health services. Key findings include a reduction in the occurrence of condensation, a reduction in the numbers of people reporting arthritis/ rheumatism, a reduction in the use of health services, an increase in temperature satisfaction for those who had a new heating system installed, and for those who did not, there was an increase in benefit uptake (70).

Interviewer: Do you think being warm is connected to your health?
Respondent: Yes, because you can catch more colds [if colder]. (Betty, retired couple)
[Harrington 2005]

Cold conditions can also increase the risk of minor illnesses. The common cold replicates faster in a cold nose whereas the immune system becomes more sluggish in colder temperatures, meaning a common cold is more likely to develop. This can have more severe consequences for patients with existing conditions, as it may lead to a chest infection in patients with chronic obstructive pulmonary disease (COPD) (44).

Summary

- There is a strong relationship between cold temperatures, cardio-vascular and respiratory diseases, which has been associated with fuel poverty and cold housing.
- Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems than children living in warm homes.
- Mental health is negatively affected by fuel poverty and cold housing for any age group.
- More than 1 in 4 adolescents living in cold housing are at risk of multiple mental health problems.
- Cold housing increases the level of minor illnesses such as colds and flu and exacerbates existing conditions such as arthritis and rheumatisms.

6
Indirect health impacts of living in a cold home

Evans (65) carried out a study of wider housing quality and children's health and well-being. Housing quality was based on an observer-rated standardised index[7] which included indoor temperature, as well as other variables (structural quality, privacy, hazards, cleanliness/clutter, and children's resources). The study found that independently of household income, children residing in poorer quality housing have more psychological symptoms and less task persistence than their counterparts living in better quality housing. There were no gender differences. The research showed not only that housing quality is associated with psychological health in children, but that it may also affect certain aspects of children's motivation. The motivational data suggests that chronic exposure to poor housing conditions may lead to greater helplessness[8].

Significant improvements in health-related quality of life were found in a randomised controlled trial of home insulation, which concluded that targeting home improvements at low-income households significantly improved social functioning and both physical and emotional well-being (including respiratory symptoms) ((41) cited in (66)).

The level of energy efficiency affects people with low incomes more severely because it affects life chances and how they spend disposable income on other basic items such as food and clothing (14). Poor families will face the choice to "heat or eat": either less money can be spent on basics such as a sufficient, healthy diet (with obvious health impacts such as obesity or malnutrition), or less can be spent on heating their homes to a reasonable temperature.

Warmer homes could bring potential physical health benefits from improvements in cooking and nutrition. Interviews with participating households as part of the Warm Front health impact evaluation found that 10% of householders felt more and better quality food could be purchased because of cost savings, and 20% reported improved cooking since previously cold kitchens were now comfortable to work in (58).

Bhattacharya and associates (67) looked at the impact of cold weather periods on family budgets and nutritional outcomes in poor American families. Their results suggested that these families tended to decrease spending on food by a similar amount to the extra spent on fuel during cold spells, and both children and adults reduced their caloric intake by about 200 calories in winter months. Rich families, on the other hand, increased spending on food, demonstrating that deprived families are more likely to suffer from some of the indirect impacts of cold weather.

Cold, damp homes increase the risk of arthritic symptoms. This impacts on strength and dexterity, which both decrease as temperatures drop, increasing the risk of non-intentional injuries. A cold house increases the risk of falls in the elderly (31). Domestic accidents, including fatalities, are more common in cold homes in winter. This can result in periods of prolonged immobility, making it even more difficult to keep warm (44).

Social isolation among older people is exacerbated by living in a cold home. Costly fuel bills prevent them from going out, they fear returning, already feeling cold, to a cold home, or they are reluctant to invite friends into a cold house (44). Older people who are unable to keep their homes warm, who have a health condition exacerbated by the cold or have sustained injuries due to the cold, may need increased care or need to go into residential care, increasing the financial burden on the country (44).

> *Interviewer*: If you're cold in your own home, what effect has that on your life in general?
> *Respondent*: Terrible. Sometimes we go to bed at 7 o'clock, and all our regular visitors know it's pointless coming after that time because they know where we are. We find it easier to go upstairs to sit underneath the blankets to keep warm. (Evelyn, middle aged couple) [Harrington 2005]

Some respondents to a survey carried out after the Warm Front programme tended to think of cold indoors as exacerbating health problems rather than causing them. This may illustrate lay beliefs rather than the absence of causality, but it also shows a clear perception on the part of the respondents that cold housing had an impact on their well-being. In particular, respondents identified positive effects of warmer homes on social relationships and mental health (68).

6.1 Social benefits of improved housing

The main benefits arising from improving the thermal efficiency of the existing housing stock are the beneficial effects on the health of residents and the reduced carbon emissions from heating needs. However, there are other benefits to warmer homes and to investing in thermal efficiency.

A study found that an increased duration of living in inadequately heated accommodation is significantly associated with having multiple negative outcomes across the range of the Every Child Matters outcomes framework[9]. For example, 67% of children who persistently lived in inadequately heated accommodation had not had a holiday in the past year compared to 50% who lived in inadequately heated accommodation on a short term basis, they were more likely to feel safe and less likely to fail to attend school (19).

Further, an increased duration of living in inadequately heated accommodation is significantly associated with having no quiet place at home to do homework (19). This may be because the family can afford to only part heat their home and heating is focused on the most used (and therefore noisiest) rooms. This can affect a child's educational attainment and therefore work opportunities in later life (31). Educational and work factors are particularly important determinants of long-term health (66): cold housing, its impact on family life and early years can heavily weight on other spheres of life, which affect long-term health outcomes.

The investment in energy efficiency measures can also help with neighbourhood renewal by creating more local jobs and improving local economies (10). Area based approaches such as the Community Energy Savings Programme currently being trialled throughout the UK could help to deliver this. Such investment can bring vitality to the green economy, work opportunities in the building industry and opportunities for up skilling the building workforce (14).

Summary

- Cold housing negatively affects children's educational attainment, emotional well-being and resilience.
- Fuel poverty negatively affects dietary opportunities and choices.
- Cold housing negatively affects dexterity and increases the risk of accidents and injuries in the home.
- Investing in the energy efficiency of housing can help stimulate the labour market and economy, as well as creating opportunities for skilling up the construction workforce.

7
Conclusions

Cold housing and fuel poverty not only have direct and immediate impacts on health, but also indirect impacts and a wider effect on well-being and life opportunities, as well as on climate change. The evidence reviewed in this paper shows the dramatic impact that cold housing has on the population in terms of cardio-vascular and respiratory morbidity and on the elderly in terms of winter mortality. It also highlights the stark effect that fuel poverty has on mental health across many different groups, while also having an impact on children and young people's well-being and opportunities.

Addressing energy inefficient housing and bringing all homes up to a minimum standard of thermal efficiency would have the strongest positive impact on the poorest households, even though households from a variety of socio-economic backgrounds are likely to be residents of such properties.

A medium scenario model for fuel price increases developed in 2008 predicted fuel poverty in England to jump to four million by 2016 if improvements to the energy performance of the housing stock, and growth in the incomes of low-income households, were maintained at only current rates (69). Fuel poverty has now already risen to this level because the fuel price increase was much higher than the model predicted: the current energy efficiency of the existing housing stock is unable to mitigate such high increases. However, it is unlikely that anyone living in a dwelling built to current and near-future standards will be at any risk of being in fuel poverty (70). The Government should aim to make improving energy efficiency standards a priority: any step forward in achieving certain minimum standards in the existing housing stock will reduce the risk of fuel poverty for current and future households and bring associated health benefits.

The Energy Savings Trust estimate that the overall total cost of improving to an E band all F and G homes would be £12.5 billion. Other estimates for upgrading all fuel poor homes to a SAP 81 range from £21 to £28 for England or £49 to £64 billion for the whole of the UK (71). If all homes in England were brought up to an EPC E band, 9.4Mt CO2 would be saved, just under 2% of the UK's net CO2 emissions[10]. Major energy efficiency retrofit programmes that would bring homes to a SAP of 81 have been estimated to reduce fuel bills of the fuel poor by half, thus removing 83% of fuel poor households from fuel poverty, as well as reducing CO2 emissions related to domestic energy requirements by over 50% (22).

> "The annual cost to the NHS of treating winter-related disease due to cold private housing is £859 million. This does not include additional spending by social services, or economic losses through missed work. The total costs to the NHS and the country are unknown. A recent study showed that investing £1 in keeping homes warm saved the NHS 42 pence in health costs..."
> [Chief Medical Officer Report, 2009]

NHS costs are associated mainly with morbidity rather than mortality, and the Department of Health in 2009 estimated that for every cold-related death there are eight non-fatal hospital admissions (39). In the coldest months of the year, NHS expenditure was reported as rising by 2% in 1998 (Hansard 1998, cited in (39)) , and Brenda Boardman estimated that the annual cost to the NHS of cold-related ill-health is almost certainly in excess of £1 billion (39).

An investment in upgrading all homes in England would be recouped though savings in energy consumption and NHS costs; additional savings would be gained through mitigating climate change, while achieving large scale environmental and social benefits through the number of lives saved and improved health and quality of life for all households affected by cold housing and fuel poverty.

Improving the energy efficiency of the existing stock is the only long-term sustainable way of ensuring a number of multiple gains: environmental gains, health gains, the mitigation of climate change and social gains through a reduction in health and environmental inequalities. It is also a good lever to stimulate the economy and the labour market in relation to the green economy, as well as providing opportunities for the up-skilling of the workforce in building construction and related sectors.

Government policy documents and reports, including the Chief Medical Officer report of 2009 and the recent Public Health White Paper, recognise the tangible impact of cold housing and fuel poverty on people's health and well-being. However, there is a clear contradiction between the Government's recognition of the link between health and cold housing, its statements of support for the reduction of fuel poverty and CO_2 emissions and its lack of identifiable commitment to support this agenda through regulation, target setting, guidelines, or funding. The recent cuts to Warm Front with its clearly reported

record of health improvement, ahead of any significant detail on the future level and arrangement of the Energy Company Obligation (ECO), are of particular concern. The impact of the funding cuts to local authorities on investment in fuel poverty and energy efficiency programmes is likely to be highly detrimental, especially when combined with the removal of National Indictor 187 and the repeal of the Home Energy Conservation Act.

While an estimated £3 to £8 billion annually is needed to address fuel poverty (71), ECO is planned to deliver only about £1 billion of investment through energy companies' contribution (72), while other existing schemes and requirements are being either reduced or abolished. The Government's current support and financial commitment to addressing the problem of poor thermal efficiency of housing remains inadequate, given the potential it has to improve the health and well-being of the population and to help mitigate climate change.

Ensuring effectiveness of interventions

Some studies (74;79) have shown that, following interventions aimed at improving thermal efficiency, trade-offs have taken place between energy use and thermal comfort. In some cases, the benefits of improved fuel efficiency were taken in the form of reduced fuel consumption rather than extra warmth, which may indicate more disposable income (68). These cases were often elderly householders, who found it difficult operating new heating controls or feared higher energy bills because they were unsure how the improved efficiency would impact on consumption.

These issues can undermine the potential health benefits of interventions. However, susceptible households can be identified and thermal efficiency interventions can be supplemented by other actions aimed at avoiding subsequent trade-offs.

A number of households who received improvements through the Warm Front programme reported a preference for retaining colder homes following improvements. Such preference was based partly on a long-term adaptation to low temperatures experienced throughout life and partly on lay beliefs of what constitutes a healthy temperature (73).

Interventions, especially in older people's homes, should be coupled with training in the use of new heating systems and ideally easy-to-use smart metres, which can indicate how much is being spent on fuel consumption. Such training should include information on what constitutes a healthy indoor temperature.

If heating or efficiency improvements are hard to implement and/or the household income is extremely low, upgrading the worst homes to a higher standard would still leave a number of households in fuel poverty. These cases need to be identified and consideration should be given to financial support with meeting energy bills for at-risk households, which would bring health benefits. Even better, the Government should give consideration to implementing a strategy for ensuring investment into upgrading such homes to a high efficiency standard, such as bands A and B. This would bring dual health and environmental benefits as well as making current and future households less susceptible to energy price increases.

A study showed that at pre-existing temperatures of 16.5C, about 30% of the benefit of an energy efficiency improvement would be taken as a temperature increase and the rest as an energy saving. This means that the great majority of interventions bring a multiple health and environmental gain. Where pre-existing temperatures were as low as 14C, such as in very poor standard homes or very low income households, a 50% energy saving is achieved and the rest is taken as a temperature increase. In circumstances where the house is already maintained at 20C on average, energy efficiency improvements will achieve a 100% energy saving (74).

This means that once the trade-off issues for at-risk households are addressed, energy efficiency interventions always bring multiple health and environmental gains.

7.1 Policy Recommendations

The studies reviewed in the sections above have shown not only that cold housing and fuel poverty have an impact on physical and mental health, but also that policies aimed at improving the thermal efficiency of homes and reducing fuel poverty can reduce mortality and morbidity. In this section we propose some areas for policy development and highlight interventions that are likely to have the greatest impact in improving cold homes and reducing fuel poverty.

The Energy Saving Trust (EST) has carried out an analysis of the measures needed to improve all houses to SAP39, thereby getting rid of all F and G homes (17% in 2008). The main measures needed are loft installation, full cavity wall insulation, a modern gas condensing boiler and double glazing. These homes will cost less than £3000 to raise to a band E. However, there are a small proportion of hard to make decent homes which will cost more than £5000 to bring to an E band. These should not be ignored when considering policy assistance measures.

Improving the energy efficiency of housing has to occur in all communities, across the social gradient and not just where it might be 'easy'. At times the households in most urgent need are those who are least likely to access support, such as tenants in the private rental sector, or who live in homes that are hardest to upgrade such as older rural housing.

1 It is vital that programmes and funding remain in place to reduce fuel poverty and improve the health of those on low incomes through improvements in the energy efficiency of homes at no cost to vulnerable consumers. Such funding should be provided to low income households through a renewed Warm Front Scheme and through the proposed Energy Company Obligation (ECO), which is currently planned to pass the costs on to consumers, regardless of income, though not upfront and with potential longer-term savings. This scheme needs to be adequately financed and its details should ensure that low-income households and vulnerable groups should be exempt from meeting costs.

2 The Warm Front programme, which provided a package of insulation and heating improvements to qualifying households, has been shown to have a positive impact on mental health, alleviating respiratory problems in children and reducing deaths among older people (61). In the context of increasing energy prices and an ageing population, as well as the need to mitigate climate change and adapt to more extreme weather events, it is recommended that the Warm Front Scheme is not only renewed to at least its pre-CSR levels, but its eligibility criteria widened or at least maintained, rather than restricted as is currently proposed.

3 Funding mechanisms must be in place to enable households across all tenures to upgrade their homes. However, beyond supporting low income households in any area, more intensity of intervention is also needed on two other levels: deprived areas should be targeted through programmes such as the Community Energy Savings Programme, and poor quality housing should be targeted through the introduction of a renewed energy-focused Decent Homes Standard, as suggested by the Communities and Local Government Committee (75). Low-income households could also be aided by further increasing targeting for the social housing sector, as suggested by the Home Energy Management Strategy, which proposed a minimum SAP standard of 70 for all social housing, as well as further action engaging with landlords to improve efficiency in the private rental sector (76).

4 More appropriate legislation must be developed on the side of tenants in private rented accommodation who are put off seeking help to make energy efficiency improvements to their homes. The Government should develop targets for upgrading the energy efficiency of the existing stock, including some form of minimum energy efficiency regulation for the private rental sector, which is supported by the Fuel Poverty Advisory Group (20). This could be facilitated through a statutory register for landlords held by local authorities, which could help identify non-decent homes, at risk households and implementation of regulation. This has the potential of raising 150,000 households from fuel poverty if privately rented F and G rented properties were brought up to a band E (72).

5 National Indicators are effective levers for local action and we recommend that the National Indicator on fuel poverty should be maintained as mandatory and a new National Indicator of housing quality, focused on energy efficiency, and specifically related to the private sector should be made available to local authorities. Fuel poverty has been included as an indicator in the proposed public health outcomes framework (77), while at the same time much of the responsibility from public health will move to local authorities: it is fundamental that data on fuel poverty at the local level continues to be collected if the this indicator is to be implemented and monitored.

6 Energy standards and guidelines should be coupled with quality standards for adequate ventilation when sealing homes. This is particularly necessary when 'quick fixes' such as double-glazing and draught proofing are carried out to properties. In major refurbishment and regeneration projects consideration should be given to using solar heat gain, while at the same time avoiding summer overheating through

shading and shelter belts. Some building materials – especially natural materials with a high density perform much better in avoiding summer overheating than light-weight counterparts, such as rockwool or polystyrene. Government funded projects should specify materials that address both problems.

7 Ensuring that all F and G rated homes are upgraded to an E standard by 2016 is a basic step towards achieving carbon emission reduction targets and ensuring that the existing housing stock is ready for upgrades to nearly zero-energy standards when undergoing further renovations as suggested by the EU policy directives on the energy performance of buildings (4). It is therefore recommended that, whenever viable, homes are upgraded to as high a standard as possible. In a few cases where some of the worst homes are involved and where it is cost-efficient, consideration should be given to demolition and rebuilding to current standards as this may avoid further expenditure in the future. It is often cost effective to deliver measures as packages, bringing them up to a band D or C, for example internal solid wall insulation and window replacements are usually most cost effectively delivered at the same time.

8 Past Government policies aimed at tackling fuel poverty have not equitably addressed those issues faced by rural communities. There are no policy instruments supporting the financing of double glazing, limited policy measures supporting financing for solid wall insulation and no strong incentive encouraging homeowners in inefficient homes to switch away from electric heating systems (1). It is recommended that policy instruments and incentives to implement the above are included in the Green Deal. There has been a lack of funding to assist off-gas properties, and remote areas suffer higher costs of delivery when it comes to home energy efficiency measures (26). Specific policies and interventions need to be developed to address the energy efficiency of rural homes, in particular FIT and RHI should be adapted to provide further support to low income households in rural homes.

Appendix

Methodology for developing model and calculating estimate of EWDs attributable to cold housing

The details of the calculations are given below. They are based on a simplistic model for estimating what proportion is attributable to cold housing and make some key assumptions:

1 The difference between the relative risk of death in cold and warm housing was constant over the 4 winter months.

2 The average risk for the non-winter months was half way between the summer minimum and the average level for the 4 winter months.

3 The population at risk in the 25% of coldest homes comprised a quarter of the general population and had the same age-sex profile.

A similar calculation could be performed for any other time periods if estimates of the risk for cold and warm housing were available for these other time periods. An assumption cannot be made that the difference in risks would be the same for other time periods, as it is not possible to predict how outdoor temperature and flu epidemics would influence this difference in risk.

The calculation was as follows:

Retrieved from ONS data

A Total EWDs for 1985/6–1995/6 = 368,850
A1 Total registered deaths 1986–1996 = 6,251,491

Calculations

B Average EWDs (A÷11)
C Monthly average EWDs (B÷4)
D The total number of deaths excluding EWDs (A1–A)
E The average monthly deaths excluding EWDs (D/(12×11))
F The average summer minimum (E–C)
G The monthly winter deaths in the coldest 25% of housing (F×1.5÷4)
H The monthly winter deaths that would be expected in 25% of housing based on death rates for the warmest housing (F×1.3÷4)
I Monthly winter deaths due to the coldest 25% of housing (G–H)
J Deaths due to the coldest 25% of housing over the winter period (I×4)
K Proportion attributable to the 25% of coldest housing (J/B)

Notes

All estimates are based on the period 1986–1996
Risk factors were taken from Wilkinson et al. 2001
Registered deaths, mortality rates and estimates of EWDs for the period 1986–1996 are all taken or derived from ONS data.

Endnotes

Denoted by [n] in the text

1 Although the emphasis in the definition is on heating the home, fuel costs in the definition of fuel poverty also include spending on water heating, lights and appliance usage and cooking costs.

2 Defined as those in receipt of one of the principle means tested or disability related benefits.

3 Those in receipt of certain income and disability benefits and those over the age of 70.

4 The CSVM is the proportionate increase in mortality during the winter months (Dec–Mar) in comparison to the average for the other two quarters of the year (Apr–Jul and Aug–Sep).

5 The 'consensual approach' is a method to measure poverty by looking at direct measures of living standards as determined by public opinion and identifying the population subject to an enforced lack of such standards.

6 The CSVM is proportionate increase in mortality during the winter months (Dec–Mar) in comparison to the average for the other two quarters of the year (Apr–Jul and Aug–Sep).

7 This index comprised 88 items which were scored between 0 and 2 by trained independent observers according to criteria listed in the index.

8 The definition of 'learned helplessness' is used here: a behavioural trait by which humans, following persistent lack of control over their surrounding environment, stop attempting to improve their circumstances, to achieve better results, or to change their own behaviour and environment.

9 This is an indicator framework of children's health and well-being developed by the Department for Children, Schools and Families in 2008 (http://www.dcsf.gov.uk/childrensplan/downloads/ECM%20outcomes%20framework.pdf)

10 The total UK net Co2 emissions in 2009 were 473.7Mt (http://www.decc.gov.uk/assets/decc/Statistics/climate_change/1214-stat-rel-uk-ghg-emissions-2009-final.pdf)

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Greater London Authority
Investigation into fuel poverty in London

Written response submitted on behalf of the Government's Fuel Poverty Advisory Group for England (FPAG)

The Fuel Poverty Advisory Group is a non-departmental advisory body, which consists of a chairman and senior representatives from the energy industry, charities and consumer bodies. Each member represents their organisation, but is expected to take an impartial view. The role of the Group is to:

- Consider and report on the effectiveness of current policies aiming to reduce fuel poverty;
- Consider and report on the case for greater co-ordination;
- Identify barriers to reducing fuel poverty and to developing effective partnerships and to propose solutions;
- Consider and report on any additional policies needed to achieve the Government's targets;
- Encourage key organisations to tackle fuel poverty, and to consider and report on the results of work to monitor fuel poverty.

Note

The diverse nature of the Group's membership may, on some occasions, prevent unanimity on some of the following points.

1. Executive summary

1.1 **Progress against Governments targets** In 2004 there were 1.2 million households, in England, in fuel poverty; the Government's own estimate indicates that there are now over 4 million households. High energy prices have been the biggest driver. The recession, plus the industries investment plans estimated at c. £200B to 2020 and uncertainty over new generating capacity will exacerbate the problem. The drastic reduction in funding for Warm Front, and the scheme's complete termination in 2013, is particularly disappointing given that heating and insulation improvements represent the most rational and sustainable approach in addressing fuel poverty. It is, therefore, essential that the government implement programmes to meet the target of eradicating fuel poverty by 2016. Partnerships between local authorities, energy suppliers, and charities with a door-by-door, street-by-street model will be crucial to making more rapid progress.

1.2 **Fuel poverty definition** The current definition of fuel poverty should broadly remain unchanged with a segmented and targeted approach to those most in need.

1.3 **Poverty and Fuel Poverty** Fuel poverty is fundamentally different from other aspects of poverty and financial inequality. Within fairly narrow parameters, and subject to certain lifestyle choices, essential goods and services including food and clothing can be acquired at a comparable cost across all households – this is not the case with domestic fuel. Fuel poverty also differs significantly from general poverty in that appropriate levels of capital investment can deliver, in many cases, a permanent and sustainable solution.

1.4 The table below illustrates the fundamental difficulties faced by fuel-poor households; not only are they economically disadvantaged, they also need to spend more on fuel, in absolute terms, to achieve a warm and healthy living environment *i.e.* those who need to spend most on fuel are those least able to do so.

Expenditure as % of income	% of housing stock	Number households	Average income	Average fuel costs (£)	Average SAP
Up to 5%	49.9%	10,890,000	£39,718	£1,124	55
5% to 10%	34.5%	7,383,000	£17,887	£1,203	51
10% to 15%	10.0%	2,145,000	£11,350	£1,351	45
15% to 20%	3.0%	635,000	£9,131	£1,567	38
Over 20%	2.6%	550,000	£5,495	£1.662	37
Total	100.0%	21,407,000	£27,554	£1,201	52

1.5 **The Health Impacts of Cold Homes and Fuel Poverty** The Marmot Review Team, commissioned by Friends of the Earth, reviews the existing evidence of the direct and indirect health impacts suffered by those living in fuel poverty and cold housing. It makes the case for aligning the environmental and health benefits of reducing fuel poverty and improving the thermal efficiency of the existing housing stock.

1.6 **Energy prices and the growth of fuel poverty numbers** With every one per cent increase in energy prices, another 60-70,000 households are added to the number of homes in fuel poverty[1]. FPAG remains deeply concerned that the costs and implication of the UK's transition to a low carbon economy, has yet to be sufficiently explored. In addition, the costs added to fuel bills to fund a range of related environmental and energy costs exacerbates the problem. A more equitable attribution would be to recover these costs on a per kWh basis and not per customer. Initial research undertaken by FPAG reveals 85% of fuel poor consumers benefit by a consumption-based cost recovery mechanism. The attribution of these costs and others on consumers' bills to fund decarbonisation of energy production and its end use is increasingly urgent and requires much greater exploration and transparency.

1.7 **Capital provision for Energy efficiency measures** Without Treasury funding, the provision of capital is the most elusive element required to eradicate fuel poverty. FPAG recommends alternative and private capital raising mechanisms and innovative methods of cost recovery. The latest Green Deal proposals appear to include private capital provision plus a new Energy Company Obligation (ECO). However, as yet, the ECO quantum and the extent to which the fuel poor will benefit are yet to be determined. It is imperative that a proper assessment of the required capital costs to significantly improve the housing stock of the fuel poor is undertaken by Government

[1] DECC fuel poverty impact assessments 2010

and then an assessment of how much of the required revenue will come from ECO and other sources.

1.8 **A regulated 'fair trade' tariff solution with energy efficiency measures**. Ofgem's Retail Market Review raises a number of concerns regarding the effectiveness of retail competition and consumers engagement. FPAG considers that further safeguards are required for the low income and vulnerable consumer. The option for a regulated tariff, priced relative to a basket of other products available on the market, together with a package of energy efficiency measures should still be explored as an alternative to participating in the competitive energy market for certain categories of the most vulnerable households.

1.9 **The methods used to target assistance** FPAG is encouraged by the data sharing between the Department for Work and Pensions and the energy companies to target the Warm Home Discount. However, we do not consider that data sharing is utilised to its full extent, for example, it is not currently possible for local authorities to use data on Council Tax Benefits and Housing Benefit for their own citizens to better target their fuel poverty programmes. Enabling data from Energy Performance Certificates to also be used by local authorities, and potentially other stakeholders, for targeting. As another example, data held on private rented properties could be used to enforce action to remove Category 1 and 2 hazards linked to cold homes.

1.10 **Social price support and Warm Home Discount** FPAG is concerned at the regressive nature of the required £250 million a year rising to £310 million by 2014/15 being funded by energy suppliers. This should be funded through general taxation, not by passing the costs on to consumer's bills, a review of the scheme must be undertaken before it is extended beyond 2014/15 to assess its impact. In terms of identifying those customers who will receive support through Warm Home Discount, FPAG would support using the Cold Weather Payments state benefits criteria.

1.11 **Winter Fuel Payments** This universal and popular £2.7 billion (2009/10) (projected spend for 2011/12 is £2.1 billion due to reduced payments) payment means households far from being in fuel poverty also benefit. For many pensioners it is an essential pension supplement and the term 'fuel payment' is potentially misleading. Nevertheless, payment to high rate taxpayers must be explored, many other low income households with high energy use due to disability or other vulnerability could also benefit from receiving such a payment.

1.12 **Support for households not connected to the mains gas grid** Existing energy efficiency schemes provide a limited range of support for a number of different property types. There are alternative and renewable technology solutions including air source heat pumps, solar thermal systems, biomass heating and photovoltaic systems now available. The role of and specifications around these technologies must be fully assessed before roll out within ECO to ensure maximum householder benefit. We are encouraged by the progress of the Feed-in-Tariff and the new Renewable Heat Incentive, however, these initiatives will not on their own benefit the fuel poor. FPAG also wish to see some larger scale demonstration projects, such as district heating, to further establish market knowledge, skills and confidence. We would also suggest that there is an opportunity created by the future renewable and nuclear energy mix. Resistive heating, where electricity is converted back into heat, offering the opportunity to inject marginal cost energy throughout the day may be such an example and could form part of the system balancing mechanism required in the future.

2. Background & context

2.1 **Fuel Poverty Figures** The Government's own estimate indicates that in 2010 there were 4 million plus households in **England** in fuel poverty. This compares with 1.2 million in 2004. Almost 50% are pensioners and overall some 80% can be categorised as vulnerable. The average domestic dual fuel bills (gas and electricity) increased from £572 to £1,287 (+125%) between January 2003 and September 2008 and the long term trend is for prices to continue rising.

2.2 **Non gas areas** Government figures for 2008 indicate around 2.75 million homes in England do not have mains gas; of these, 0.7 million (26%) were fuel poor. Their plight is exacerbated by space and water heating costs using kerosene or LPG being respectively 50% and 90% higher than those for mains gas. Solid fuel and other heating fuels remain outside regulated energy supply and assistance should be provided to help vulnerable households access fair prices.

2.3 **Prepayment meters** In 2008, 33.9% of prepayment meter users for electricity and 34.3% of prepayment meter users for gas were fuel poor[2]. In 2006, 22% of households within the lowest income decile used prepayment.

2.4 **Energy debt** The recession, together with the harsh winter and increases in already very high energy prices, is going to cause severe payment difficulties for many consumers. A worrying leading indicator of this is revealed in Ofgem's Domestic suppliers' social obligations report Quarter 3 2010. This reveals an increase in the number of consumers on Pre-payment meters for gas entering into new debt repayment arrangements, 15% higher than Q3 for 2009. In addition, the amount of debt households are repaying has increased, the average electricity debt has risen by 4% (£279 to £291) and gas debt by 9% (£264 to £289) compared to Q3 2009.

2.5 **Tariff differentials** Despite some licence modifications to ensure tariffs reflect their costs; FPAG remains concerned that inequity persists. A pre-payment dual fuel consumer could pay up to £255[3] more than a consumer with an online deal via the internet and paying by direct debit.

3. Progress against Government's legal targets

3.1 In 2004, there were 1.2 million households in fuel poverty, by 2010 it is estimated this had increased to some 4 million households. The Government has two statutory based fuel poverty targets in England:

- By 2010 **no vulnerable households** to be in fuel poverty.
- By 2016 **no households** to be in fuel poverty.

3.2 The first legal target was not met. The second legal target is in jeopardy, despite some of the positive announcements which include:

[2] http://www.decc.gov.uk/assets/decc/Statistics/fuelpoverty/611-fuel-poverty-2008-detailed-tables.pdf
[3] Consumer Focus 1st November 2010

- Green Deal and ECO will provide affordable warmth to low income, vulnerable households and protect against fuel price rises.
- By April 2018, it will be unlawful to rent out a property which has an energy efficiency rating of E or below.
- Warm Homes Discount will provide electricity rebates of £120 to the poorest pensioners and to other customers in vulnerable groups.
- The extension of the Carbon Emissions Reduction Target programme to 2012 with the introduction of a Super Priority Group.
- Permanently increased Cold Weather Payments.

3.3 These developments in themselves, although welcome, are inadequate and further measures are required, particularly in the hard/expensive to treat properties off the mains gas network and those with solid walls. Thus far, despite the increased risk of severe fuel poverty for such households (about a half of all fuel poor households live in such homes), there has been little on offer to improve their energy efficiency. This must all be included in a robustly co-ordinated and detailed plan, with key deliverables, the responsible parties, plus the precise funding detail to eradicate fuel poverty by 2016.

4. Fuel poverty definition

4.1 The original definition of fuel poverty, in the Fuel Poverty Strategy (2001), used a broader definition that excluded housing costs from income. FPAG are dismayed that both this wider target and the reporting on it have been abandoned. This may make the absolute numbers suffering fuel poverty look better – but it does not lessen the number of people who are cold in their homes because they leak heat.

4.2 The current definition of fuel poverty as a household needing to spend more than 10% of their household income on all domestic fuel use, including appliances, to heat their home to an adequate level of warmth, should broadly remain unchanged. However, with the inexorable rise in the numbers it is inevitable that some segmentation and prioritisation must now be made to address the most serious cases as a matter of extreme urgency. In short, the crisis created through increasing energy bills demands a creative approach to solutions, segmentation and targeting.

4.3 For example, the current definition refers to a living room temperature of 21°C but for the particularly sick or infirm this temperature may not be high enough. For those who are unable to venture beyond say one or two rooms of their property the most urgent need may be to deal with their immediate living environment and not the whole property. The Warm Front Scheme now limits assistance to the very poorest householders in the least efficient housing and this type of targeting will ensure the future ECO reaches those most at risk of being in fuel poverty

5. Poverty and Fuel Poverty

5.1 There is a strong correlation between low household income and fuel poverty but other factors are involved. 22.6% of the poorest households (Ist income decile (and lowest)) are not in fuel poverty while 10% of those in the 4th decile are fuel poor. The

main factor in this counter-intuitive outcome is the energy efficiency characteristics of the dwelling and other factors including lack of access to mains gas.

- In general, fuel-poor households occupy poorer quality housing although this is less likely to be the case where they are social sector tenants and, particularly where they are tenants of a Registered Social Landlord. However, in fuel poverty terms, the comparatively energy efficient quality of social housing cannot compensate for low household income.

- Across the fuel-poor population, the required/necessary spend to ensure a warm and healthy living environment is higher than that for non-fuel-poor households. This anomaly is unrelated to household income and is a consequence of poor heating and property insulation standards.

- Measures adopted to address general poverty require ongoing financial support. This is especially the case for those on permanent low fixed incomes such as pensioner households where economic circumstances are unlikely to improve.

- Measures to address fuel poverty have the potential to deliver permanent solutions. One-off investment in affordable warmth, provided demanding energy efficiency standards are required, can effectively fuel poverty-proof a dwelling and its occupants.

- Affordable warmth brings additional benefits to low-income households in that increased disposable income enables them to benefit from increased spending on other essential goods and services thereby addressing other manifestations of general poverty. This also feeds into the local economy which is often in a very deprived area.

- The energy efficiency approach to fuel poverty delivers an additional range of anti-poverty assistance through creation of training and job opportunities and through the release of extra spending power through the individual household to the economic benefit of the wider community.

- Action on energy efficiency pre-empts future poverty and fuel poverty threats as Government environmental ambitions drive up the cost of energy. In addition, of course, the individual and the wider society, benefit from reduced adverse health consequences for fuel-poor households and reduced treatment costs for the health service.

6. Fuel poverty is different

6.1 In 1985, the then Secretary of State for Energy, Peter Walker MP, felt able to assert:[4] 'I am afraid that I must take issue with the term 'fuel poverty'. People do not talk of 'clothes poverty' or 'food poverty' and I do not think that it is useful to talk of fuel poverty either. Of course there is far too much poverty around and the Government is spending huge sums to alleviate it through the social security

[4] Energy Action Bulletin, No.16, 1985.

system. The regeneration of the economy, for which we are all working, will also help.'

6.2 Actually, of course, we do talk of 'food poverty' and we generally call it malnutrition. Recent data relating to hospital admissions suggests that 1 in 3 adults admitted to hospital suffer from serious risk of malnutrition.[5]

6.3 However, fuel poverty is fundamentally different from other aspects of poverty and financial inequality. Within fairly narrow parameters, and subject to certain lifestyle choices, essential goods and services including food and clothing can be acquired at a comparable cost across all households – this is not the case with domestic fuel. Fuel poverty also differs significantly from general poverty in that appropriate levels of capital investment can deliver a permanent and sustainable solution in many cases.

6.4 The table below illustrates the fundamental difficulties faced by fuel-poor households; not only are they economically disadvantaged, they also need to spend more on fuel, in absolute terms, to achieve a warm and healthy living environment *i.e.* those who need to spend most on fuel are those least able to do so.

Expenditure as % of income	% of housing stock	Number households	Average income	Average fuel costs (£)	Average SAP
Up to 5%	49.9%	10,890,000	£39,718	£1,124	55
5% to 10%	34.5%	7,383,000	£17,887	£1,203	51
10% to 15%	10.0%	2,145,000	£11,350	£1,351	45
15% to 20%	3.0%	635,000	£9,131	£1,567	38
Over 20%	2.6%	550,000	£5,495	£1.662	37
Total	100.0%	21,407,000	£27,554	£1,201	52

6.5 Factors affecting fuel poverty

Fuel poverty is generally the result of a combination of contributory factors, the most common of which are:

- Low household income
- Poor thermal insulation standards and inefficient and uneconomic heating
- Unaffordable energy costs

6.6 In combination, or sometimes in isolation, these circumstances predispose to fuel poverty – the inability to ensure a warm and healthy living environment at the cost of 10% or less of household income. The Government currently estimates that there are more than 4 million fuel-poor households in England.

7. Low household income

7.1 Clearly there is a strong relationship between general poverty and fuel poverty although, as domestic energy prices continue to increase, some households other than the poorest are in fact categorised as fuel poor. In 2003, 96% of all fuel-poor households were in the lowest three income deciles; by 2008, as the table below illustrates, that figure had reduced to 89%. It seems inevitable that, as fuel prices

[5] Nutrition Screening Survey in the UK and Republic of Ireland, BAPEN, 2011.

carry on rising and incomes falling, greater numbers of non-poor households will be defined as in fuel poverty.

Household income decile	% households in group		Number households in group		Total households	% of total fuel poor
	Fuel poor	Not fuel poor	Fuel poor	Not fuel poor		
Ist	77.4%	22.6%	1,702,000	497,000	2,199,000	51.0%
2nd	59.5%	40.5%	883,000	1,297,000	2,180,000	26.5%
3rd	18.1%	81.9%	386,000	1,740,000	386,000	11.6%
4h	10.0%	90.0%	213,000	1,928,000	2,141,000	6.4%
5th	3.4%	96.6%	73,000	2,067,000	2,140,000	2.2%
6th to 10th	0.7%	99.3%	78,000	10,543,000	10,621,000	2.3%
Total	15.6%	84.4%	3,335,000	18,073,000	21,407,000	100.0%

7.2 The Warm Homes and Energy Conservation Act 2000 appeared to anticipate potential anomalies in the definition of fuel poverty. Whilst the subsequent UK Fuel Poverty Strategy (2001) made no specific reference to the financial circumstances of individual households, the Act indicated that: 'For the purposes of this Act, a person is to be regarded as living "in fuel poverty" if he is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost.'

7.3 In practice this has made little difference to fuel poverty policy since energy efficiency programmes such as Warm Front and the Carbon Emissions Reduction Priority Group have targeted vulnerable and generally financially disadvantaged households. This focus on financial disadvantage will become more closely targeted as eligibility criteria for Warm Front and the Warm Home Discount scheme are linked to the poorest households.

7.4 Most Government schemes use welfare benefits as a proxy for eligibility. It is estimated that £16 billion in means-tested benefits and tax credits go unclaimed every year[6], FPAG would emphasise the need for Benefit Entitlement Checks to be included by these schemes.

8. Inadequate heating and insulation standards

8.1 Much as fuel poverty cannot always be associated with serious financial disadvantage, so it is not always related to poor heating and insulation standards. Despite the fact that social housing is of generally higher energy efficiency than private sector housing, the variation in the incidence of fuel poverty is small. Properties rented from Registered Social Landlords are rated highest at SAP 60; local authority dwellings average SAP 58; and private sector properties average SAP 50 (2008). While 15.4% of private sector households are fuel poor the figure for social sector tenants is 16.6%, demonstrating the importance of household income as a factor in fuel poverty.

8.2 However the more general relationship between efficient and economic heating and effective insulation standards is better illustrated in the table below where high standards of energy efficiency can offer significant protection against fuel poverty.

[6] DWP: Income Related Benefits Estimates of Take-Up in 2007-08

Fuel poverty by energy efficiency ratings (SAP 2005)						
	% households in group		Number households in group			
Banded SAP	Not fuel poor	Fuel poor	Not fuel poor	Fuel poor	Total households	% total fuel poor
<20	41.9%	58.1%	286,000	397,000	684,000	11.9%
20-30	62.0%	38.0%	538,000	429,000	867,000	9.9%
30-40	76.1%	23.9%	1,942,000	611,000	2,553,000	18.3%
40-50	83.8%	16.2%	4,088,000	790,000	4,8779.000	23.7%
50-65	88.4%	11.6%	7,673,000	1,011,000	8,685,000	30.3%
>65	94.8%	5.2%	3,545,000	195,000	3,739,000	5.8%
Total	84.4%	15.6%	18,073,000	3,335,000	21,407,000	100.0%

9. Energy prices

9.1 Ofgem's Energy Retail Market Supply Probe of 2008 culminated in a number of measures to introduce greater fairness in the domestic energy market. Action to redress unjustified pricing differentials, remove what were effectively penalties on non-switchers and reduce electricity charges for customers without access to mains gas all contributed to lower costs for financially disadvantaged households. The latest development in this respect is the Retail Markets Review which again concluded that the market is not working in the best interests of all consumers.

9.2 However, despite all these efforts and potential modifications to the market and improvement of consumer equity, the fundamental problem is that energy costs are unaffordable for millions of households.

9.3 Domestic consumers' gas bills increased by around 120% between 2003 and 2009. Electricity bills rose by around 60% over the same period. Energy costs fell back slightly in 2010 but this progress has been undermined by announcements of further price increases effective from late 2010 and early 2011. There has been further recent announcements of fuel price rises, up 19% for the price of gas, with all other suppliers expected to follow suit, this enforces the need for action.

9.4 The rises in fuel prices have been steep, but they should not have been unexpected by the Government. Indeed, the Fuel Poverty Strategy 2001, noted the importance of fuel prices as a factor in fuel poverty. In 2005, the Third Annual Fuel Poverty Report noted the opinion of the DTI Select Committee that the increased price rises being experienced were likely to be long term and that 'further price rises might occur.' Therefore, both the importance of greater energy efficiency and the possibility of large price movements having an effect on fuel poverty are not factors about which the government could not have known: they were recognised factors from the outset.

9.5 It should also be noted that Government-mandated costs on energy bills to support environmental programmes add 4% and 10% to gas and electricity bills respectively; this funding method is regressive, impacting disproportionately on low-income households. Paradoxically, the imposition of supplier costs which are often designed

to assist vulnerable households, have the perverse effect of increasing their disadvantage and predisposition to fuel poverty and, consequently, exacerbating general poverty.

10. Energy prices and the growth of fuel poverty numbers

10.1 The UK is entering a transformational energy context, but as we move to a low carbon economy, FPAG remains concerned that the costs and its implication have yet to be sufficiently explored. This is essential to adequately inform the decision making process and subsequent policy instruments to ensure consumer equity and affordability.

10.2 For example, DECC and Ofgem do not appear to understand the apparent dichotomy of their respective conclusions regarding the cost implications of low carbon energy for consumer's energy bills. The Government's 'Estimated impacts of energy and climate change policies on energy prices and bills'[7] gives only one energy price scenario, and a clearly optimistic one, with an average additional cost of £136 per annum by 2020. This is based on the assumption that all consumers will take 15% of their full energy efficiency makeover as comfort and the rest in reduced consumption. For the fuel poor, many of whom under heat, this assumption is false and could potentially lead to complacency about the future affordability of energy for the fuel poor. Furthermore, Ofgem's energy price scenarios indicate a potentially worst case scenario of a 60% price increase.

10.3 The 'fair trade' tariff may not be the cheapest and could, for example, be related to a small percentage difference to the best online deal. Over 50% of the fuel poor are pensioner households. Price differentials for the internet literate consumer buying energy and being serviced on line, compared to someone paying by prepayment for dual fuel, is now in excess of £280 per annum[8]. Some 5 million pensioners have never even been on line. Poor literacy, numeracy, lack of broadband and being unbanked all drive consumer exclusion from the competitive market. Nevertheless, all consumers currently pay for the systems and overheads that facilitate the competitive market.

10.4 Should all consumers pay equally for carbon abatement? According to the Centre for Sustainable Energy, the poorest 20% of society emit 60% less than the richest 20%. The attribution of these costs is important and will require DECC and/or Ofgem's intervention to determine. A more equitable attribution would be to recover these costs on a per kWh basis and not per customer. Initial research undertaken by FPAG reveals 80% of fuel poor consumers benefiting by such a consumption-based cost recovery mechanism. A supplementary paper will be sent to the Review Team providing detailed evidence and analysis at the start of July. Smart meters could facilitate differential charging if this became policy and this should be actively explored by Ofgem and the suppliers

10.5 A range of factors, such as security of supply, imported gas, carbon prices, low carbon objectives, power station construction and policy issues etc all have the potential to create uncertainty in the energy markets, drive energy prices higher and, increase the numbers of households in fuel poverty. A thorough analysis of these

[7] "Estimated impacts of energy and climate change policies on energy prices and bills" DECC July 2010
[8] "Fixing the SAP" Consumer Focus 2009

factors and their implications for consumer equity and pressures placed on energy suppliers to keep energy prices low must be undertaken.

10.6 With every one per cent increase in prices, another 60-70,000 households are added to the number of homes in fuel poverty (DECC fuel poverty impact assessments 2010).

11. The Health Impacts of Cold Homes and Fuel Poverty

11.1 The inability to heat a home to a healthy temperature, as a result of poor quality housing and/or sufficient income to cover the required energy costs, impacts directly and indirectly on the physical and psychological health of the occupants, and can lead to death. The Marmot[9] team did not use Fuel Poverty as an indicator because of its imprecision in identifying particular households, but the concept stands alongside the indicators that were used, which included the low thermal efficiency of housing and low indoor temperatures.

On excess winter deaths, the Marmot team noted:

- that countries with more energy efficient housing have lower rates of excess winter deaths;
- there is a relationship between excess winter deaths, low thermal efficiency of housing and low indoor temperature;
- there is a strong relationship between cold temperatures and cardio-vascular and respiratory diseases (see attachment 1);
- around 40% of excess winter deaths are attributable to cardio-vascular diseases;
- around 33% of excess winter deaths are attributable to respiratory diseases;
- excess winter deaths are almost three times higher in the coldest quarter of housing than in the warmest;
- children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems than children living in warm homes;
- cold housing negatively affects children's educational attainment, emotional well-being and resilience;

11.2 The report also noted that:

- children in cold homes face significant negative effects such as infants' weight gain, hospital admission rates, developmental status and the severity and frequency of asthmatic symptoms;
- mental health is affected by living in cold homes across all age groups;
- there are clear negative effects of cold housing and fuel poverty on the mental health of adolescents;
- more than 1 in 4 adolescents living in cold housing are at risk of multiple mental health problems compared to 1 in 20 adolescents who have always lived in warm housing;

[9] http://www.foe.co.uk/resource/reports/cold_homes_health.pdf

- for adults of all ages, but particularly older people, there are clear measurable effects of cold housing on adults' physical health, well-being and self-assessed general health, in particular for vulnerable adults and those with existing health conditions;
- for older people, there were measurable effects from cold housing in terms of higher mortality risk, physical health, and mental health;
- cold housing increases the level of minor illnesses such as colds and flu, and exacerbates existing conditions such as arthritis and rheumatism.

11.3 The report shows that long-term acute physical and psychological health effects and death can be avoided by interventions which improve the fabric of the property, reduce its energy requirements and so the cost of keeping it appropriately warm and heated to an adequate temperature.

11.4 Fuel poverty may be an imprecise indicator from the point of view of targeting social injustice and health inequalities, but cold homes are central to a range of Government priorities in this area. Cold homes can now be seen to impact on public health, mental health, and educational attainment and, because of reduced dexterity, on domestic falls, accidents and injuries. Homes are cold because of the interaction between poor quality housing, and poor people – which is what fuel poverty enshrines.

For the full report please use the following link:
http://www.foe.co.uk/resource/reports/cold_homes_health.pdf

12. Capital provision for energy efficiency measures

12.1 FPAG wishes to emphasise its concern at the regressive nature of the funding mechanisms to deliver energy efficiency programmes and considers that these should be funded through general taxation and not added to consumer's bills. The increasing number of costs added to fuel bills and the consumer inequity that this creates has the potential to put even more consumers into fuel poverty. Once Warm Front ends in 2013, it will be the first time since 1978 that there has been no Exchequer funding for a domestic energy efficiency programme. Without Treasury funding, the provision of capital to enable the installation of energy efficiency measures to eradicate fuel poverty is the most elusive element of the fuel poverty challenge.

12.2 FPAG considers it essential that the up-front installation costs of energy efficiency measures, including more expensive measures, are fully funded for low income households.

12.3 Alternative funding methods should also be explored; fuel poor households could be offered the opportunity to be part of a regulated solution with a 'fair trade' tariff and a complete energy efficiency makeover. Equity release schemes have been explored previously by FPAG but these may be more attractive to householders and lenders for more substantial measures such as solid wall insulations. Some householders in fuel poverty in higher income deciles may be attracted to Green Deal finance but generally this will be less appropriate and attractive to those on the lowest incomes and to the finance companies/suppliers.

13. The coherence of the Government's initiatives on energy efficiency

13.1 The coherence and co-ordination of the current policies must be significantly improved. The main programmes which are set to run to 2013 are:

- **Warm Front** FPAG believes that Warm Front has been an extremely successful and beneficial programme. This provides grants to private sector households claiming a range of means tested and other welfare benefits to install a range of insulation measures and heating systems. The Scheme has worked well and is estimated to have assisted 2.2 million households since 2000, saving an average of more than £450 per year off their energy bills, and 1 tonne of carbon.

  More than 30% of the activity carried out under Warm Front is in households with the lowest SAP ratings (less than 30).

  Previously the scheme's Benefit Entitlement Check service also identified an average of more than £1,600 per year in additional income for those households that successfully received the service, thereby extending the impact of the scheme for those eligible.

- **Carbon Emissions Reduction Target (CERT)** CERT's primary obligation is to reduce carbon emissions with the companies required to achieve a proportion of the savings (currently 40%) from a so called Priority Group and within this a sub group of a Super Priority Group. CERT delivers a range of measures that provide the companies with cost effective carbon savings. These include a limited range of insulation measures including cavity wall and loft insulation. CERT measures can be delivered in any home irrespective of tenure. There has been efforts made to interface CERT and Warm Front, Green Deal and ECO should be designed so that householders are directed to the appropriate measures and funding streams.

- **Warm Home Discount** provides for a rebate on a consumer's electricity bill, up to £120 per annum. FPAG welcome the data sharing used as a method of targeting scheme assistance, but would encourage assistance to be widened to the Cold Weather Payment group and legislation to facilitate this. Additionally, for those off gas should receive a higher level rebate broadly equivalent to the discount dual fuel consumers would receive.

  In addition, eligible off-gas households who use another fuel source, such as oil or LPG, as their main heating fuel should receive additional support in the form of a 'heating addition' within their benefits. The 'heating addition' should recognise the additional costs associated with these heating fuels. This proposal would require Ofgem intervention to ensure supplier equity due to different levels of non gas areas etc.

13.2 FPAG would like to emphasise the achievements of schemes and programmes to date, in order to make clear that a significant amount has been achieved, and with more investment there is more that could very quickly be done

13.3 These welcome programmes represent considerable investment in energy efficiency and a significant proportion of which has been invested in schemes to address fuel poverty. However, Warm Front and CERT will, for example, compete on occasions directly to install the same measures in the same properties.

13.4 In addition, the six major energy supplier companies can switch their schemes 'on and off', often at short notice, to manage the delivery of their targets. Similarly, with diminished Government funding for Warm Front and uncertainty around Green Deal and ECO, forward planning for suppliers and installers becomes very difficult. While this will be logical from the companies' perspective, it creates significant problems and militates against coherent, long term delivery and investment in capacity.

13.5 The Thermal Comfort criterion of the Decent Homes Standard encouraged considerable investment in energy efficiency in social sector properties. However, the standards are still relatively low and properties which meet the basic standards are unlikely to provide affordable warmth to the majority of tenants with today's increasing energy prices. While it is accepted that many social landlords have gone beyond the minimum standards, FPAG believes that the aim of the standard should be to provide affordable warmth to the majority of social tenants. The funding for social housing improvements has been cut back by 75% and FPAG would urge a review of public investment in housing and that further efforts are made to invest in the energy efficiency of social housing.

13.6 FPAG also believes that Government should now be taking the necessary action to ensure private sector landlords have the appropriate incentive to meet specified levels of affordable Thermal Comfort as a pre-condition of rental. It is hoped that the 2018 target as part of the Energy Bill will encourage landlords, but FPAG consider that this target should be brought forward to provide thermal comfort to tenants sooner and policies must be introduced to achieve this target.

13.7 The Green Deal and ECO should be developed so that providers are required to fully treat a particular number of fuel poor households if a means can be found to identify them.

14. The methods used to target assistance at households which need it most.

14.1 FPAG welcomes data sharing between energy suppliers and the DWP that seeks to significantly improve the targeting of those most in need and believe that it is essential that such data sharing can be made to work effectively for Warm Home Discount. As a proxy for targeting support through DWP data sharing, FPAG would support the Cold Weather Payments criteria, although FPAG suggests households on means tested benefits with school age children should be added to this criteria.

14.2 Other opportunities to share data, with appropriate safeguards, do exist but are either currently not possible or have yet to be explored. These include, for example, local authorities, and potentially other stakeholders, not being able to use data on Council

Tax Benefits and Housing Benefit for their own citizens to better target their fuel poverty programmes. Local authorities should also be enabled to use data from Energy Performance Certificates for targeting purposes.

14.3 Meanwhile, the Warm Front and CERT programmes identified above, are significantly demand led and therefore often require potential beneficiaries to contact the companies or the managing agents directly. The companies and managing agencies also utilise a range of additional methods to target those eligible for assistance, however, the related cost of so doing can lead to limited attempts to target those most in need. For example, the inclusion of all over 70's in the CERT Priority Group, means it is more cost effective to promote these schemes to the more articulate, aware and better off over 70's than those most in need who may, for example, have literacy, numeracy or other learning difficulties.

14.4 The direct, proactive approach taken by, for example, Warm Zones, Green Streets, NEA, and the Warm Front tariff pilot are much more effective at identifying the target market. This approach, together with the partnership building with local care agencies and other voluntary organisations, can provide vulnerable households with reassurance and result in improved take up amongst the most vulnerable and needy households.

14.5 FPAG considers it essential that the national property database of energy efficiency standards – the Government's National Energy Efficiency Database, is developed at the earliest opportunity. Such a database could potentially play an invaluable role in targeting energy efficiency and fuel poverty programmes if linked to data sharing such as that being developed with the DWP.

15. Winter Fuel Payments (WFP)

15.1 For 2009-2010 the Government spent circa £2.7 billion on WFP, for 2011/12 this is projected to fall to £2.1 billion due to a reduction in payment amounts. The universal nature of this popular payment means that millions of households who are comparatively affluent and far removed from fuel poverty, some even living overseas, and high rate taxpayers benefit from the payment.

15.2 The Government has previously estimated that the Payment removes only 100,000 households from fuel poverty; an extremely poor return for such an investment, if that is the only outcome the Government seeks to achieve. However, FPAG does recognise that in addition to the difficulty of changing this payment there is a real risk of damaging the undoubted benefit this brings to those in or close to financial hardship particularly during the winter months. For many pensioners, the WFP is an essential pension supplement to their general income and there is evidence that the poorest do indeed use the payment to achieve affordable warmth (studies by IFS and NEA).

15.3 Nevertheless, there are some clear anomalies, such as payment to high rate taxpayers. This should be explored with a view to the reallocation of monies to those households who would benefit the most, if the administrative burden can be reduced. The Treasury previously estimated that of the potential £240m that could be

redirected from higher tax payers, only £60m would be achieved due to flipping between spouses and administrative costs .

15.4 However, it must be recognised that the WFP, social price support and rebates on bills are temporary fixes of a fuel poverty 'symptom' and do not address the 'illness' of inadequate insulation. Every pound that is spent on these measures does nothing to reduce the long term capital requirement to address poor levels of insulation.

16. Support for households who are not connected to the mains gas grid

16.1 FPAG would wish to take this opportunity to reinforce the need for creativity in the use of electricity and for the fuel poor in off gas areas in particular. The future generating mix will create a number of significant challenges in balancing supply and demand in a renewable and nuclear energy context. The decision to take production from a renewable source compared to nuclear or clean coal will require new demand side management opportunities. For example resistive heating in a fuel poor context and the opportunity to inject marginal cost energy throughout the day should be thoroughly explored as part of this strategy.

16.2 FPAG is concerned that current energy efficiency schemes provide a limited range of support for households occupying a wide variety of property types, including those not connected to the mains gas network. There is clear evidence that mains gas is currently the cheapest fuel for space and water heating. FPAG welcomes the recent introduction of arrangements by the energy regulator, Ofgem, to fund the extension of the mains gas network to some households and communities living in the most deprived areas in the short term.

16.3 The Government's new ECO should provide assistance for the hard to treat properties, to provide the more expensive measures such as solid wall insulation, focusing support first on the fuel poor living in hard to treat properties as a priority.

16.4 There are alternatives heat sources, Solar, Heat Pumps etc for non gas fuel poor consumers. Despite Ofgem's proposal to facilitate some modest extension of the mains gas network, there is a growing awareness that most off-gas communities will, in the long run, have to rely on some form of alternative. Uncertainties about longer-term gas prices provides a further argument for adoption of heat sources and systems that can be widely applied in rural and other hard/expensive to treat housing. FPAG would urge Government to support policies which will help direct Feed-in-Tariffs and RHI grants to low income households as these incentives could also address fuel poverty and potentially provide a means for capital investment.

16.5 NEA, both through Warm Front and separately, has been involved in trialling a number of alternative and renewable technology solutions including air-source heat pumps, solar thermal systems, and biomass heating and photovoltaic systems. NEA has also tested state of the art internal insulation products that may prove commercially viable as measures to tackle fuel poverty.

16.6 FPAG would, therefore, wish to see some larger scale demonstration projects to further establish market knowledge, skills and confidence so they are brought forward as part of the fuel poverty toolkit. Case studies of innovative trials to improve tower

blocks or estates and the findings of the CESP trials will help shape future cost effective measures and scheme design.

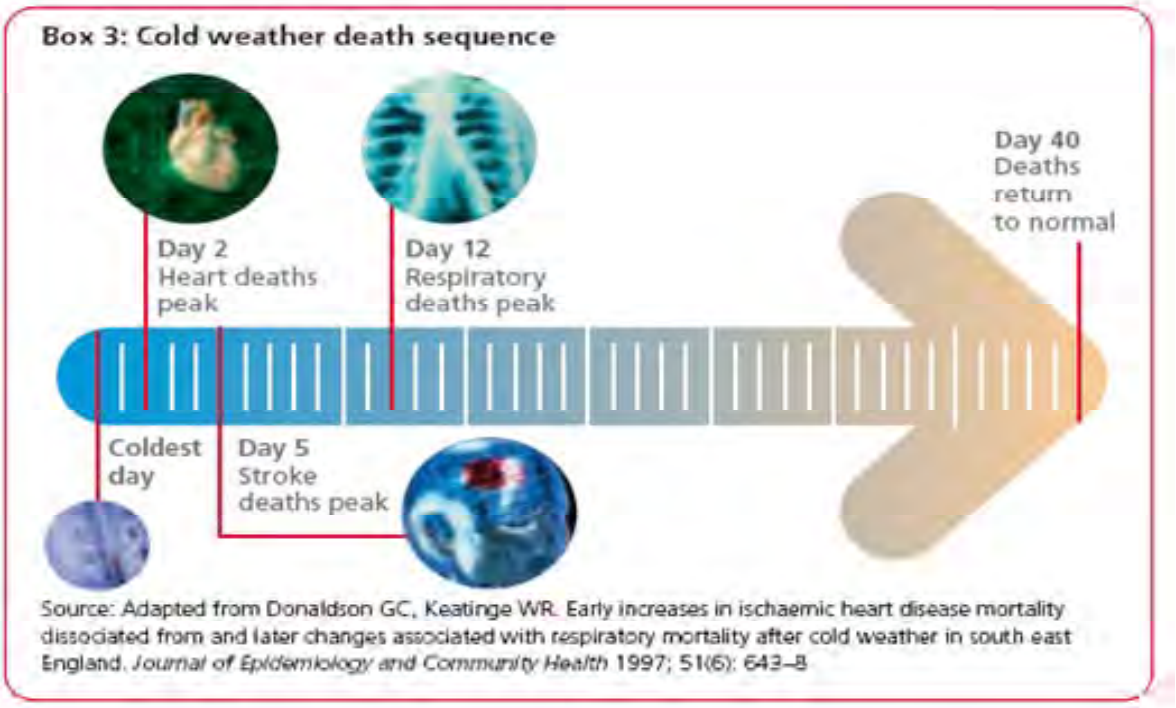
16.7 FPAG would also wish for the planning process for new shopping centres and supermarket developments to be required to explore the potential for their waste heat to be reused. There are enormous amounts of heat dissipated to the atmosphere through cooling and freezing in such developments which could be provided at low cost to communities in areas of multiple deprivation / off the gas grid or where other social need has been defined.

16.8 Turning to heat pumps in particular, their development brings the very real prospect of an alternative solution to oil heating for non gas areas. FPAG would like to see specific application tariffs developed as part of this programme. Smart Meters will facilitate more creative tariffs and demand side management opportunities. FPAG, therefore, asserts that Ofgem be required to consider the regulatory incentives that would be necessary to stimulate the development of such tariffs, and also the implications for rural electricity networks coping with the added demand and to encourage trials under the next phase of the Low Carbon Communities Fund

Derek Lickorish

FPAG Chair
14th June 2011

Exposure to cold: effects on health



A 'now cast' of Fuel Poverty in 2010

Fuel Poverty Monitoring Tool for Consumer Focus

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CONTENTS

FOREWORD

Consumer Focus is committed to helping the Government meet its target to eliminate fuel poverty in England by 2016. We consider this important to fulfilling our statutory duty to represent the interests of energy consumers, particularly those on low incomes.

Consumer Focus, in common with many others, considers effective fuel poverty policies require up-to-date and robust data. The Government reports on progress towards its Fuel Poverty Strategy targets in the annual UK fuel poverty progress reports. However, it is hampered by the need to use fuel poverty data that is at least two years out of date. In the current period of rapidly changing energy prices, improving energy efficiency standards and changing household incomes as the economy restructures, the effectiveness of monitoring is reduced.

The Government provided projections of the headline fuel poverty rates in England year in the 2008 and 2009 UK fuel poverty progress reports. These were very helpful for informing policy. However, they do not tell us how the projections break down by region, household type or tenure (for example). Such information is crucial for informing our understanding of fuel poverty and the policies and programmes required to address it.

In response to calls for current fuel poverty data from many stakeholders, Consumer Focus commissioned the Centre for Sustainable Energy (CSE) and Dr Richard Moore to carry out the research described in this report. Using the latest available data from the 2007 English House Condition Survey, the research models the impact of changes in fuel prices, incomes and energy efficiency standards to give up to date projections of fuel poverty in 2010. The report also shows how fuel poverty has changed between 2007 and 2010.

Consumer Focus considers the research gives a robust and detailed picture of fuel poverty in 2010. We believe the findings should provide a valuable resource for policy makers, researchers and all those concerned to develop effective fuel poverty policies. We would welcome feedback on the research findings.

Consumer Focus hopes to repeat this exercise in future years, funding permitted, with each annual release of Government house condition data.

William Baker, Consumer Focus

EXECUTIVE SUMMARY

This report summarises the main findings for fuel poverty in England in 2010, as projected by the Centre for Sustainable Energy's 'fuel poverty monitoring' tool. The tool builds upon an existing research project ('Improvement Prophet'), which is supported by Eaga Charitable Trust and Pilkington Energy Efficiency Trust. Consumer Focus's funding has helped improve the research, particularly with respect to its ability to predict fuel poverty.

The tool uses the latest official survey of house conditions and models the likely impact of changes in housing stock, energy efficiency, fuel prices and income since the survey to give up to date projections of fuel poverty.

This report provides fuel poverty projections for England for 2010 and compares these with fuel poverty in 2007 (the most recent Government data). While the methodology used for predicting fuel poverty is slightly different to that used by the Department of Energy and Climate Change (DECC) for its own projections, the results are very similar to DECC's estimate for 2009. The research builds upon DECC's projection by providing detailed breakdowns of fuel poverty for different consumer groups, regions and household type (for example). We therefore consider the research provides a valuable resource to policy makers and researchers and should help inform the future development of fuel poverty policy.

The research predicts that 4.0 million or 18 per cent of all households in England are in fuel poverty in 2010, according to the full income definition, up from 2.8 million in 2007. 4.4 million households or 20 per cent of households are in fuel poverty on the 'basic income' definition, up from 3.3m in 2007. (The 'full income' definition includes benefits received for housing costs as 'income' and is the Government's preferred definition of fuel poverty. The Government also provides fuel poverty data according to a 'basic income' definition, which does not include benefits received for housing costs as 'income'.)

The research shows that 3.3 million fuel poor households (full income) in 2010 are 'vulnerable', according to the Government's UK Fuel Poverty Strategy definition of 'vulnerable'. The research shows that there are many more households in fuel poverty in 2010 than 2001, when the Government launched its Fuel Poverty Strategy. According to Government statistics, 1.7 million households lived in fuel poverty in 2001, of whom 1.4 million were 'vulnerable'. The research therefore confirms the Government's assessment that it will not hit its target to eliminate fuel poverty among vulnerable households by November 2010 (note that the Government projection for 2009 did not give a breakdown for 'vulnerable' and 'all' fuel poor).

The research provides detailed breakdowns of fuel poverty for 2010 and compares these with fuel poverty in 2007. For most consumer groups, fuel poverty rose considerably over the three years. Fuel poverty levels for some groups are of particular concern. For example, the research found that fuel poverty had reached the following levels for certain consumer groups:

Consumer group	Basic income per cent in FP	Full income per cent in FP
Lowest 10 per cent of income	86	80
Unemployed people	70	47
Consumers with LPG heating	60	60
Single older people	47	43
Lone parents	41	25
Local authority tenants	40	25
Gas ppm meter consumers	38	25

The research found that single older people account for just over a third of all fuel poor households in England in 2010, with single households under 60 accounting for a further 17 per cent. Thus, over a half of fuel poor households in England are single.

The research found that the North East region has the highest level of fuel poverty in 2010 among England's nine regions on both the full and basic income definitions (26 per cent and 28 per cent of all households in the region respectively).

London has the lowest level of fuel poverty on the full income definition (13 per cent), whereas the South East has the lowest level on the basic income definition (15 per cent). Both the South West and East of England also have lower levels of fuel poverty than London on this definition. The change in London's ranking between the two definitions reflects London's high housing costs. This is because the 'full income' definition treats benefits received for housing costs as 'income'.

The research found that 26 per cent of households on means tested benefits are in fuel poverty in 2010 on the full income definition, 32 per cent on the basic income definition. Over a million fuel poor households do not claim means-tested benefits. This suggests that many fuel poor households will miss out on help, given that means-tested benefits act as a passport to eligibility for Warm Front and other fuel poverty programmes.

The 2010 projection of fuel poverty estimated by this research, at 4.0 million, is slightly lower than the Government's 2009 projection of 4.6 million. Some of the difference is likely to be due to the fall in fuel prices and hence fuel poverty since March 2009. Some may be due to differences in methodological approach. For example, the research uses more detailed calculations for projecting incomes, fuel prices and energy efficiency improvements than DECC.

The next stage of the research will give headline fuel poverty projections for Scotland, Wales and Northern Ireland and thus the UK as a whole. Consumer Focus hopes to produce regular updates of fuel poverty data, funding permitted, by applying the monitoring tool to new house condition and fuel price data, as these become available.

1. BACKGROUND

Consumer Focus commissioned the Centre for Sustainable Energy (CSE) and Dr Richard Moore to develop a tool to produce up to date estimates of fuel poverty. The funding enhanced the fuel poverty elements of the Eaga Charitable Trust and Pilkington Energy Efficiency Trust funded 'Improvement Prophet' tool[1].

The Fuel Poverty Monitoring Tool allows users to estimate the number and distribution of households in fuel poverty at the current time and in the future, using modelled data based on the most recently available Government housing data (currently the 2007 English House Condition Survey or EHCS[2]). The project will also create a stand-alone facility that will enable other stakeholders (e.g. policy makers and energy professionals) to generate their own outputs depending upon the scenarios they choose to explore.

Measuring and monitoring fuel poverty levels is essential for the development of effective policies and programmes. CSE has designed and delivered a number of different research projects to help improve the targeting and understanding of who the fuel poor are and how to reach them. These include the 2003 Fuel Poverty Indicator and the mapping of hard to treat homes, as well as Improvement Prophet (see www.cse.org.uk for details of related projects). The Consumer Focus project builds upon Improvement Prophet.

The enhanced version of the tool provides:

- a more accurate estimate of current household income and hence fuel poverty by further developing the modelling used in the recent Consumer Focus project, *Cutting the energy bills of the fuel poor* (Consumer Focus, 2010);
- current estimates of fuel poverty that draw upon the latest EHCS longitudinal data to allow for the installation of energy efficiency measures since the last EHCS; and
- an accurate projection of the impact of new house building and housing demolition on housing stock conditions and fuel poverty rates.

The Consumer Focus funding also helped improve a number of innovations which will be reported upon in updates of this research (for example, fuel poverty rates according to different definitions of income).

The following report contains:

- Headline figures and key breakdowns of fuel poverty in England for 2007 and 2010
- A description of the research methodology
- An Appendix with detailed tables of fuel poverty breakdowns for 2007 and 2010
- A discussion paper on the 'dynamics of fuel poverty' (attached as Appendix B)

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[1] See Appendix D and CSE website (http://www.cse.org.uk/projects/view/1144) for details of 'Improvement Prophet'.

[2] SN 6449 -English House Condition Survey, 2007, CLG

2. FUEL POVERTY IN 2007 AND 2010: SUMMARY FINDINGS

Appendix A gives a full set of fuel poverty data for 2007 and 2010. This section pulls out some of the key findings of the research.

2.1 Headline fuel poverty rates

Table 1 below gives the headline fuel poverty rates for 2007 and 2010, as predicted by the research.

Table 1: Headline fuel poverty rates for England

Fuel Poverty by definition	2007 total (000)	2010 total (000)
Not in fuel poverty - full income definition	18,561	17,900
In fuel poverty - full income definition	2,819	4,021
Proportion of households in fuel poverty	*13.2%*	*18.3%*
Not in fuel poverty - basic income definition	18,130	17,532
In fuel poverty - basic income definition	3,250	4,389
Proportion of households in fuel poverty	*15.2%*	*20.0%*
Total no. of households (England)	21,380	21,921

The 2010 projection of fuel poverty estimated by this research, at 4.0 million (full income), is slightly lower than the Government's 2009 projection of 4.6 million[3]. The research team has discussed this difference with DECC statisticians. Some of the difference is considered likely to result from the fall in fuel prices and hence fuel poverty since March 2009. Differences in methodology may also explain some of the difference. These differences are described below:

- This research uses a 'snap-shot' methodology for projecting fuel poverty data. It estimates fuel poverty at a specific point of time – 31st March 2010 in the case of this research. By contrast, DECC projects the 2006/07 proportion of the EHCS to 2008 and the 2007/08 EHCS to 2009 to give an average of the two time periods. We consider the snap-shot approach gives a better reflection of actual spending patterns and enables the use of current fuel prices and incomes. Use of the DECC methodology for calculating 2010 fuel costs would have required speculating on fuel costs and incomes for the whole of the 2010/11 financial year.
- DECC uses the fuel component of the Retail Price Index (RPI) to project changes in fuel costs for its projections of fuel poverty, rather than assigning costs by the payment method and region, as in the EHCS. The fuel RPI is predominantly based on credit tariffs, rather than all payment methods. By contrast, this research takes into account differing regional costs and tariffs associated with different payment methods in its projections of fuel costs and associated change in fuel poverty. We consider this represents a more accurate method of modelling fuel costs than that deployed by DECC.
- CSE's 'Improvement Prophet' profiles income changes for each element of a household's income. By contrast, DECC uses wider benefit changes to project income changes. Again,

[3] DECC (2009), *The UK Fuel Poverty Strategy: 7th annual progress report,* DECC

we consider the methodology used by this research represents a more accurate method of modelling income than that deployed by DECC.

The appendices analyse the factors influencing fuel poverty rates in more detail. These include further discussion of the fuel poverty projections from this research and those of DECC.

2.2 Fuel poverty trends since 2001

The research found that 4.0 million households live in fuel poverty in 2010 (full income), of whom 3.3 million are 'vulnerable', according to the Government's UK Fuel Poverty Strategy definition of 'vulnerable'[4]. Table 2 below shows the fuel poverty trends from 2001 to 2010 (figures from 2001 to 2007 are based on DECC fuel poverty data; the 2010 figures are based on the Improvement Project projections).

Table 2: Trends in fuel poverty in England between 2001 and 2010

Year	No. of vulnerable fuel poor households	% vulnerable households that are fuel poor	No. of fuel poor households	% of households in Eng. that are fuel poor
2001	1,416	9.9%	1,720	7.2%
2003	974	6.6%	1,222	5.9%
2004	951	6.4%	1,236	5.9%
2005	1,194	7.8%	1,529	7.2%
2006	1,947	12.8%	2,432	11.5%
2007	2,259	14.5%	2,819	13.2%
2010	3,290	20.7%	4,021	18.3%

Figure 1 shows how fuel poverty (full income) grew between 2001 and 2010 for both vulnerable and 'all' fuel poor households (the data was extrapolated from 2007 to 2010 to cover 2008 and 2009, since the research did not produce projections for these two years).

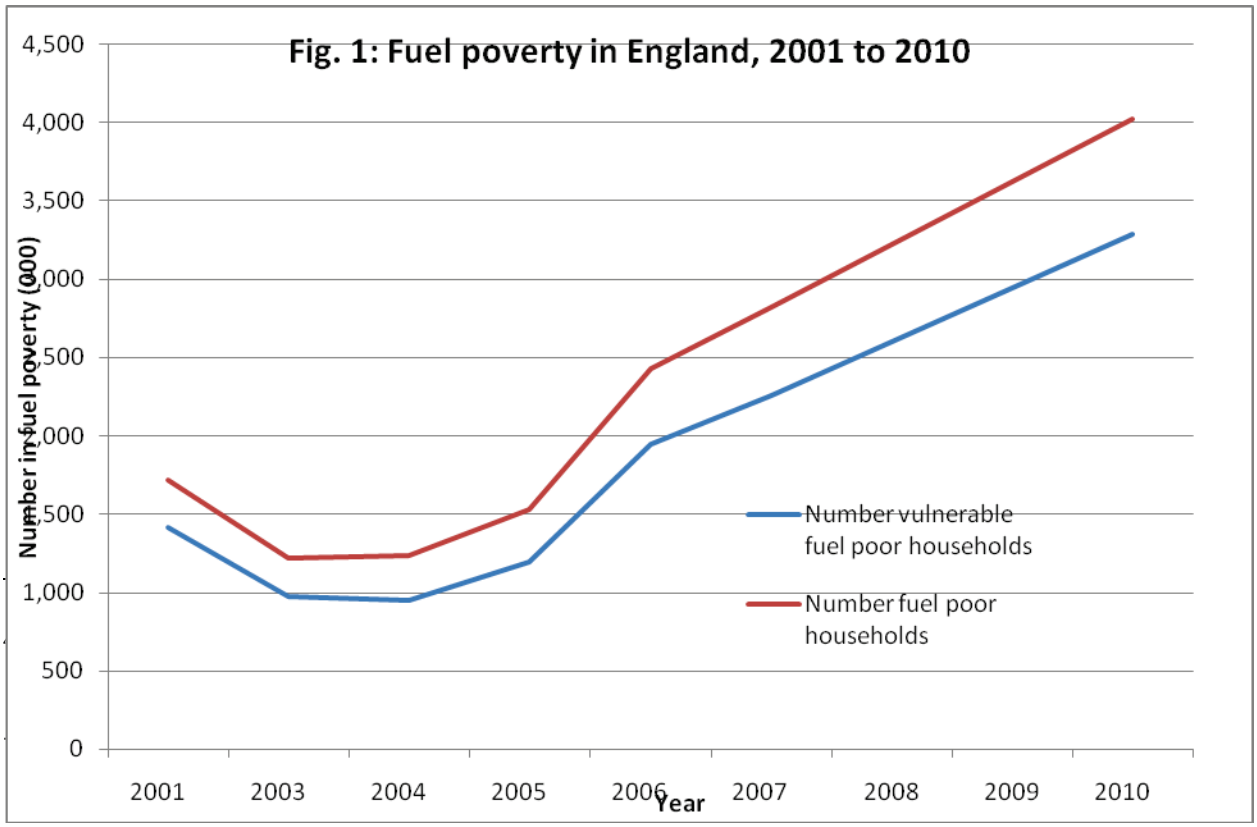


Table 2 and Figure 1 show that there are far more households in fuel poverty in 2010 than 2001 (the launch date of the Government's Fuel Poverty Strategy). According to Government statistics, 1.7 million households lived in fuel poverty in 2001, of which 1.4 million were 'vulnerable'. We therefore consider the research confirms the Government's assessment that it will not hit its target to eliminate fuel poverty among vulnerable households by November 2010 (see DECC (2009), *The UK Fuel Poverty Strategy: 7th annual progress report,* DECC).

2.3 Regional fuel poverty rates

Table 3 gives regional breakdowns of fuel poverty in 2010 and compares these with 2007.

Table 3: Regional breakdowns of fuel poverty in 2007 and 2010

Government Office Region	Fuel pov. definition	2007 total (000)	2007 % in FP	% of FP in Eng	2010 total (000)	2010 % in FP	% of FP in Eng
North East	Full	206	18.6%	7.3%	293	26.0%	7.3%
	Basic	236	21.3%	7.3%	312	27.6%	7.1%
Yorkshire and the Humber	Full	333	15.5%	11.8%	467	21.2%	11.6%
	basic	378	17.6%	11.6%	492	22.4%	11.2%
North West	Full	472	16.1%	16.8%	687	23.0%	17.1%
	Basic	545	18.6%	16.8%	730	24.5%	16.6%
East Midlands	Full	272	14.8%	9.6%	403	21.4%	10.0%
	Basic	299	16.3%	9.2%	400	21.3%	9.1%
West Midlands	Full	383	17.2%	13.6%	503	22.1%	12.5%
	Basic	409	18.3%	12.6%	555	24.4%	12.6%
South West	Full	259	11.7%	9.2%	367	16.1%	9.1%
	Basic	285	12.9%	8.8%	374	16.5%	8.5%
East of England	Full	253	10.8%	9.0%	386	16.0%	9.6%
	Basic	275	11.7%	8.5%	400	16.6%	9.1%
South East	Full	333	9.5%	11.8%	499	13.9%	12.4%
	Basic	362	10.4%	11.1%	548	15.3%	12.5%
London	Full	309	10.0%	11.0%	417	13.1%	10.4%
	Basic	461	14.9%	14.2%	577	18.2%	13.1%
Total	**Full**	**3,250**		**100.0%**	**4,389**		**100.0%**
	Basic	***2*,819**		**100.0%**	**4,021**		**100.0%**

Figure 2 below compares the proportion of households in fuel poverty (basic income) between 2007 and 2010 for the nine regions in England.

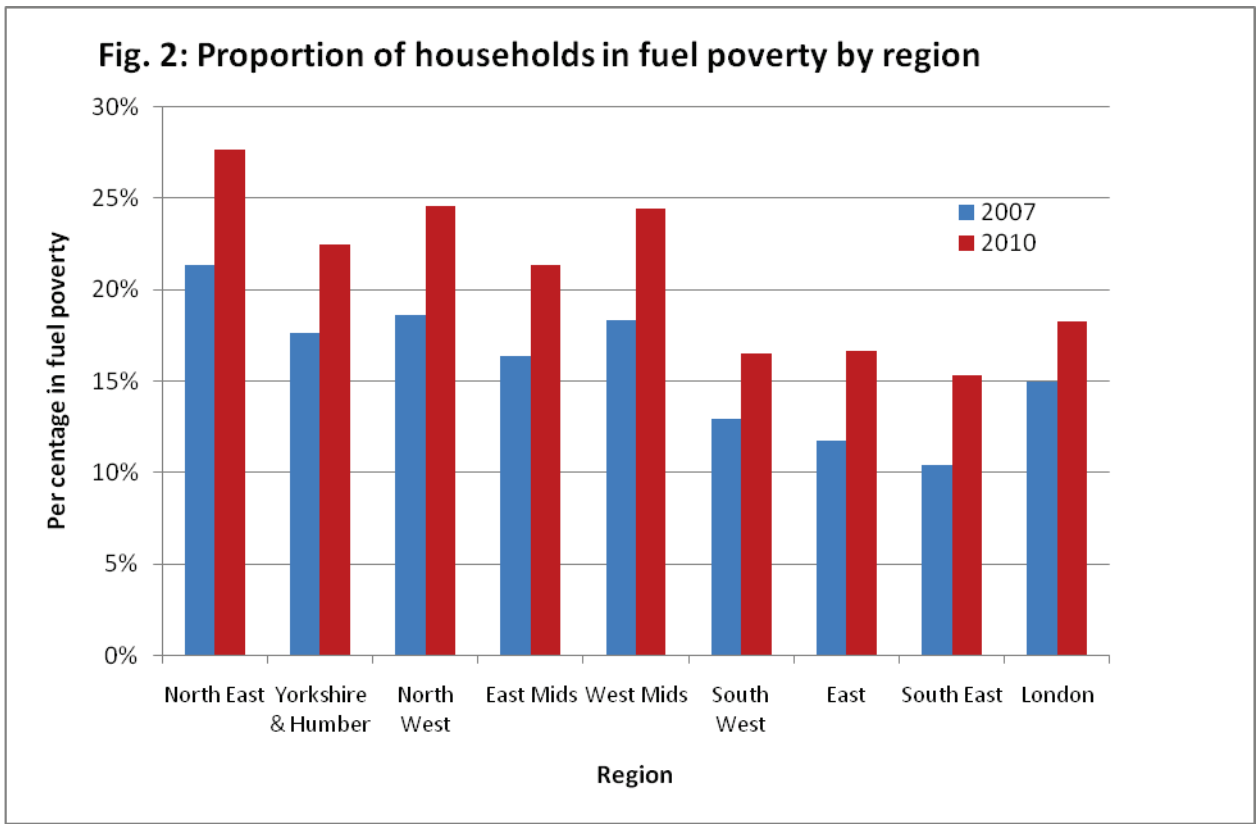


Table 3 and Figure 2 show that the North East region has the highest level of fuel poverty in 2010 among England's nine regions on both the full and basic income definitions (26 per cent and 28 per cent of all households in the region, respectively). The North West region has the second highest level of fuel poverty at 23 per cent (full income) and 24.5 per cent (basic income). The North West also has the highest number of fuel poor households among England's nine regions (accounting for 16.8 per cent of all fuel poor households in England on both the full and basic income definitions).

London has the lowest level of fuel poverty on the full income definition (13 per cent). By contrast, the South East has the lowest level on the basic income definition (15 per cent). Furthermore, both East of England and the South West have lower fuel poverty rates than London on the basic income definition, as illustrated by Figure 2. This reflects London's high housing costs, which tend to 'deflate' fuel poverty on the 'full income' definition. This is because fuel poor benefit recipients receive correspondingly higher Housing Benefit to cover housing costs.

2.4 Fuel poverty by household composition

Tables 3 and 4 give fuel poverty by household composition for 2007 and 2010.

Table 3: Fuel poverty (full income) in England by household composition

Household composition	2007 total (1000)	2007 % in FP	% of FP in Eng	2010 total (1000)	2010 % in FP	% of FP in Eng
Couple under 60, no dependent child(ren)	190	4.7%	6.7%	277	6.7%	6.9%
Couple aged 60 or over, no dependent child(ren)	422	11.2%	15.0%	695	18.3%	17.3%
Couple with dependent child(ren)	264	5.2%	9.4%	370	7.1%	9.2%
Lone parent with dependent child(ren)	248	17.0%	8.8%	373	24.7%	9.3%
Other multi-person household	176	11.5%	6.3%	245	15.7%	6.1%
One person under 60	552	22.9%	19.6%	683	27.3%	17.0%
One person aged 60 or over	967	30.5%	34.3%	1,377	42.9%	34.2%
Total	**2,819**		**100.0%**	**4,021**		**100.0%**

Table 4: Fuel poverty (basic income) in England by household composition

Household composition	2007 total (1000)	2007 % in FP	% of FP in Eng	2010 total (1000)	2010 % in FP	% of FP in Eng
Couple under 60, no dependent child(ren)	189	4.7%	5.8%	252	6.1%	5.7%
Couple aged 60 or over, no dependent child(ren)	389	10.4%	12.0%	602	15.8%	13.7%
Couple with dependent child(ren)	281	5.6%	8.7%	385	7.4%	8.8%
Lone parent with dependent child(ren)	469	32.1%	14.4%	625	41.3%	14.2%
Other multi-person household	199	13.0%	6.1%	258	16.6%	5.9%
One person under 60	657	27.2%	20.2%	761	30.4%	17.3%
One person aged 60 or over	1,065	33.6%	32.8%	1,506	46.9%	34.3%
Total	**3,250**		**100.0%**	**4,389**		**100.0%**

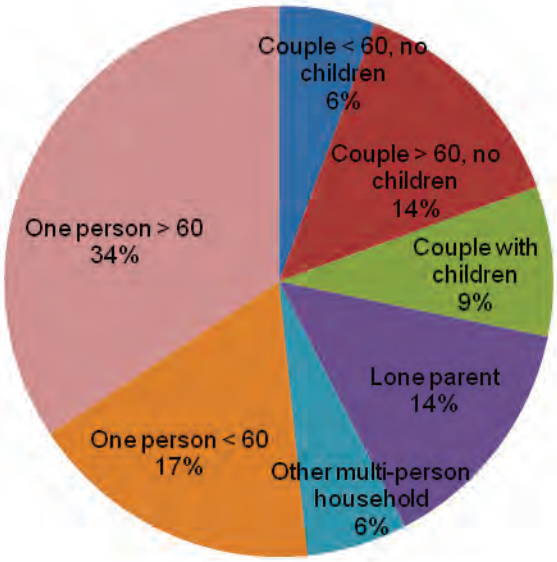
Tables 3 and 4 show how fuel poverty rose among all household types between 2007 and 2010. 43 per cent of single older households are now in fuel poverty (full income definition), compared to 31 per cent in 2007. Single older households now account for about a third of all fuel poor households in England (full and basic definitions). The equivalent 'basic income' figures are 47 per cent and 34 per cent respectively. 25 per cent of lone parents are now in fuel poverty (full

income), compared to 17 per cent in 2007. The equivalent 'basic income' figures are 41 per cent and 32 per cent respectively.

The tables show that on the basic income definition between four and five out of ten lone parent and single older households are in fuel poverty in 2010.

Figure 3 below gives a graphic representation of the composition of the fuel poor (basic income) by household type in England in 2010. The chart shows that over a half of fuel poor households in England are single adult households.

Fig. 3: Composition of fuel poor in England 2010



2.5 Other household types

Table 5: Fuel poverty in England by tenure

Tenure	FP definition	No. in FP in 2007	% in FP	No. in FP in 2010	% in FP
Owner occupied	Full	1,860	12.2%	2,699	17.3%
	Basic	1,613	10.6%	2,307	14.8%
Private rented	Full	469	19.0%	584	22.8%
	Basic	612	24.8%	723	28.2%
Local authority	Full	301	16.0%	464	24.5%
	Basic	591	31.4%	759	40.1%
Registered Social Landlord (RSL)	Full	188	10.4%	273	14.5%
	Basic	434	24.1%	600	31.8%
Total	**Full**	**2,819**		**4,021**	
	Basic	**3,250**		**4,389**	

Table 5 shows that there was a substantial growth in fuel poverty among local authority tenants between 2007 and 2010. 25 per cent (full income) and 40 per cent (basic income) of local authority tenants are in fuel poverty in 2010, the highest rate among the four tenures. Thus, despite generally higher energy efficiency standards in local authority housing than other tenures, the rate of fuel poverty is still high. This reflects the high level of low income among households in this tenure.

Despite lower fuel poverty rates, owner occupiers account for by far the largest number of fuel poor households. This reflects the dominance of this tenure in England.

Table 6: Fuel poverty in England by rurality

Rurality	FP definition	No. in FP in 2007	% in FP	No. in FP in 2010	% in FP
Urban > 10k	Full	2,076	12.2%	3,021	17.3%
	Basic	2,508	14.7%	3,438	19.7%
Town and fringe	Full	281	13.0%	398	17.9%
	Basic	298	13.8%	401	18.0%
Village	Full	289	18.7%	389	24.6%
	Basic	281	18.2%	353	22.3%
Hamlet & isolated dwellings	Full	173	27.6%	213	32.9%
	Basic	163	26.1%	196	30.3%
Total	**Full**	**2,819**		**4,021**	
	Basic	**3,250**		**4,389**	

Table 6 shows that fuel poverty is higher in the more remote rural areas than urban areas and small towns. 25 per cent of households in villages and 33 per cent in 'hamlets & isolated dwellings' are in fuel poverty (full income). The equivalent 'basic income' figures are 22 per cent and 30 per cent respectively. Households living in villages and hamlets account for 15 per cent of the fuel poor in England but only 10 per cent of the total English population (see Table A5 in Appendix A: fuel poverty – full income – by rurality)

Table 7: Fuel poverty in England by employment status

Employment status	FP definition	No. in FP in 2007	% in FP	No. in FP in 2010	% in FP
Full-time work	Full	463	4.2%	776	6.8%
	Basic	391	3.5%	637	5.6%
Part-time work	Full	243	14.1%	323	18.3%
	Basic	249	14.5%	321	18.2%
Retired	Full	1,375	22.5%	2,037	32.9%
	Basic	1,448	23.7%	2,083	33.6%
Unemployed	Full	201	40.8%	235	46.8%
	Basic	318	64.7%	351	69.9%
Full-time education	Full	98	38.0%	112	41.1%
	Basic	113	43.7%	129	47.5%
Other inactive	Full	439	26.4%	538	31.6%
	Basic	731	43.9%	867	51.0%
Total	**Full**	**2,819**		**4,021**	
	Basic	**3,250**		**4,389**	

Table 7 shows that 47 per cent of unemployed households are in fuel poverty (full income). The proportion is even higher on the basic income definition at 70 per cent. Households in full time work have a relatively low risk of fuel poverty at 7 per cent (full income) and 6 per cent (basic income).

Table 8: Fuel poverty in England by heating fuel

Heating fuel	FP definition	No. in FP in 2007	% in FP	No. in FP in 2010	% in FP
Gas (mains)	Full	2,009	11%	3,037	16%
	Basic	2,371	13%	3,349	18%
Electricity	Full	366	21%	466	26%
	Basic	432	25%	518	29%
Bulk LPG	Full	70	52%	81	60%
	Basic	67	50%	81	60%
Heating oil	Full	214	23%	245	26%
	Basic	196	21%	217	23%
Solid Fuel	Full	132	45%	159	54%
	Basic	133	45%	157	53%
Community heating from CHP/waste heat	Full	28	10%	33	11%
	Basic	50	18%	67	23%
Total	**Full**	**2,819**		**4,021**	
	Basic	**3,250**		**4,389**	

Table 8 shows that 60 per cent of households who use LPG for heating their homes, 54 per cent who use solid fuel, 26 per cent who use oil and 26 per cent who use electricity are in fuel poverty in 2010 (full income). The comparable figure for those who heat their homes with gas is 16 per cent. This reflects the higher costs of heating costs for non-gas fuels, plus the close association between non-gas heating systems and older (and thus more expensive to heat) homes.

However, most fuel poor households live in homes with gas heating, reflecting the dominance of gas heating in England.

Table 9: Fuel poverty in England by fuel payment method

		Gas				Electricity			
Payment Method	**FP def.**	**No. in FP in 2007**	**% in FP**	**No. in FP in 2010**	**% in FP**	**No. in FP in 2007**	**% in FP**	**No. in FP in 2010**	**% in FP**
Direct	Full	874	7.9%	1,427	12.6%	1,096	9.0%	1,693	13.6%
Debit	Basic	855	7.7%	1,329	11.7%	1,066	8.8%	1,586	12.7%
Standard	Full	938	17.2%	1,286	22.9%	1,187	18.9%	1,593	24.6%
Credit	Basic	1,052	19.3%	1,418	25.3%	1,305	20.7%	1,716	26.6%
Pre -	Full	391	17.8%	552	24.6%	535	18.4%	735	24.8%
Payment	Basic	675	30.7%	852	38.0%	879	30.2%	1,087	36.7%
No gas	Full	616	22.9%	756	27.7%				
	Basic	668	24.8%	789	28.9%				
Total	**Full**	**2,819**		**4,021**		**2,819**		**4,021**	
	Basic	**3,250**		**4,389**		**3,250**		**4,389**	

Table 9 shows that 25 per cent of both gas and electricity prepayment meter customers are in fuel poverty in 2010 (full income). The equivalent basic income figures are 38 per cent for gas and 37 per cent for electricity. However, although fuel poverty rates are considerably lower for Direct Debit payers than Standard Credit, in numerical terms the number of fuel poor households paying by Direct Debit is similar to those paying by Standard Credit. This reflects the dominance of Direct Debit as the most popular method for paying fuel bills in England.

Table 10: Fuel poverty in England by CERT priority group and access to benefits

	FP definition	No. in FP in 2007	% in FP	No. in FP in 2010	% in FP
Priority Group	Full	1,784	22.1%	2,598	31.7%
	Basic	2,357	29.2%	3,203	39.1%
Non priority group	Full	1,035	7.8%	1,423	10.4%
	Basic	894	6.7%	1,186	8.6%
Means tested benefits	Full	1,840	18.1%	2,687	26.0%
	Basic	2,401	23.7%	3,280	31.7%
Not on means tested	Full	978	8.7%	1,334	11.5%
Benefits	Basic	849	7.6%	1,109	9.6%
Total	**Full**	**2,819**		**4,021**	
	Basic	**3,250**		**4,389**	

Table 10 shows that 26 per cent of households on means tested benefits are in fuel poverty in 2010 on the full income definition, 32 per cent on the basic income definition. The table also shows that over a million fuel poor households do not claim means-tested benefits (33 per cent of all fuel poor households on the full income definition or 25 per cent on the basic income definition – see Tables A11 and A12 in Appendix A). Given that these benefits act as a passport to eligibility for Warm Front and other fuel poverty programmes, the table shows that many fuel poor households will miss out on help.

Table 11: Fuel poverty in England by income decile (full income)

Income decile	No. in FP in 2007	% in FP	% of FP in Eng.	No. in FP in 2010	% in FP	% of FP in Eng.
1	1,574	73.7%	55.9%	1,749	79.8%	43.5%
2	684	32.0%	24.3%	1,105	50.4%	27.5%
3	305	14.3%	10.8%	613	28.0%	15.2%
4	145	6.8%	5.2%	303	13.8%	7.5%
5	54	2.5%	1.9%	137	6.2%	3.4%
6	26	1.2%	0.9%	52	2.4%	1.3%
7	15	0.7%	0.5%	30	1.4%	0.7%
8	5	0.2%	0.2%	12	0.6%	0.3%
9	9	0.4%	0.3%	17	0.8%	0.4%
10	2	0.1%	0.1%	2	0.1%	0.1%
Total	**2,819**		**100%**	**4,020**		**100.0%**

Table 12: Fuel poverty in England by income decile (basic income)

Income decile	No. in FP in 2007	% in FP	% of FP in Eng.	No. in FP in 2010	% in FP	% of FP in Eng.
1	1,717	80.3%	52.8%	1,879	85.7%	42.8%
2	876	41.0%	27.0%	1,306	59.6%	29.8%
3	399	18.7%	12.3%	684	31.2%	15.6%
4	155	7.3%	4.8%	316	14.4%	7.2%
5	51	2.4%	1.6%	102	4.6%	2.3%
6	18	0.8%	0.6%	46	2.1%	1.0%
7	19	0.9%	0.6%	25	1.1%	0.6%
8	5	0.2%	0.1%	9	0.4%	0.2%
9	9	0.4%	0.3%	16	0.7%	0.4%
10	2	0.1%	0.1%	4	0.2%	0.1%
Total	**3,251**		**100%**	**4,387**		**100%**

Tables 11 and 12 show that the three lowest income deciles account for 86 per cent of all fuel poor households in 2010 on the full income definition and 88 per cent on the basic income definition. 80 per cent of all households in the lowest decile live in fuel poverty in 2010 (full income); 86 per cent on the basic income definition. The tables illustrate the importance of low income as a contributory cause of fuel poverty.

Appendix A gives more a more detailed breakdown of the information presented in the above tables. It also gives fuel poverty breakdowns for ‘ethnic origin’, ‘age of dwelling’ and ‘wall type’.

3. METHODOLOGY

3.1 Improvement Prophet

CSE is currently developing the Improvement Prophet tool on behalf of a coalition of funders (see Appendix D for details of methodology). The tool will bring together the results of work previously undertaken to create housing models based on the English Housing Condition Survey (EHCS), namely.

- Fuel prices model: developed for the Energy Efficiency Partnership for Homes (EEPfH) from an original model for the National Right to Fuel Campaign (funded by EEPfH and Unison, energywatch & NEA)
- Energy improvement model: funded by Eaga CT and the Government Office for the South West)

The project seeks to update, integrate and rationalise the two models to create a resource that will enable policy makers to assess the impact of potential energy efficiency improvements on the housing stock and fuel poverty.

The following gives an overview of the improvements to the methodology made possible by Consumer Focus's funding. The 'Improvement Prophet' tool was updated to run on the 2007 EHCS sample. The database uses a number of look-up tables to determine the changes in incomes, fuel prices and energy efficiency since 2007. The tables, summarised below, required significant research to enable the projections to 2010.

- Current fuel prices, using DECC regional data[5].
- Fuel price rises, using the Fuel RPI[6], DECC fuel price by main cities[7], and Sutherland tables[8] for non metered fuels.
- Earned income rises, using the Annual Survey of Hours and Earnings (ASHE) data[9] and the RPI excluding mortgages (or RPIX)[10] – this was improved to allow up-rating by ASHE income deciles, sex and working status.
- Benefits and other incomes, using DWP data[11], RPI[12] and Treasury growth projections[13].
- Housing costs and rents, using CLG data on Council Tax increases by government office region[14], regional data on housing rates[15] and the RPI.

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[5] http://www.decc.gov.uk/en/content/cms/statistics/source/prices/prices.aspx

[6] Energy statistics: prices; Retail prices index UK: fuel components in the UK relative to GDP deflator (QEP 2.1.1 and 2.1.2), DECC 2010.

[7] Energy statistics: prices; Quarterly energy prices' (QEP): Table 2.2.3 and Table 2.3.3, DECC 2010.

[8] Sutherland Comparative Domestic Heating Costs Tables, 2010.

[9] Annual Survey of Hours and Earnings (ASHE) 2009, Office for National Statistics (ONS).

[10] RPIX, Office for National Statistics (ONS).

[11] Benefit and Pension Rates, April 2010, Department for Work and Pensions (DWP).

[12] Retail Price Index (RPI), Office for National Statistics (ONS).

[13] Forecasts for the UK economy, HM Treasury.

[14] Council Tax Levels set by Local Authorities in England – 2009-10, Communities and Local Government (CLG).

The following gives more details of the modelling work carried out for this research.

2.6 Dwelling and household estimates for England 2010

The Greater London Authority (GLA) project *Fuel Poverty in London*[16] predicted current fuel poverty levels in relation to current estimates of household numbers, rather than the household numbers that applied at the time of the most recent EHCS. The research assumed that new dwellings did not contain any fuel poor households, as these would have been built to current Building Regulation standards. Given that low income is a significantly contributory cause of fuel poverty, as well as poor energy efficiency, this assumption was probably over-optimistic.

The research for this report revealed a small number of fuel poor households in new homes (see Table A4 in Appendix A). This suggests other studies have under-estimated fuel poverty to a small extent. However, the research did not take account of the impact of clearance action on fuel poverty rates. This is likely to have led to an over-estimate of fuel poverty.

The methodology used in this project for determining a new dwelling sample and the number of households in April 2010 is provided in Appendix C. This also briefly examines the impact of new building and new conversions on the number of households in fuel poverty in 2010. The impact of demolition activity since 2007 has not yet been included in the estimates.

In theory, the replacement of the least efficient housing with new dwellings built to current Building Regulation standards or above could have a substantial, positive impact on the number of households in fuel poverty. However, because there is very little demolition currently taking place and very low building rates for new homes (due to the recession), these factors have had little impact on fuel poverty rates since 2007.

2.7 Incorporating housing stock changes in Improvement Prophet

There were essentially two ways the 2007 EHCS sample could have been modified to reflect changes in housing stock (see Appendix C for details of these changes):-

- The grossing of the existing 2007 sample could be changed to reflect the new dwelling and household estimates etc, or
- New cases could be added to the existing 2007 sample and grossed cases removed, without altering the grossing on the remaining sample.

The problem with the first option is that it would change the estimates for variables, other than those where the estimates require updating to 2010, and in ways that are difficult to control. In the final version of the tool the second option was used for new homes, ensuring the changes for new homes are contained and more tightly controlled. Appendix C gives a more detailed account of the methodology.

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[15] *Housing and Planning Statistics 2009*, Communities and Local Government (CLG).

[16] GLA 2009, *Fuel Poverty in London*, Richard Moore, CSE and ACE

In the final version of the tool, option 1 will be used to account for demolitions, but with re-grossing limited to 1 per cent of the existing sample to avoid major re-grossing issues. This also has the advantage of ensuring the EHCS sample retains integrity, i.e. that cases are not removed.

2.8 Developing the income module

The team has rebuilt and enhanced the EHCS income model. The SQL (Structured Query Language*)* model uses a set of queries to first determine the individual components of the respondent's income and then transforms these to the current date using data from the Department for Work and Pensions, the Annual Survey of Hours and Earnings and the Treasury Pre-Budget Report[17].

The future projections of earned income are based on standard Treasury assumptions for income growth to 2020[18]. The projections for income are now set to the first quarter on 2010 with the ASHE data profiled to income deciles rather than survey means. Thus, income changes are matched to the household's income decile. This improves the accuracy of the incomes profiled.

2.9 Developing the energy efficiency module

The research team created a database-stored procedure to randomly select the properties most likely to receive insulation and heating improvements between 2007 and 2010. The number of measures is defined by national installation rates for loft insulation, cavity wall insulation and heating measures[19]. Following the application of measures, the model uses the energy module from Improvement Prophet to determine the change in energy performance.

The assumptions regarding the application of measures were improved to match them to:

- The property's need for measures, for example due to failure to meet the Decent Homes Standard in social housing
- The respondent's desire for measures, for example by using data on self-reported dissatisfaction with current heating and insulation levels
- The age of the heating system when correlated with householder satisfaction
- The eligibility criteria for relevant schemes such as Warm Front
- The random assignment of measures to both the probable group above and a wider group of householders. This matches the random marketing of schemes themselves and includes a series of constraints, e.g. not selecting a new boiler when the existing boiler is less than 3 years old.

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[17] HM Treasury, Budget 2009: the economy and public finances – supplementary material

[18] HM Treasury 2010

[19] Installation rates provided by CIGA, Eaga, Ofgem, Energy Efficiency for homes Heating Strategy Group and Insulation Strategy Group

4. CONCLUSION

The research has produced robust and credible breakdowns of fuel poverty in England for 2010 and shown how these compare with 2007. It builds upon DECC's fuel poverty projection for 2009 by giving detailed breakdowns of fuel poverty, for example by consumer group, region and housing circumstances. We therefore consider the findings should provide a valuable resource for policy makers, researchers and all those concerned to develop effective fuel poverty policies.

The research estimates that there are 4.0 million households in fuel poverty in 2010, of whom 3.3 million are 'vulnerable' (full income definition). The 4.0 million figure is slightly lower than the Government's 2009 projection of 4.6 million. Some of the difference is likely to result from the fall in fuel prices and hence fuel poverty since March 2009. Some may be due to differences in methodology. For example, the research uses more detailed calculations for projecting incomes, fuel prices and energy efficiency improvements than DECC.

The research shows that fuel poverty grew significantly for most consumer groups between 2007 and 2010. Fuel poverty rates for some groups are of particular concern. For example, on the basic income definition, the research found fuel poverty had reached the following levels in 2010:

- 86 per cent of households in the lowest income decile
- 70 per cent of unemployed people
- 60 per cent of households who heat their homes with LPG
- 47 per cent of single older people
- 41 per cent of lone parents
- 40 per cent of local authority tenants
- 38 per cent of gas prepayment meter consumers

The research findings illustrate the impact of the fuel poverty definition on the composition of the fuel poor. For example, 70 per cent of unemployed households live in fuel poverty on the basic income definition, compared to 46 per cent on the full income definition. This is because certain consumer groups, such as unemployed people, lone parents and prepayment meter consumers, are much more likely to receive Housing Benefit than other groups, such as older people. With no allowance made for housing costs, fuel poverty propensity is therefore considerably lower on the full income definition for certain consumer groups than it is under the basic income definition.

The findings have important implications for fuel poverty policy. They confirm the Government's assessment that it will not hit its UK Fuel Poverty Strategy target to eliminate fuel poverty among vulnerable households in England by 2010. They illustrate the scale of the task required to meet its target to eliminate fuel poverty among all households by 2016. 667,000 households would need to be removed from fuel poverty each year between 2010 and 2016 if the Government is to hit its target.

The findings also illustrate which groups policy needs to focus on, given their particularly high fuel poverty rates, for example those on low incomes, lone parents, single older households,

households without gas heating. While energy efficiency measures represent the long term sustainable solution to fuel poverty, the findings also illustrate the importance of tackling low income and high fuel prices. The high fuel poverty rates among local authority tenants are of particular concern, given the generally high energy efficiency standards in this sector.

The research found that over a million fuel poor households do not claim means-tested benefits. This has worrying implications for policy, given that these benefits act as a passport to eligibility for Warm Front and other fuel poverty programmes. Thus, many fuel poor households will miss out on current programmes to tackle fuel poverty.

The next stage of the research will give headline fuel poverty projections for Scotland, Wales and Northern Ireland and thus the UK as a whole. Consumer Focus also hopes to produce regular updates of fuel poverty data, funding permitted, by applying the tool to new house condition and fuel price data, as these becomes available.

APPENDIX A: DETAILED BREAKDOWNS OF FUEL POVERTY FOR 2007 AND 2010

Table A1: Fuel poverty by household composition (full income)

Household composition	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (1000)	2010 Row%	2010 Column%
couple, no dependent child(ren) under 60	Not in FP	3,817			3,840		
	In FP	190	4.7%	6.7%	277	6.7%	6.9%
couple, no dependent child(ren) aged 60 or over	Not in FP	3,333			3,112		
	In FP	422	11.2%	15.0%	695	18.3%	17.3%
couple with dependent child(ren)	Not in FP	4,786			4,839		
	In FP	264	5.2%	9.4%	370	7.1%	9.2%
lone parent with dependent child(ren)	Not in FP	1,214			1,139		
	In FP	248	17.0%	8.8%	373	24.7%	9.3%
other multi-person household	Not in FP	1,351			1,313		
	In FP	176	11.5%	6.3%	245	15.7%	6.1%
one person under 60	Not in FP	1,860			1,822		
	In FP	552	22.9%	19.6%	683	27.3%	17.0%
one person aged 60 or over	Not in FP	2,200			1,835		
	In FP	967	30.5%	34.3%	1,377	42.9%	34.2%
Total		2,819		100.0%	4,021		100.0%

Table A2: Fuel poverty by household composition (basic income)

Household composition	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
couple, no dependent child(ren) under 60	Not in FP	3,818			3,865		
	In FP	189	4.7%	5.8%	252	6.1%	5.7%
couple, no dependent child(ren) aged 60 or over	Not in FP	3,365			3,206		
	In FP	389	10.4%	12.0%	602	15.8%	13.7%
couple with dependent child(ren)	Not in FP	4,769			4,824		
	In FP	281	5.6%	8.7%	385	7.4%	8.8%
lone parent with dependent child(ren)	Not in FP	993			887		
	In FP	469	32.1%	14.4%	625	41.3%	14.2%
other multi-person household	Not in FP	1,328			1,299		
	In FP	199	13.0%	6.1%	258	16.6%	5.9%
one person under 60	Not in FP	1,756			1,744		
	In FP	657	27.2%	20.2%	761	30.4%	17.3%
one person aged 60 or over	Not in FP	2,101			1,706		
	In FP	1,065	33.6%	32.8%	1,506	46.9%	34.3%
Total		3,250		100.0%	4,389		100.0%

Table A3: Fuel poverty by tenure (full income)

Tenure	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
owner occupied	Not in FP	13,361			12,877		
	In FP	1,860	12.2%	66.0%	2,699	17.3%	67.1%
private rented	Not in FP	2,003			1,977		
	In FP	469	19.0%	16.6%	584	22.8%	14.5%
local authority	Not in FP	1,583			1,430		
	In FP	301	16.0%	10.7%	464	24.5%	11.5%
RSL	Not in FP	1,613			1,615		
	In FP	188	10.4%	6.7%	273	14.5%	6.8%
Total		2,819		100.0%	4,021		100.0%

Table A4: Fuel poverty by tenure (basic income)

Tenure	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
owner occupied	Not in FP	13,609			13,269		
	In FP	1,613	10.6%	49.6%	2,307	14.8%	52.6%
private rented	Not in FP	1,861			1,839		
	In FP	612	24.8%	18.8%	723	28.2%	16.5%
local authority	Not in FP	1,293			1,135		
	In FP	591	31.4%	18.2%	759	40.1%	17.3%
RSL	Not in FP	1,368			1,288		
	In FP	434	24.1%	13.4%	600	31.8%	13.7%
Total		3,250		100.0%	4,389		100.0%

Table A5: Fuel poverty by rurality (full income)

Rurality	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
urban > 10k	Not in FP	14,975			14,446		
	In FP	2,076	12.2%	73.7%	3,021	17.3%	75.1%
town and fringe	Not in FP	1,877			1,827		
	In FP	281	13.0%	10.0%	398	17.9%	9.9%
Village	Not in FP	1,258			1,193		
	In FP	289	18.7%	10.3%	389	24.6%	9.7%
hamlet & isolated dwellings	Not in FP	452			434		
	In FP	173	27.6%	6.1%	213	32.9%	5.3%
Total		2,819		100.0%	4,021		100.0%

Table A6: Fuel poverty by rurality (basic income)

Rurality	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
urban > 10k	Not in FP	14,543			14,029		
	In FP	2,508	14.7%	77.2%	3,438	19.7%	78.3%
town and fringe	Not in FP	1,860			1,823		
	In FP	298	13.8%	9.2%	401	18.0%	9.1%
Village	Not in FP	1,266			1,228		
	In FP	281	18.2%	8.7%	353	22.3%	8.1%
hamlet & isolated dwellings	Not in FP	462			451		
	In FP	163	26.1%	5.0%	196	30.3%	4.5%
Totals		3,250		100.0%	4,389		100.0%

Table A7: Fuel poverty by ethnic origin (full income)

Ethnic origin	Full definition	2007 total (000)	2007 % Row%	2007 % Column%	2010 total (000)	2010 Row%	
White	Not in FP	16,925			16,255		
	In FP	2,547	13%	90%	3,693	19%	92%
Black	Not in FP	525			524		
	In FP	88	14%	3%	110	17%	3%
Asian	Not in FP	700			697		
	In FP	115	14%	4%	141	17%	3%
Other	Not in FP	412			423		
	In FP	69	14%	2%	77	15%	2%
Totals		2,819		100%	4,021		100%

Table A8: Fuel poverty by ethnic origin (basic income)

Ethnic origin	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
White	Not in FP	16,595			15,995		
	In FP	2,876	15%	88%	3,954	20%	90%
Black	Not in FP	483			478		
	In FP	129	21%	4%	156	25%	4%
Indian	Not in FP	668			668		
	In FP	147	18%	5%	169	20%	4%
Other	Not in FP	383			390		
	In FP	98	20%	3%	110	22%	3%
Total		3,250		100%	4,389		100%

Table A9: Fuel poverty by primary working status of HRP (full income)

Employment Status	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
full-time work	Not in FP	10,658			10,704		
	In FP	463	4.2%	16.4%	776	6.8%	19.3%
part-time work	Not in FP	1,480			1,444		
	In FP	243	14.1%	8.6%	323	18.3%	8.0%
Retired	Not in FP	4,745			4,161		
	In FP	1,375	22.5%	48.8%	2,037	32.9%	50.7%
unemployed	Not in FP	291			267		
	In FP	201	40.8%	7.1%	235	46.8%	5.8%
full-time education	Not in FP	160			160		
	In FP	98	38.0%	3.5%	112	41.1%	2.8%
other inactive	Not in FP	1,227			1,163		
	In FP	439	26.4%	15.6%	538	31.6%	13.4%
Total		2,819		100.0%	4,021		100.0%

Table A10: Fuel poverty by primary working status of HRP (basic income)

Employment Status	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
full-time work	Not in FP	10,730			10,843		
	In FP	391	3.5%	12.0%	637	5.6%	14.5%
part-time work	Not in FP	1,474			1,446		
	In FP	249	14.5%	7.7%	321	18.2%	7.3%
Retired	Not in FP	4,671			4,115		
	In FP	1,448	23.7%	44.6%	2,083	33.6%	47.5%
unemployed	Not in FP	174			151		
	In FP	318	64.7%	9.8%	351	69.9%	8.0%
full-time education	Not in FP	146			143		
	In FP	113	43.7%	3.5%	129	47.5%	2.9%
other inactive	Not in FP	935			833		
	In FP	731	43.9%	22.5%	867	51.0%	19.8%
Total		3,250		100.0%	4,389		100.0%

Table A11: Fuel poverty by access to benefits or grant funding (full income)

Benefit Criteria	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 % Row%
Priority Group	Not in FP	6,276			5,600	
	In FP	1,784	22.1%	63.3%	2,598	31.7% 64.6%
Non Priority Group	Not in FP	12,286			12,300	
	In FP	1,035	7.8%	36.7%	1,423	10.4% 35.4%
Means Tested Benefits	Not in FP	8,302			7,667	
	In FP	1,840	18.1%	65.3%	2,687	26.0% 66.8%
Not on means tested benefits	Not in FP	10,260			10,232	
	In FP	978	8.7%	34.7%	1,334	11.5% 33.2%
Total	Not in FP	18,562			17,900	
	In FP	2,819		100.0%	4,021	100.0%

Table A12: Fuel poverty in 2010 by access to benefits or grant funding (basic income)

Benefit Criteria	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%
Priority Group	Not in FP	5,703			4,995	
	In FP	2,357	29.2%	72.5%	3,203	39.1% 73.0%
Non Priority Group	Not in FP	12,427			12,537	
	In FP	894	6.7%	27.5%	1,186	8.6% 27.0%
Means Tested Benefits	Not in FP	7,741			7,074	
	In FP	2,401	23.7%	73.9%	3,280	31.7% 74.7%
Not on means tested benefits	Not in FP	10,389			10,457	
	In FP	849	7.6%	26.1%	1,109	9.6% 25.3%
Total	Not in FP	18,130			17,531	
	In FP	3,250		100.0%	4,389	100.0%

Table A13: Fuel poverty by age of dwelling (full income)

Age of Dwelling	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
pre 1850	Not in FP	575			541		
	In FP	188	24.6%	6.7%	232	30.0%	5.8%
1850 to 1899	Not in FP	1,548			1,426		
	In FP	408	20.9%	14.5%	550	27.8%	13.7%
1900 to 1918	Not in FP	1,441			1,351		
	In FP	343	19.2%	12.2%	444	24.7%	11.0%
1919 to 1944	Not in FP	3,141			2,923		
	In FP	591	15.8%	21.0%	815	21.8%	20.3%
1945 to 1964	Not in FP	3,592			3,258		
	In FP	621	14.7%	22.0%	963	22.8%	24.0%
1965 to 1974	Not in FP	2,835			2,671		
	In FP	351	11.0%	12.4%	515	16.2%	12.8%
1975 to 1980	Not in FP	1,362			1,302		
	In FP	122	8.2%	4.3%	187	12.6%	4.7%
1981 to 1990	Not in FP	1,703			1,657		
	In FP	114	6.3%	4.0%	162	8.9%	4.0%
post 1990	Not in FP	2,363			2,770		
	In FP	82	3.3%	2.9%	152	5.2%	3.8%
Total		2,819		100.0%	4,021		100.0%

Table A14: Fuel poverty by age of dwelling (basic income)

Age of Dwelling	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
pre 1850	Not in FP	573			556		
	In FP	189	24.8%	5.8%	217	28.0%	4.9%
1850 to 1899	Not in FP	1521			1425		
	In FP	435	22.2%	13.4%	551	27.9%	12.5%
1900 to 1918	Not in FP	1421			1321		
	In FP	363	20.4%	11.2%	474	26.4%	10.8%
1919 to 1944	Not in FP	3084			2901		
	In FP	648	17.4%	19.9%	838	22.4%	19.1%
1945 to 1964	Not in FP	3438			3129		
	In FP	775	18.4%	23.8%	1091	25.9%	24.9%
1965 to 1974	Not in FP	2757			2599		
	In FP	429	13.5%	13.2%	588	18.4%	13.4%
1975 to 1980	Not in FP	1341			1267		
	In FP	143	9.7%	4.4%	222	14.9%	5.1%
1981 to 1990	Not in FP	1675			1606		
	In FP	142	7.8%	4.4%	213	11.7%	4.9%
post 1990	Not in FP	2320			2726		
	In FP	125	5.1%	3.9%	196	6.7%	4.5%
Total		3,250		100.0%	4,389		100.0%

Table A15: Fuel poverty by heating fuel (full income)

Age of Dwelling	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
Gas (mains)	Not in FP	16,006			15,468		
	In FP	2,009	11%	71%	3,037	16%	76%
Electricity	Not in FP	1,359			1,291		
	In FP	366	21%	13%	466	26%	12%
Bulk LPG	Not in FP	65			53		
	In FP	70	52%	2%	81	60%	2%
Heating oil	Not in FP	713			693		
	In FP	214	23%	8%	245	26%	6%
Solid Fuel	Not in FP	164			137		
	In FP	132	45%	5%	159	54%	4%
community heating from CHP/waste heat	Not in FP	255			258		
	In FP	28	10%	1%	33	11%	1%
Total		2,819	0%	100%	4,021	0%	100%

Table A16: Fuel poverty by heating fuel (basic income)

Age of Dwelling	Basic definition	2007 totals (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	
Gas (mains)	Not in FP	15,644			15,156		
	In FP	2,371	13%	73%	3,349	18%	76%
Electricity	Not in FP	1,293			1,239		
	In FP	432	25%	13%	518	29%	12%
Bulk LPG	Not in FP	67			54		
	In FP	67	50%	2%	81	60%	2%
Heating oil	Not in FP	731			721		
	In FP	196	21%	6%	217	23%	5%
Solid Fuel	Not in FP	162			139		
	In FP	133	45%	4%	157	53%	4%
community heating from CHP/waste heat	Not in FP	233			223		
	In FP	50	18%	2%	67	23%	2%
Total		3,250	0%	100%	4,389	0%	100%

Table A17: Fuel poverty by payment method for gas (full income)

Gas payment method	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 Totals (000)	2010 Row%	2010 Column%
Direct debit	Not in FP	10,179			9,913		
	In FP	874	7.9%	31.0%	1,427	12.6%	35.5%
Standard credit	Not in FP	4,504			4,318		
	In FP	938	17.2%	33.3%	1,286	22.9%	32.0%
Pre payment	Not in FP	1,805			1,691		
	In FP	391	17.8%	13.9%	552	24.6%	13.7%
n/a = No gas	Not in FP	2,072			1,978		
	In FP	616	22.9%	21.9%	756	27.7%	18.8%
Total		2,819		100.0%	4,021		100.0%

Table A18: Fuel poverty in 2010 by payment method for gas (basic income)

Gas payment method	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
Direct debit	Not in FP	10,197			10,010		
	In FP	855	7.7%	26.3%	1,329	11.7%	30.3%
Standard credit	Not in FP	4,390			4,185		
	In FP	1,052	19.3%	32.4%	1,418	25.3%	32.3%
Pre payment	Not in FP	1,521			1,391		
	In FP	675	30.7%	20.8%	852	38.0%	19.4%
n/a = No gas	Not in FP	2,021			1,945		
	In FP	668	24.8%	20.5%	789	28.9%	18.0%
Total		3,250		100.0%	4,389		100.0%

Table A19: Fuel poverty by payment method for electricity (full income)

Electricity payment method	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
Direct debit	Not in FP	11,073			10,801		
	In FP	1,096	9.0%	38.9%	1,693	13.6%	42.1%
Standard credit	Not in FP	5,110			4,869		
	In FP	1,187	18.9%	42.1%	1,593	24.6%	39.6%
Pre payment	Not in FP	2,379			2,230		
	In FP	535	18.4%	19.0%	735	24.8%	18.3%
Total		2,819		100.0%	4,021		100.0%

Table A20: Fuel poverty by payment method for electricity (basic income)

Electricity payment method	Basic definition	2007 total (000)	2007 % Row%	2007 % Column%	2010 total (000)	2010 Row%	2010 Column%
Direct debit	Not in FP	11,103			10,908		
	In FP	1,066	8.8%	32.8%	1,586	12.7%	36.1%
Standard credit	Not in FP	4,992			4,746		
	In FP	1,305	20.7%	40.2%	1,716	26.6%	39.1%
Pre payment	Not in FP	2,036			1,877		
	In FP	879	30.2%	27.0%	1,087	36.7%	24.8%
Total		3,250		100.0%	4,389		100.0%

Table A21: Fuel poverty by wall type (full income)

Wall type	Full definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
cavity wall	Not in FP	13,435			13,111		
	In FP	1,609	10.7%	57.1%	2,417	15.6%	60.1%
Solid/other	Not in FP	5,127			4,789		
	In FP	1,209	19.1%	42.9%	1,604	25.1%	39.9%
Totals		2,819		100.0%	4,021		100.0%

Table A22: Fuel poverty by wall type (basic income)

Wall type	Basic definition	2007 total (000)	2007 Row%	2007 Column%	2010 total (000)	2010 Row%	2010 Column%
cavity wall	Not in FP	13,147			12,841		
	In FP	1,897	12.6%	58.4%	2,687	17.3%	61.2%
Solid/other	Not in FP	4,983			4,691		
	In FP	1,353	21.4%	41.6%	1,702	26.6%	38.8%
Total		3,250		100.0%	4,389		100.0%

Table A23: Fuel poverty by income decile (full income)

Percentile Group	Fuel Poverty in 2007						Fuel Poverty in 2010					
	Not in FP - full definition	Row %	Column %	In FP - full definition	Row %	Column %	Not in FP - full definition	Row %	Column %	In FP - full definition	Row %	Column %
1	563	26.3%	3.0%	1,574	73.7%	55.9%	444	20.2%	2.5%	1,749	79.8%	43.5%
2	1,455	68.0%	7.8%	684	32.0%	24.3%	1,086	49.6%	6.1%	1,105	50.4%	27.5%
3	1,833	85.7%	9.9%	305	14.3%	10.8%	1,578	72.0%	8.8%	613	28.0%	15.2%
4	1,994	93.2%	10.7%	145	6.8%	5.2%	1,889	86.2%	10.6%	303	13.8%	7.5%
5	2,084	97.5%	11.2%	54	2.5%	1.9%	2,056	93.8%	11.5%	137	6.2%	3.4%
6	2,112	98.8%	11.4%	26	1.2%	0.9%	2,139	97.6%	12.0%	52	2.4%	1.3%
7	2,122	99.3%	11.4%	15	0.7%	0.5%	2,162	98.6%	12.1%	30	1.4%	0.7%
8	2,135	99.8%	11.5%	5	0.2%	0.2%	2,180	99.4%	12.2%	12	0.6%	0.3%
9	2,128	99.6%	11.5%	9	0.4%	0.3%	2,175	99.2%	12.2%	17	0.8%	0.4%
10	2,136	99.9%	11.5%	2	0.1%	0.1%	2,189	99.9%	12.2%	2	0.1%	0.1%

Table A24: Fuel poverty by income decile (basic income)

Percentile Group	Fuel Poverty in 2007						Fuel Poverty in 2010					
	Not in FP - basic definition	Row %	Column %	In FP - basic definition	Row %	Column %	Not in FP - basic definition	Row %	Column %	In FP - basic definition	Row %	Column %
1	420	19.7%	2.3%	1,717	80.3%	52.8%	312	14.3%	1.8%	1,879	85.7%	42.8%
2	1,263	59.0%	7.0%	876	41.0%	27.0%	886	40.4%	5.1%	1,306	59.6%	29.8%
3	1,734	81.3%	9.6%	399	18.7%	12.3%	1,507	68.8%	8.6%	684	31.2%	15.6%
4	1,978	92.7%	10.9%	155	7.3%	4.8%	1,876	85.6%	10.7%	316	14.4%	7.2%
5	2,097	97.6%	11.6%	51	2.4%	1.6%	2,089	95.4%	11.9%	102	4.6%	2.3%
6	2,120	99.2%	11.7%	18	0.8%	0.6%	2,148	97.9%	12.3%	46	2.1%	1.0%
7	2,121	99.1%	11.7%	19	0.9%	0.6%	2,166	98.9%	12.4%	25	1.1%	0.6%
8	2,131	99.8%	11.8%	5	0.2%	0.1%	2,179	99.6%	12.4%	9	0.4%	0.2%
9	2,130	99.6%	11.7%	9	0.4%	0.3%	2,179	99.3%	12.4%	16	0.7%	0.4%
10	2,135	99.9%	11.8%	2	0.1%	0.1%	2,189	99.8%	12.5%	4	0.2%	0.1%

Table A25: Fuel poverty by government office region

Government Office Region	Fuel poverty def	No of h/hds in 2007	% of h/hds in FP in 2007	% of FP h/hds in Eng	No of h/hds in 2010	% of h/hds in FP in 2010	% of FP h/hds in Eng
North East	Not in FP - full	901			835		
	In FP - full	206	18.6%	7.3%	293	26.0%	7.3%
	Not in FP - basic	871			817		
	In FP - basic	236	21.3%	7.3%	312	27.6%	7.1%
Yorkshire & Humber	Not in FP - full	1,817			1,733		
	In FP - full	333	15.5%	11.8%	467	21.2%	11.6%
	Not in FP - basic	1,772			1,708		
	In FP - basic	378	17.6%	11.6%	492	22.4%	11.2%
North West	Not in FP - full	2,457			2,295		
	In FP - full	472	16.1%	16.8%	687	23.0%	17.1%
	Not in FP - basic	2,384			2,252		
	In FP - basic	545	18.6%	16.8%	730	24.5%	16.6%
East Midlands	Not in FP - full	1,561			1,476		
	In FP - full	272	14.8%	9.6%	403	21.4%	10.0%
	Not in FP - basic	1,534			1,478		
	In FP - basic	299	16.3%	9.2%	400	21.3%	9.1%
West Midlands	Not in FP - full	1,849			1,777		
	In FP - full	383	17.2%	13.6%	503	22.1%	12.5%
	Not in FP - basic	1,823			1,724		
	In FP - basic	409	18.3%	12.6%	555	24.4%	12.6%
South West	Not in FP - full	1,950			1,907		
	In FP - full	259	11.7%	9.2%	367	16.1%	9.1%
	Not in FP - basic	1,924			1,899		
	In FP - basic	285	12.9%	8.8%	374	16.5%	8.5%
East of England	Not in FP - full	2,090			2,024		
	In FP - full	253	10.8%	9.0%	386	16.0%	9.6%
	Not in FP - basic	2,068			2,010		
	In FP - basic	275	11.7%	8.5%	400	16.6%	9.1%
South East	Not in FP - full	3,153			3,093		
	In FP - full	333	9.5%	11.8%	499	13.9%	12.4%
	Not in FP - basic	3,124			3,044		
	In FP - basic	362	10.4%	11.1%	548	15.3%	12.5%
London	Not in FP - full	2,782			2,760		
	In FP - full	309	10.0%	11.0%	417	13.1%	10.4%
	Not in FP - basic	2,631			2,600		
	In FP - basic	461	14.9%	14.2%	577	18.2%	13.1%

APPENDIX B: THE CHANGING DYNAMICS OF '10 PER CENT' FUEL POVERTY

Introduction

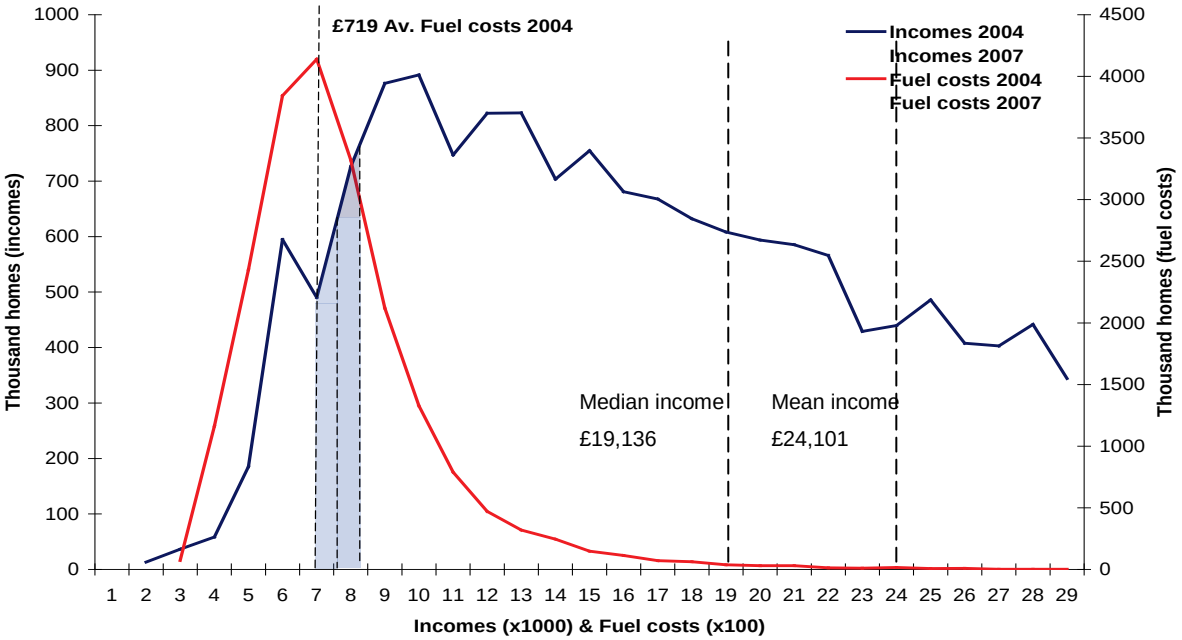
This appendix examines how, by the time of the 2007 EHCS, the dynamics of fuel poverty in England had changed significantly to that existing at the time of the 2004 survey, which took place immediately before the main fuel price increases. It shows that due to a change in the relationship between fuel costs and low incomes, the impact of fuel price rises on fuel poverty numbers is likely to have been less pronounced after the 2007 EHCS than before. To improve the comparison between 2004 and 2007, the analysis used in the appendix is based on the representative 2004 to 2007 EHCS longitudinal survey. This re-surveyed dwellings in the 2007 EHCS that were originally surveyed in the 2004 EHCS, although the occupying household and energy efficiency will have changed in some of these dwellings.

The appendix also shows how these dynamics contribute to the slight difference in the fuel poverty projections generated by Improvement Prophet and DECC.

The impact of fuel price rises before 2007

Using estimates from the 2004 longitudinal sample, Figure B1 plots the distribution of total fuel costs (red) against the (blue) distribution line for 10 per cent of full income.[20] The distribution of incomes is heavily skewed with a steep climb in the number of households on low incomes as income gradually increases towards the mode and a long tail away from the mode as income increases above the mode. The modal income is significantly lower than the median, which in turn is below the mean income.

Figure B1: The impact of fuel price rises on fuel poverty, 2004



[20] In the figures, the 'blips' in the income line are due to the small EHCS sample sizes for a particular income. In reality, the distribution will take the same overall shape but be generally smoother.

Figure B1 shows that most fuel costs coincided with the sharpest rises in the distribution line for 10 per cent of incomes (the average fuel cost in 2004 was £719). For example, in homes with average annual fuel costs, only those households on low incomes (of under £7,190) would have been fuel poor. However, when the average cost rose by, say, £70, many more households (from the area in light blue) will have fallen into fuel poverty. When the costs rose by a further £70, an even greater number (from the darker blue area) are likely to have become newly fuel poor. In this way, as fuel prices rose after 2004, an **accelerating** increase in fuel poverty tended to occur[21].

The final rows in Table B1 confirm this accelerating increase in fuel poverty. After 2004, the annual increase rose from 24 per cent between 2004 and 2005 to 59 per cent between 2005 and 2006. Both of these increases in fuel poverty were substantially higher than the corresponding rises in fuel costs (12 per cent and 24 per cent for those on the lowest 30 per cent of incomes) and despite similar income increases of around 5 per cent. Between 2006 and 2007 the increase in fuel poverty was significantly lower at 16 per cent. This was partly due to the lower rise in fuel costs (13 per cent), but possibly also reflected the onset of a changing relationship between the distribution of fuel costs and low incomes and a consequent change in the impact of fuel price rises[22].

Table B1: Increases in fuel prices, fuel costs, incomes and fuel poverty, 2004 to 2007

	2003	2004	2005	2006	2007
All households					
RPI fuel price index*	113.4	121.4	137.8	171.8	184.0
Annual increase (%)		7.1	13.5	24.7	7.1
Average fuel costs (£)	694	720	827	1,028	1,138
Annual increase (%)		3.8	14.9	24.2	10.7
Lowest 30% of incomes					
Average Incomes (£)	8,758	9,023	9,493	9,927	10,306
Annual increase (%)		3.0	5.2	4.6	3.8
Average fuel costs (£)	622	633	711	885	998
Annual increase (%)		1.8	12.3	24.4	12.8
No. in Fuel poverty (x1000)	1,222	1,236	1,529	2,432	2,819
Annual increase (%)		1.2	23.7	59.0	15.9

* All fuel and light, actual price index.

The impact of fuel price rises after 2007

By the time of the 2007 EHCS, the income distribution had shifted slightly to the right, as might be expected, giving fewer homes with household incomes of under £10,000, but otherwise was very similar to that in 2004. By contrast, the distribution of fuel costs had, with sharply rising fuel prices, moved much further to the right than incomes and had also broadened/flattened. Furthermore, there was now a wider range of fuel costs for a given

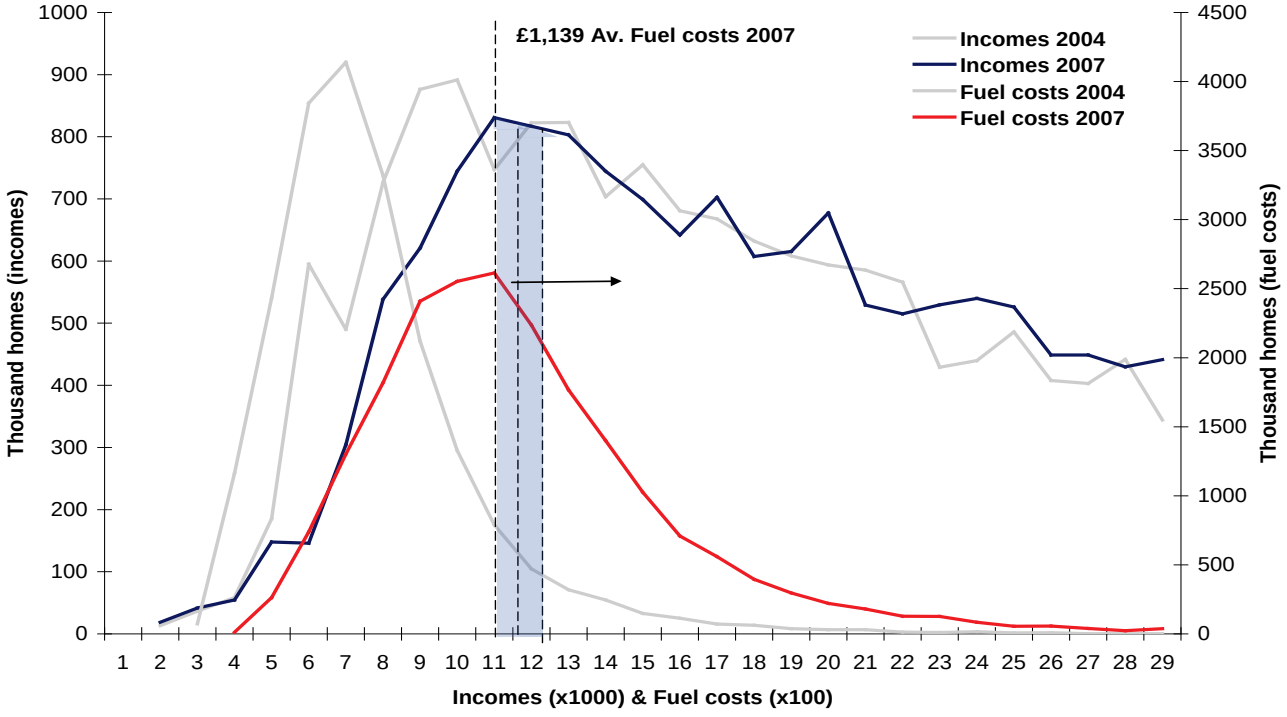
[21] The critical relationship between the distribution of fuel costs and incomes in England after 2004 was first explored by Richard Moore as part of the EEPH project, *Impact of Fuel Price Rises in the Managed Housing Sector,* Energy Efficiency Partnership for Homes (EEPH 2007)

[22] In addition, methodological changes also account for a small difference in fuel poverty numbers between the years.

level of consumption due to the growth of differentials both within and between payment methods[23]. The 2007 distributions are superimposed on those of 2004 in Figure B2.

The consequence of this change was that, by 2007, average fuel costs (£1,139) were no longer centred over the point in the income distribution where household numbers were rapidly rising. As indicated by the blue shaded areas, further similar increases in average fuel costs would still substantially increase fuel poverty, being near the top of the income distribution. However, price rises would no longer accelerate the numbers of fuel poor in the same way as they did after 2004.

Figure B2: The impact of fuel price rises on fuel poverty, 2007



The changed impact on fuel poverty would have been reinforced by the fact that those at risk of fuel poverty often have higher fuel costs than the general population (an average of £1,366 for the fuel poor in 2007). This is illustrated by Figure B3, which again shows the distribution of fuel costs (dotted orange line) and full incomes (dotted light blue line) for all households in 2007, but with the y axis now showing the percentage rather than number of households. This new graph also shows the equivalent distribution of fuel costs (in red) and incomes (in dark blue) for households either already in fuel poverty or at severe risk of falling into fuel poverty, due to their fuel costs being over 9 per cent of their full income in 2007.

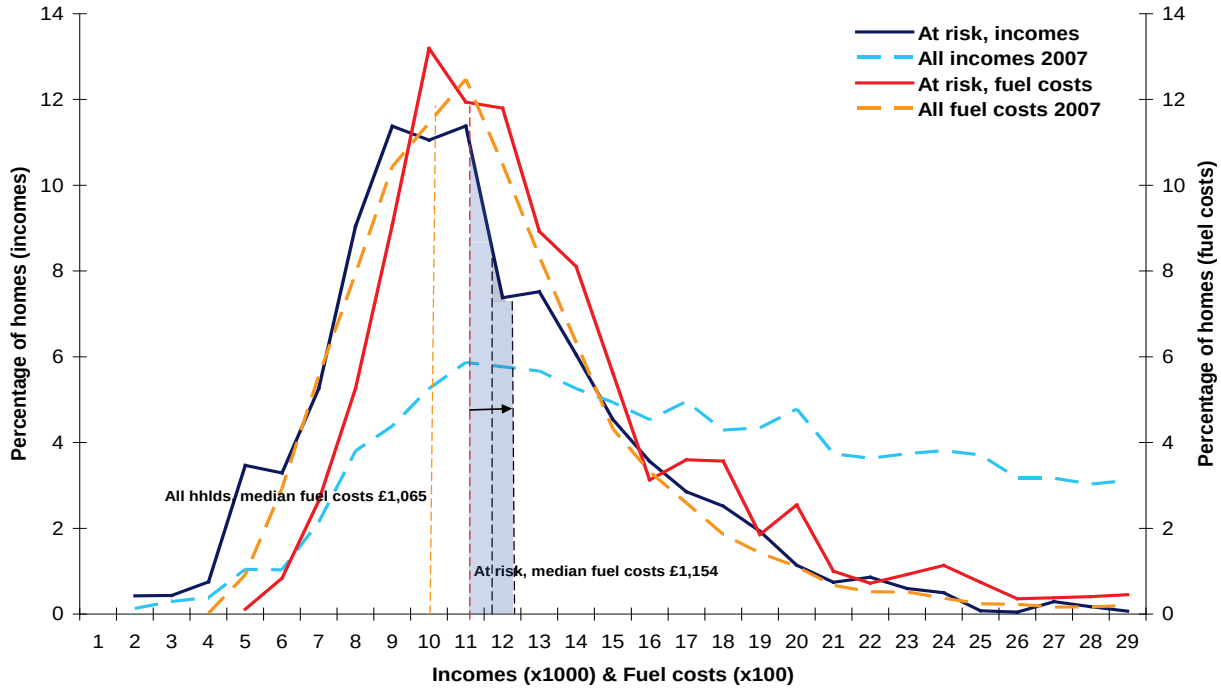
The graph shows that, for those in or near fuel poverty, the distribution of fuel costs lies somewhat to the right of those for all households, while the distribution of their incomes lies

[23] The average difference between direct debit and prepayment tariffs was 19% in 2007, up from 12% in 2004. However, the difference between the lowest and highest tariffs within each payment method has increased further; 69% from 18%; 30% from 12%; and 41% from 20% in the case of standard credit, direct debit and prepayment methods respectively.

to the left. As a consequence, households in this group will tend to reach the point at which fuel poverty is decelerating, sooner than suggested by the equivalent distributions for all households. Moreover, because of their rapid decline in higher incomes, the deceleration in fuel poverty will also be much more pronounced for this group than shown for households generally.

For high risk groups having a smaller proportion of households already in fuel poverty (e.g. having 2007 fuel costs of over 7 per cent of income), the fuel cost and income distributions exhibit similar characteristics to households with fuel costs over 9 per cent, but to a less pronounced extent, being somewhat closer to the distributions for all households.

Figure B3: The impact of fuel price rises on households in or near fuel poverty, 2007



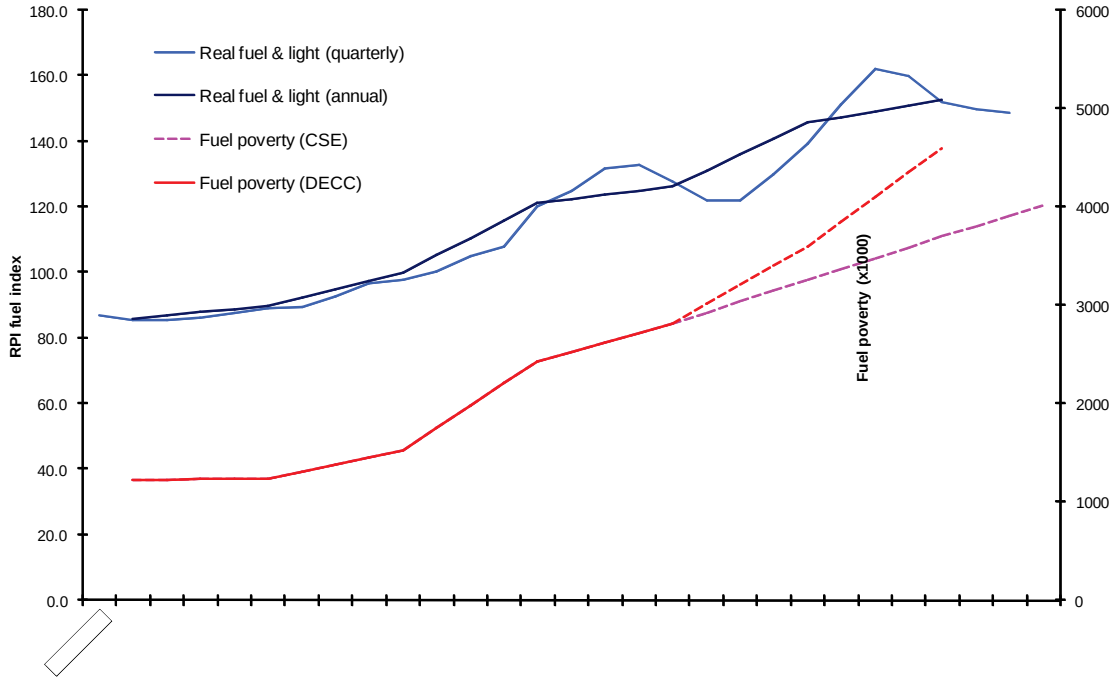
In subsequent years after 2007, with further large increases in fuel prices, it is likely that the distribution of total fuel costs will have moved yet further to the right. The income distribution will also have further shifted, but due to the recession, any move to the right is likely to be much smaller than that of the fuel costs. This will probably have moved average fuel costs to the point in the income distribution where household numbers are more rapidly declining, as well as moving a greater proportion of lower fuel costs away from the sharpest rises in the income line. This is likely to have resulted in a deceleration in the increase of fuel poverty after the time of the 2007 EHCS.

When fuel prices fall, the reverse effect will tend to take place. However, because the decline in the number of households in higher incomes is generally less steep than the initial increase in incomes from the lowest levels, the relationship between fuel costs and low incomes will need to revert to the pre 2007 position before any rapid fall in fuel poverty can be expected.

Comparison of Improvement Prophet and DECC projections

The above analysis explains, in part, the divergence between the projection of fuel poverty for 2010 produced by this research and DECC's projection for 2009. Figure B4 shows the projected level of fuel poverty from Improvement Prophet and DECC, alongside the annual and quarterly RPI real (inflation adjusted) fuel costs. Fuel poverty has historically closely followed the trend in fuel prices. However, the snap shot methodology used by this research suggests that these two factors began to diverge before 2007, as explained above.

Figure B4: Divergence from the DECC projections



APPENDIX C: ESTIMATING HOUSEHOLD NUMBERS AND ENERGY NEED

Adding new sample cases

At the time of writing, the latest statistics on the net supply of housing produced by CLG were released on 27 February 2009[24]. These statistics include the first two columns of Table C2 (excluding the first two rows) and show a breakdown of the net dwelling supply of new dwellings in 2006/07 and 2007/08. Total new build completions comprise new housing figures supplied by local authority Building Control departments and the National House-Building Council, plus other new housing completions certified by Independent Approved Inspectors (Table C1)

Table C1: Breakdown of new dwelling supply, England

Components of net housing supply	2006-07	2007-08	2008/09 estimate	2009/10 Estimate	Total 2007 to 2010
LA and NHBC returns	167,680	168,140	133,830	115,500	417,470
Other new housing	25,420	32,160	23,932	20,431	76,523
Total new build completions	193,100	200,300	157,762	135,931	493,993
Plus					
Net conversions	7,600	9,000	8,300	8,300	25,600
Plus					
Net change of use	20,100	17,700	18,900	18,900	55,500
Plus					
Net other gains	500	1,000	750	750	2,500
Gives					
Net additional dwellings	221,399	228,000	185,712	163,881	577,593

As shown in Table C2, the CLG published LA and NHBC quarterly returns for starts and completions of new build dwellings, broken down by public and private sectors, were available up to the fourth quarter of 2009[25]. These were used to estimate the total number of new build completions in 2008/09 and 2009/10. These returns show a significant reduction in new building starts and completions after 2007/08, due to the recession. Total new building completions in 2008/09 and 2009/10 are calculated on the assumption that:-
The additional number of dwellings completed after 2007/08, but not recorded in the LA and NHBC returns, being mainly in the private sector, declines in proportion to the majority of private sector new builds, as shown in the returns.

As the latest CLG statistics for the new build starts and completions were for the 4th quarter of 2009, it was further assumed that:-

The number of completions in the first quarter of 2010, was the same as the number of starts six months earlier. The quarterly returns show that, on average, this is broadly correct for the previous years.

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[24] www.communities.gov.uk/documents/statistics/xls/1159410.xls

[25] CLG housing statistics Table 213 Housebuilding: permanent dwellings started and completed by tenure; England (quarterly)

Table C2: CLG Housing building starts and completions

Year	Starts				Completions			
	Private Enterprise	Registered Social Landlords	Local Authorities	All Dwellings	Private Enterprise	Registered Social Landlords	Local Authorities	All Dwellings
2006 -07	155,240	16,850	200	172,290	145,680	21,750	250	167,680
2007 -08	140,420	15,810	200	156,430	144,740	23,100	300	168,140
2008 -09	71,160	18,850	310	90,320	107,710	25,550	570	133,830
2009 Q2	17,770	4,580	50	22,390	24,760	5,730	60	30,550
2009 Q3	21,600	4,930	30	26,550	20,780	6,510	100	27,390
2009 Q4	15,710	4,040	50	19,800	24,780	6,200	30	31,010
2010 Q1					21,600	4,920	30	26,550
2008 -10					91,920	23,360	220	115,500
Total 2007/2010					344,370	72,010	1,090	417,470

Overall, only some 494,000 new-build dwellings are estimated to have been completed since the 2007 EHCS. The lower number of other dwelling gains due to conversions and change of use are assumed to be somewhat less affected by the recession and to continue at the same level in 2008/09 and 2009/10 as the average for 2006/07 and 2007/08. Consequently these are estimated to account for a further 83,600 new dwellings (Table C1).

New cases needed to be added to the 2007 sample to represent these 494,000 new dwellings and the net 83,600 conversions, added to the housing stock since the 2007 EHCS. For the new dwellings, to avoid the need to populate the new cases with all new data, it was assumed that this additional sample would be a repeat of:-

the 316 addresses in the 2007/08 sample, which are not conversions and have a SAP rating of 64.7 or more, and are known to have been constructed from 1996 onwards (this age band having only been introduced in the 2007/08 sample of the survey). This sample currently grosses to approximately the required number of new-build dwellings.

This sample has an average SAP rating of 70.2, compared to the average for all new housing in the 2007 EHCS constructed between 1996 and 2002 of 65.1 and between 2003 and 2007 of 66.5. As such it represents, housing built since the 2007 EHCS, given that, in practice, this does not always match that of the standards set by the latest building regulations.

For the new conversions, it was assumed that the additional sample would be a repeat of:-

The 58 addresses in the 2007 EHCS, where the property has either been converted, since 1995, from non-residential use, to more than 1 dwelling, from 2 or more dwellings or to HMO use and has a SAP ratings of 44 or more if conversions from non-residential use and 60.5 or more if other conversions. This sample currently grosses to approximately the required number of such new conversions.

This sample has an average SAP rating of 64.5, compared to the average for all new conversions in the 2007 EHCS completed since 1996 of only 49.3. Similarly this represents conversions completed since the 2007 EHCS, given that, in practice, these do not always reach the standards of the latest building regulations.

The repeated 374 cases (316 + 58) are given new address codes by changing their prefix letter of their 'aacode' numbers from F to X (using the string functions SUBSTR' and 'LPAD'). These cases, with the new 'aacode' letter, were then added to the 2007 sample for every EHCS file used in the model.

Grossing the new build dwelling sample

The new build sample currently grosses to 495,369 dwellings, slightly higher than the 493,993 dwellings constructed since 2007. As well as changing the grossing to allow for this small over-estimation, the weightings of the sample were also modified to align with the tenure and regional distribution of new dwellings built since 2007.

The tenure and regional distribution of new housing built between Q2 2007 and Q4 2009 inclusive as recorded by local authorities and the NHBC and published by the CLG is shown in Table C3[26]. In this table, dwellings constructed by local authorities were combined with those for registered social landlords, due to the very small number of the former (just over 1,000), particularly when broken down by region.

Table C3: CLG number of completions by region & sector, Q2 2007 to Q4 2009

GO Region	Private Enterprise		Social Sectors		All Dwellings	
	Number	Col %	Number	Col %	Number	Col %
North East	14,240	4.4	1,810	2.7	16,030	4.1
North West	38,350	11.9	2,340	3.4	40,680	10.4
Yorks & Humber	31,870	9.9	1,830	2.7	33,680	8.6
East Midlands	32,970	10.2	4,220	6.2	37,180	9.5
West Midlands	26,760	8.3	4,910	7.2	31,680	8.1
East of England	41,360	12.8	10,390	15.3	51,740	13.2
London	37,210	11.5	19,730	29.0	56,960	14.6
South East	61,370	19.0	15,250	22.4	76,590	19.6
South West	38,680	12.0	7,620	11.2	46,270	11.8
Total Number	322,810		68,100		390,810	
Total percent	82.6	100.0	17.4	100.0	100.0	100.0

Assuming the distribution of other new housing and that built in Q1 2010 were similar to that shown in Table C3, Table C4 gives the total number of new build completions between Q2 2007 and Q1 2010 inclusive, broken down by region and sector. In this table, the regions were re-ordered to conform with the order in the EHCS.

[26] CLG Housing statistics; Tables, house building starts and completions by tenure, English regions

Table C4: Total completions by region & sector, 2007 to 2010

GO Region	Private Enterprise		Social Sectors		All Dwellings	
	Number	Col %	Number	Col %	Number	Col %
North East	17,995	4.4	2,287	2.7	20,282	4.1
Yorks & Humber	40,274	9.9	2,313	2.7	42,587	8.6
North West	48,463	11.9	2,957	3.4	51,420	10.4
East Midlands	41,664	10.2	5,333	6.2	46,997	9.5
West Midlands	33,817	8.3	6,205	7.2	40,021	8.1
South West	48,880	12.0	9,629	11.2	58,509	11.8
East of England	52,267	12.8	13,130	15.3	65,396	13.2
South East	77,553	19.0	19,271	22.4	96,825	19.6
London	47,022	11.5	24,933	29.0	71,955	14.6
Total Number	407,935		86,058		493,993	
Total percent	82.6	100.0	17.4	100.0	100.0	100.0

Table C5 shows the existing grossed estimates for the 2007 sample selected to represent new housing and the factors by which these were adjusted to give the new build completion figures in Table B4.

Table C5: Grossing adjustments for 2007 sample required for new build sample

GO Region	Private sectors			Social sectors		
	2007 sample	New sample	grossing factor	2007 sample	New sample	grossing factor
North East	18,420	17,995	0.9769	1,964	2,287	1.1645
Yorks & Humber	36,230	40,274	1.1116	7,251	2,313	0.3190
North West	53,647	48,463	0.9034	15,286	2,957	0.1934
East Midlands	40,775	41,664	1.0218	4,678	5,333	1.1400
West Midlands	33,618	33,817	1.0059	10,118	6,205	0.6133
South West	47,242	48,880	1.0347	11,562	9,629	0.8328
East of England	49,561	52,267	1.0546	10,390	13,130	1.2637
South East	54,022	77,553	1.4356	18,489	19,271	1.0423
London	51,547	47,022	0.9122	30,568	24,933	0.8157
Total Number	385,062	407,935		110,306	86,058	

Grossing the new conversion dwelling sample

Extrapolating the CLG statistics (Table C1) provides the net gains from conversion since 2007. Two thirds of all these net conversions are from changes of use, which are assumed to be dwellings converted from non-residential uses, such as warehouses. Consequently, the numbers of other conversions e.g. conversions to more than 1 dwelling and from 2 dwellings or more, are relatively small and only the net additions are included in the new sample and re-grossed. Conversions to HMO are assumed to give no net dwelling gain, but gains in the number of households.

Table C6 shows the existing grossed estimates for the 2007 sample selected to represent new conversions and the factors by which these were adjusted to give the new conversion figures in Table C1.

Table C6: Grossing adjustments for 2007 sample required for new conversion sample

Type of conversion	2007 sample	New sample	grossing factors
Changes of use from non-residential	55,948	55,000	0.9831
Net other conversions and gains	30,322	28,100	0.9267
Total Number	86,270	83,100	

Vacant dwellings

After applying the new grossing, the selected new-build sample shows 28,519 or 5.8 per cent of dwellings as vacant. This is above the 2007 vacancy rate for all dwellings of 4.3 per cent, but below the rate for new dwellings built since 2002 of 6.6 per cent. The selected new conversion sample shows a much higher vacancy rate with 12,110 or 14.5 per cent of dwellings as vacant. However, this sample includes dwellings in the process of conversion and the vacancy rate is still lower that the 2007 EHCS estimate for all conversions started or completed since 1995 of 18.5 per cent.

Household grossing

As Table C7 shows the total estimated number of vacant dwellings is 40,628, which when subtracted from the total estimate of 577,593 new dwellings started or completed since 1970, leaves 536,965 occupied dwellings. An estimated 2,574 of these are new HMOs containing an average of 3 households, leaving 534,391 dwellings occupied by single households. The household weights are adjusted to provide these new household numbers.

Table C7: Number of dwellings and households in new sample

Households sharing	Number of dwellings	Number of households
Single household in dwelling	534,391	534,391
Total sharing	2,574	7, 722
Total occupied dwellings	536,965	542,113
Vacant dwellings	40,628	
Totals dwellings	577,594	

Fuel poverty

Table C8 shows the number and percentage of households in fuel poverty by tenure produced by the selected new-build and new conversion samples. Compared to the local authority and NHBC returns, the total number of households in the local authority sector is high, but this is compensated by a somewhat lower estimate for those renting from RSLs.

In total, under 14,000 or 2.5 per cent of households living in post 2007 dwellings are estimated to be in fuel poverty, three quarters of these being tenants of private or social landlords. Not surprisingly, the incidence of the fuel poor in new dwellings is well below the average incidence of 18 per cent of all households in fuel poverty.

Table C8: Fuel poverty by tenure for new dwellings

	Not in fuel poverty	In fuel poverty	Total households
Owner occupied	351,978	3,324	355,302
	99.1	0.9	100.0
Private rented	83,463	7,325	90,788
	91.9	8.1	100.0
Local authority	8,164	1,190	9,354
	87.3	12.7	100.0
RSL	84,842	1,827	86,669
	97.9	2.1	100.0
Total	528,447	13,666	542,113
	97.5	2.5	100.0

Overall energy need by survey year

The fuel poverty methodology altered slightly for the 2006/07 survey. The SAP methodology was changed to better reflect thermal bridging, according to the British Standard BS EN ISO 6946. Like for like, the 2007/08 sample of the survey is therefore on average less efficient than the 2006/07 and 2005/06 years. This has increased the energy requirements and fuel costs in the 2007/08 sample compared to those for 2006/07 and 2005/06. As a result, the combined 2007 EHCS sample under-estimates fuel poverty slightly. However, this methodological change has been more than compensated by actual improvements in the energy efficiency of the stock, resulting in lower average energy needs for both fuel poor and non-fuel poor households in 2007/08 than in previous years (see Table C9).

Table C9: Average energy need in gigajoules (gjs) for the fuel poor and non fuel poor by survey year

Sample year	Fuel poverty flag	Space heating	Water heating	Lights and appliances	Cooking	Total
2005/06	Not in FP	82.643	17.046	10.358	2.836	112.883
	In FP	115.075	14.876	8.581	2.360	140.893
2006/07	Not in FP	80.114	16.734	10.532	2.873	110.252
	In FP	109.512	15.153	9.034	2.500	136.198
2007/08	Not in FP	75.264	15.992	10.365	2.840	104.461
	In FP	101.331	14.367	8.613	2.446	126.757
2005/06	All	85.432	16.859	10.206	2.795	115.291
2006/07	All	84.296	16.509	10.319	2.820	113.943
2007/08	All	78.304	15.802	10.161	2.794	107.061

APPENDIX D: IMPROVEMENT PROPHET METHODOLOGY

The 'Improvement Prophet' tool consists of three core modules:

- **Energy Improvement Module** – using the housing stock database to specify the thermal performance of each EHCS case before and after improvement
  - **Insulation Sub-module** – the EHCS records are flagged to determine householders that are likely to receive insulation. Loft insulation, cavity wall insulation and heating improvements are assigned to allow for efficiency changes between 2006 to 2010
- **Fuel Price Rises Module** – the EHCS fuel poverty model is used to determine energy need for each case in the dataset. Fuel price rises were then applied using DECC data on regional price changes and the Fuel Retail Price Index (RPI)
- **Income Module** – the EHCS incomes are broken down into their component parts and then inflated from 2006 to 2010

Each module is discussed further below.

Energy Improvement Model
The energy improvement aspect of the model represents the most complex part of the tool. The following summarises the key steps and tables used within this aspect of the model:

Loop 1 – Using a combination of 60 variables in the **EHCS** the tool develops a code for the 12 variables that link individual households to cases in **the housing stock database** (a modelled household). This represents a property's starting point prior to improvement.

Loop 2 – Once the housing stock database case is identified, all the records in the table that provide an improvement in the energy performance of that building are selected to provide a range of possible end points for that case.

Loop 3 – For each individual case in the EHCS group the model calculates the costs, savings and optimum package for each case based on the user's specified criteria and the end points available. The calculation is carried out on a case by case basis as the savings for each property[27] need to be adjusted for floor area.

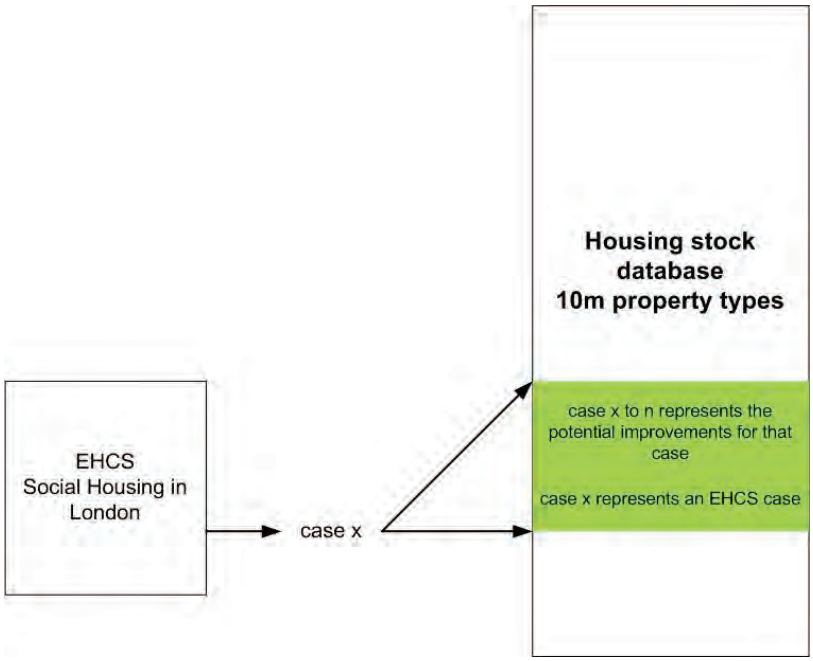
Figure D1 illustrates the first two steps of the looped process. Each EHCS case is first analysed to determine its current (pre-improvement) state. For example case x may be a 3 bed room semi detached with no cavity wall insulation, 100mm of loft insulation, an old gas boiler, radiators, no secondary heating, part installation of CFLs, draught proofing, limited water efficiency and no renewables. The case is then linked to the row in the housing stock database that most closely matches its current state.

[27] While properties may have similar descriptive characteristics, e.g. 3-bedroom house with gas central heating, solid walls and standard loft insulation, there is likely to be considerable variation in other factors influencing thermal performance and energy savings. These might include total floor area, the presence of an extension etc.

The model then selects all the possible end points for this case (shaded in green in the table below). The model assumes a property cannot change built form or size (e.g. number of bedrooms) and also applies a number of constraints to restrict the application of measures to suitable properties, e.g. micro-wind is not appropriate on low rise buildings in urban areas.

Based on the scenarios defined in stage 2 the model will then select the optimum package of measures to achieve the proposed Enhanced Decent Homes Standard. Figure D1 illustrates this process whereby the model queries records x to n.

Figure D1:- Illustrating the loop



CSE has assumed standard levels of water use by household occupants. The tool will be enhanced to automate the deployment of water efficiency measures.

Insulation sub-module

The team has developed a specific sub-module to help provide a 'nowcast' for fuel poverty. The query utilises the three main modules to accurately predict income, fuel cost and energy efficiency at the present date. The energy efficiency improvements use a MS SQL stored procedure to randomly select properties for insulation and heating improvements between 2006 and 2010. These reflect the heating and insulation improvements funded by CERT, Warm Front and general replacement needs.

The number of measures is defined by national installation rates for loft insulation, cavity wall insulation and heating measures. The stored procedure randomly selects a case based on the criteria discussed below. Its EHCS weighting is then taken from the number of measures created and the process is repeated until the total number of measures is applied.

Measures are divided into four categories to ensure the random selection is informed by funding streams and householder desire. The model first splits the number of measures

available into the priority group and non priority group, broadly matching the criteria for CERT and Warm Front funded insulation measures.

The model then determines which dwellings are most likely to have been improved since the 2005-06 EHCS. In the private sector it is assumed that significant energy efficiency improvements are only likely to have occurred where, not only low thermal standards existed, but the household was dissatisfied with the heating or standard of insulation. In the EHCS sample, these are represented by those owner occupiers who did not have a recent heating system and/or lacked wall and/or loft insulation and respectively recorded their heating and/or insulation as "not very effective", "not at all effective" or "non-existent".

Similar criteria are applied to those privately renting, except the model assumes tenants are more likely to complain than owner occupiers while private landlords are more reluctant to take action. The model assumes energy measures are only installed for those cases where the heating was deemed by the tenant to be "not at all effective" or non-existent. In the public sector, the model assumes that dwellings failing the thermal criteria of the decent homes standard (DHS) are the first to receive energy measures. Thus, dwellings are scheduled for improvement after 2004 if they did not then have a recent heating system and failed the DHS on heating and/or lacked wall and/or loft insulation and failed the DHS in this regard.

Fuel prices module

Data from the 2006-07 EHCS and the official 2007 fuel poverty model was used to determine the separate energy requirements (GJ/yr) needed to achieve satisfactory space heating, water heating, cooking and adequate lights and appliance use, i.e. a SQL query calculates the energy need from DECC's fuel prices data.

Depending on the particular fuels and tariff types (e.g. off-peak electricity) used for each component, the updated fuel prices have then been applied to each energy requirement and any additional standing charge, to give updated fuel costs for space heating, water heating, cooking and lights and appliance use. These separate costs were then summed to give the new total fuel costs resulting from the various fuel price rises.

The tool then uses a look-up table to determine the relative rise in fuel prices between the baseline and the target year for each case. The look-up table contains a multiplication factor which is applied to each case based on the survey year, the payment method and the gas or electricity region. The following data sources were used to calculate these multiplication factors:

- Changes in non metered fuel prices are derived from DECC data for non metered fuels
- Changes in gas and electricity prices between 2005/06 and 2008 are derived from DECC average yearly prices by city (adjusted by the fuel RPI to allow for the differences in timings for the EHCS and DECC fuel price methodologies)
- Changes in gas and electricity prices between 2009 and 2010 are then determined from Consumer Focus data on energy supplier prices.

Income module

The tool first determines the individual income components from the three income variables provided by the public dataset. This is the EHCS 'basic income' for the household reference person (HRP) and any partner and the fuel poverty 'basic' and 'full' incomes for each

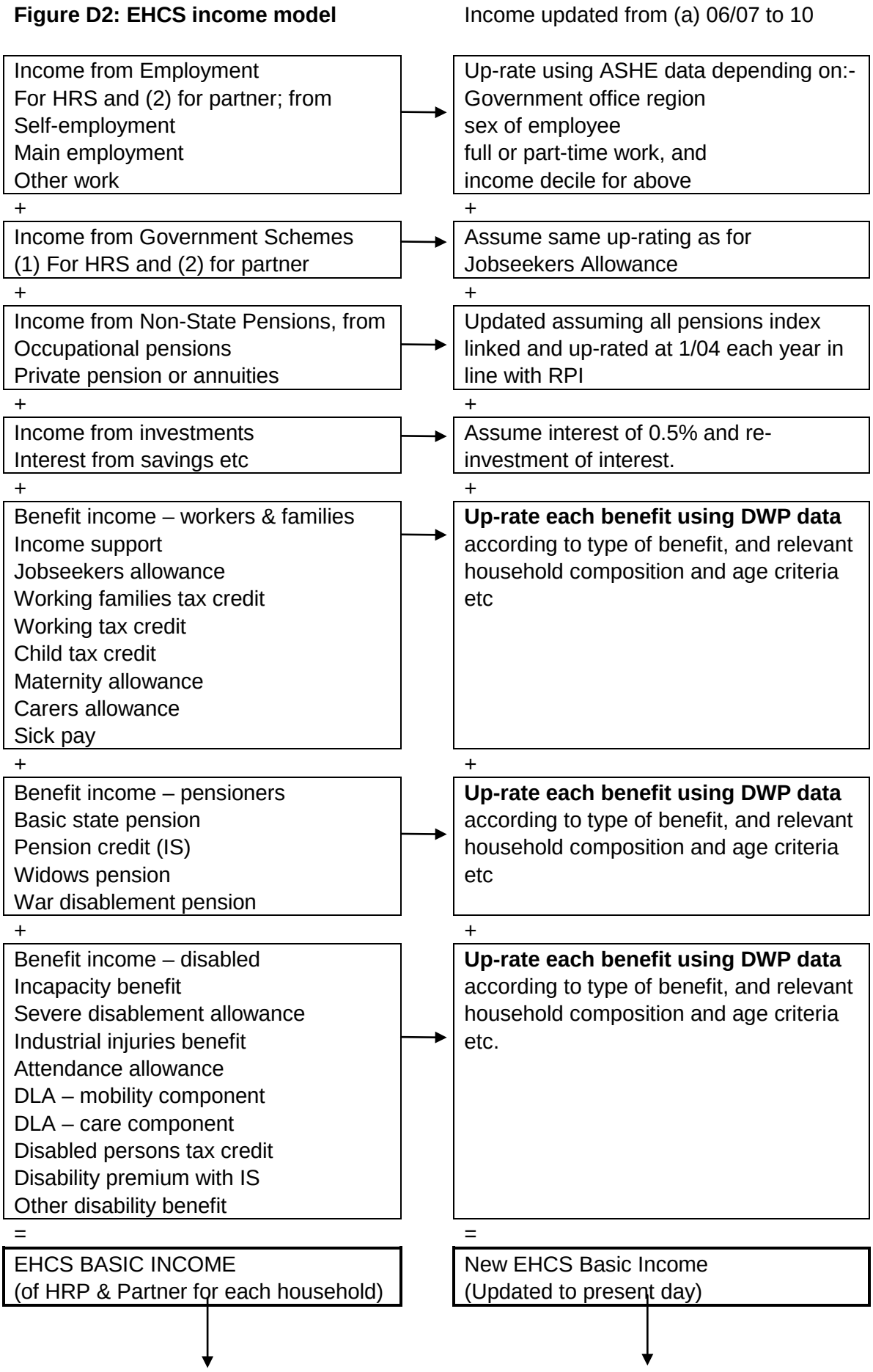
household. As no other derived income variables are available from CLG, this information is collated from the raw income data collected in the 2006 Survey.

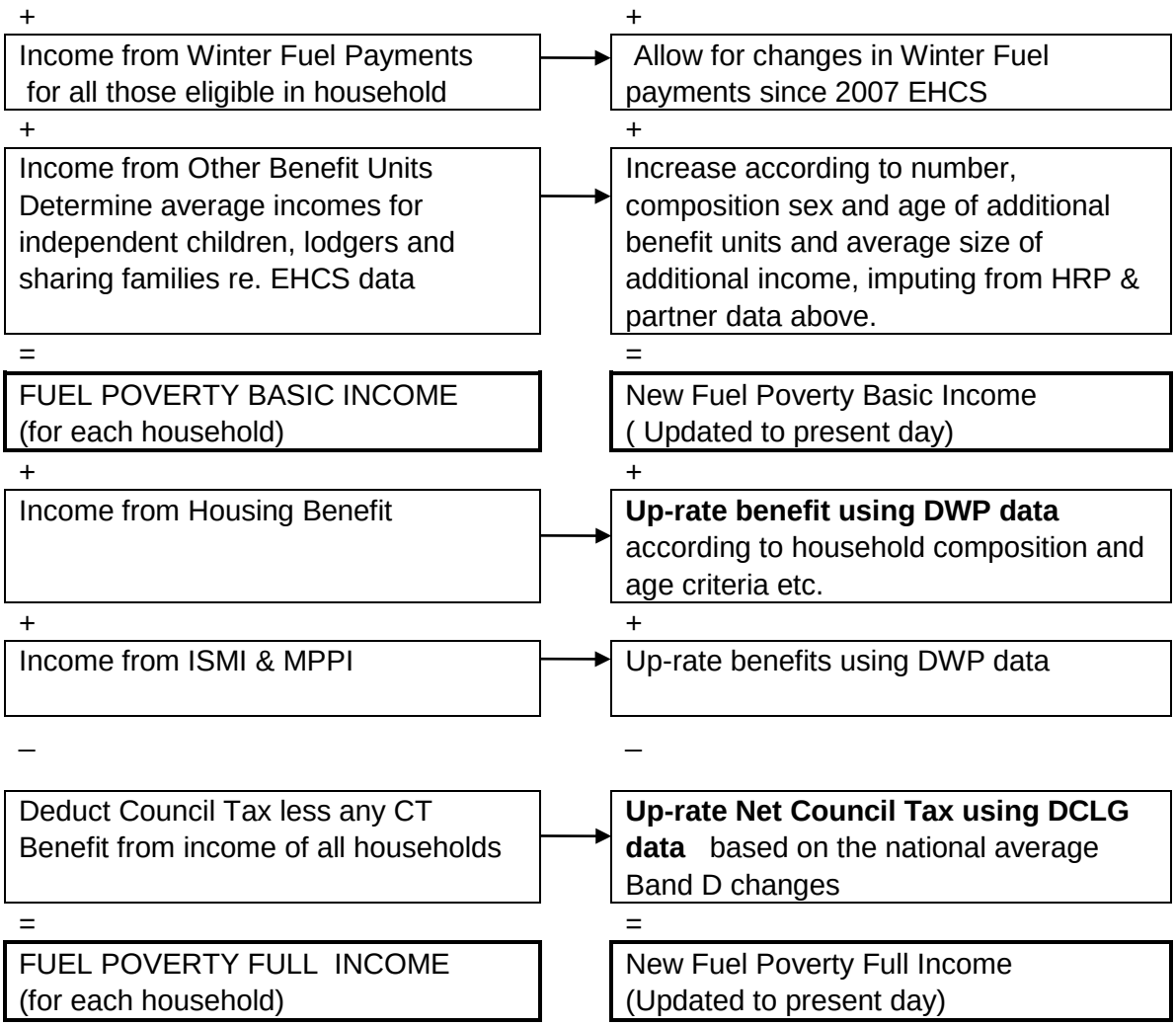
The components for each of the three incomes and the relationship between them are shown in the left hand column of Figure D2 below. The EHCS 'basic income' is made up of the net income from various forms of employment of the (HRP) and any partner, income from Government schemes, income from occupational pensions and private pensions and annuities, income from investment and income for a large raft of different benefits. Frequently, the combined household income of the HRP and any partner will come from several of these different sources.

Unlike the EHCS 'basic income', the fuel poverty 'basic income' relates to the whole household and includes income from Winter Fuel Payments (WFP) for any eligible person in the household and income from any other benefit units in the household. The latter include independent children and other relatives, lodgers and other families in the household. Their combined income is determined relatively easily by subtracting WFPs from the difference between the EHCS and fuel poverty basic incomes.

The fuel poverty 'full income' also relates to the whole household and additionally includes income from Housing Benefit and from Income Support for Mortgage Interest (ISMI) and Mortgage Payment Protection Insurance (MPPI). However, this final income variable excludes net Council Tax, since it includes any Council Tax Benefit but deducts Council Tax paid from the income of all households.

Figure D2: EHCS income model




+
Income from Winter Fuel Payments for all those eligible in household
+
Allow for changes in Winter Fuel payments since 2007 EHCS
+
Income from Other Benefit Units Determine average incomes for independent children, lodgers and sharing families re. EHCS data
+
Increase according to number, composition sex and age of additional benefit units and average size of additional income, imputing from HRP & partner data above.
=
FUEL POVERTY BASIC INCOME (for each household)
=
New Fuel Poverty Basic Income (Updated to present day)
+
Income from Housing Benefit
+
Up-rate benefit using DWP data according to household composition and age criteria etc.
+
Income from ISMI & MPPI
+
Up-rate benefits using DWP data
–
–
Deduct Council Tax less any CT Benefit from income of all households
Up-rate Net Council Tax using DCLG data based on the national average Band D changes
=
FUEL POVERTY FULL INCOME (for each household)
=
New Fuel Poverty Full Income (Updated to present day)

end
fuel
poverty

End Fuel Poverty Coalition
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11th June 2011

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End Fuel Poverty Coalition – written evidence to Energy Public Bill Committee

1. This briefing note captures the key overarching principles to which the End Fuel Poverty Coalition believes the Energy Company Obligation (ECO) should adhere and is submitted for consideration by members of the Energy Public Bill Committee.

2. **About the End Fuel Poverty Coalition -** the End Fuel Poverty Coalition (EFPC) is an alliance of environmental, poverty and consumer organisations. We want energy efficient homes, decent incomes and affordable fuel for low income households. We consider the achievement of high levels of energy efficiency can also help create a vibrant low carbon economy, generating hundreds of thousands of jobs.

3. **Summary**
   - The ECO must exclusively target the vulnerable and those on low incomes.
   - ECO resources will not be sufficient to effectively address fuel poverty, or to subsidise more expensive measures on behalf of better off households, let alone both. More money is needed.
   - Ending fuel poverty requires more than just the right financial mechanisms – the ECO must sit within a broader 'road map' for ending fuel poverty.
   - Surveys of the British population consistently find that we place the right to a 'warm dry home' at the top of our list of priorities, but millions of households in Britain do not have this right
   - It is estimated that in the UK there are an average of 40,000 extra deaths each winter as a result of cold housing

4. **EFPC position on the Energy Company Obligation (ECO) -** correctly designed, the new Energy Company Obligation can make a significant contribution to a radical overhaul of the housing of vulnerable and low income households, however, the Government's current proposals will result in the ECO being spread too thinly. Ministers intend for it to not only help the fuel poor but also subsidise expensive energy efficiency measures in households which are not fuel poor. ECO resources will be inadequate to achieve either of these objectives, let alone both. This briefing note captures the key overarching principles to which the EFPC believes the ECO should adhere.

5. **The ECO must exclusively target the vulnerable and those on low incomes.** The Government intends for ECO to deliver on both carbon reduction and 'affordable warmth' targets. Action to focus the ECO, at least in its initial years, exclusively on those in the greatest need is therefore a win-win. It will also contribute significantly to achievement of the

end
fuel
poverty

Government's statutory target to eradicate fuel poverty by 2016.

6. This approach will also mitigate the risk of the ECO actively increasing, not decreasing, the numbers of fuel poor households. The costs of the ECO will be met through domestic energy bills, leading to a regressive impact on those on lower incomes. The higher the ambition of the ECO, the greater the impact on bills – and the greater the negative impact on fuel poverty[i].

7. **ECO resources will not be sufficient to effectively address fuel poverty, or to subsidise more expensive measures on behalf of better off households – let alone both. More money is needed.**

8. When Warm Front finishes in 2012-2013, England will have no publicly-funded energy efficiency programmes for the first time since the 1970s (the Scottish, Welsh and Northern Ireland governments have pledged to continue funding their equivalent programmes until at least 2016). The Government must use public funding to bolster the total amount available – for example, by recycling proceeds from the impending carbon floor price and the sale of emissions permits for the next round of the EU ETS.

9. Ministers have suggested that ECO expenditure will provide funding of around £1-2 billion per year. Although that is clearly a substantial sum, it must be compared to the estimated £30 to £60 billion that is required to overhaul the homes of the fuel poor[ii] - to say nothing of the much broader funding needed to improve all homes in the country to a decent standard.

10. **Ending fuel poverty requires more than just the right financial mechanisms – the ECO must sit within a broader 'road map' for ending fuel poverty.**

11. The Government's move to regulate energy efficiency standards in the private rented sector is welcome recognition that tackling fuel poverty is not just about providing the right financial incentives and subsidies. A coherent strategy is required to ensure meaningful improvements to heating and insulation standards across the entire housing stock.

12. The Government has commissioned an independent review of fuel poverty targets but this must not delay the urgent action required to tackle the increasing problem of poor quality housing and unaffordable energy costs in all tenures. It is essential that programmes are scaled up now in recognition of the extent of the problem[iii]. The EFPC urges the Government to put in place a 'road map' for eliminating fuel poverty in line with the statutory fuel poverty target, and to set out the role of ECO and other funding mechanisms within this. We understand that the Government will consult on the design of the ECO later in 2011.

13. **Why fuel poverty?** Surveys of the British population consistently find that we place the right to a 'warm dry home' at the top of our list of priorities, alongside the right to shelter, food and water[iv]. Millions of households in Britain do not have this right. They live in cold, damp homes or forgo other essential goods and services in trying to keep their home warm. Fuel poverty results from a combination of low household income, poor energy efficiency standards and high fuel prices. However, while there is a clear link between low income and fuel poverty, there is one major difference – investment in improved heating and insulation standards can provide a permanent and sustainable solution for fuel-poor households. The EFPC believes that a comprehensive national energy efficiency programme to address fuel poverty is urgently needed and that the Energy Company Obligation should be at the heart of this programme.

14. It is estimated that in the UK there are an average of 40,000 extra deaths each winter as a result of cold housing; this figure takes no account of the increased suffering endured by vulnerable people of all ages as a result of illnesses precipitated and exacerbated by the cold. Illness caused by poor housing is estimated to cost the NHS at least £2bn a year, and incalculable damage is caused to the most vulnerable in society due to the lost life opportunities and poor mental health outcomes which are directly attributable to cold, damp homes.

15. EFPC supporter organisations have produced a series of briefings and reports exploring the key design issues of the ECO and its role within a fuel poverty strategy.

For more information, please contact me on 07970 487744 or at **info@endfuelpoverty.org.uk**

Yours sincerely

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The End Fuel Poverty Charter is supported by:
Association for the Conservation of Energy, Centre for Sustainable Energy, Disability Alliance, Friends of the Earth, Consumer Focus, End Fuel Poverty Coalition, Age UK, Child Poverty Action Group, Federation of Private Residents' Associations, Macmillan Cancer Support, National Childbirth Trust, National Energy Action,
National Pensioners Convention, Save the Children, National Right to Fuel Campaign, Unison, National Federation of Women's Institutes, UK Public Health Association. TUC

[i] Association for the Conservation of Energy, 'A future obligation on energy companies' (May 2011): http://tinyurl.com/aceeco
[ii] For a synthesis of different estimates of the cost of eliminating fuel poverty, see IPPR, The Long Cold Winter (2010): http://www.ippr.org.uk/publicationsandreports/publication.asp?id=736
[iii] The recent joint report of the All Party Parliamentary Fuel Poverty and Energy Efficiency Group and the Parliamentary Renewable and Sustainable Energy Group, *Inquiry into social justice in the low carbon economy*, recommended that at least £4bn total annual investment should be spent on improving the energy efficiency of the homes of vulnerable low income households.
[iv] For example, Gordon et al (2000), *Poverty and social exclusion in Britain,* Joseph Rowntree

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Date: 03 July 2011

Dear Sir/Madam,

London Councils' Transport and Environment Committee's (TEC) response to the London Assembly's investigation into fuel poverty in London

London Councils represents all 32 London boroughs, the City of London, the Metropolitan Police Authority and the London Fire and Emergency Planning Authority. We are committed to fighting for fair resources for London and getting the best possible deal for London's 33 Councils. We lobby on our members' behalf, develop policy and do all we can to help boroughs improve the services they offer. We also run a range of services ourselves which are designed to make life better for Londoners.

We welcome the London Assembly's Health and Public Services Committee's investigation into fuel poverty and share the Assembly's concern about the effects of fuel poverty on the health and well-being of many vulnerable families in London.[1] We would like to draw the Assembly's attention to the potential impacts of the government's welfare reform proposals and the implications of these for fuel poverty in London.

London Councils recently published a report by CESI 'Making work pay in London under Universal Credit' which modelled expected income levels for different types of family in London once the Universal Credit has been introduced.[2] It examined how much money families (either not in work, working part-time or in full time employment earning the minimum wage), would potentially have left once housing and childcare costs had been deducted.

For the purposes of this investigation we have looked again at these projected incomes and costs and explored what implications they are likely to have for fuel poverty in London from 2013.

Summary

Our analysis of incomes and costs for Londoners, both working at minimum wage levels and not working, and receiving the Universal Credit shows that:

- At anticipated 2012 energy prices single parents out of work are likely to be in fuel poverty.
- Single parents (both in and out of work), couples with children (out of work), and couples with children (where both parents work either part-time or full-time

[1] These impacts were clearly outlined in the recent report by the Marmot Review Team, *'The Health Impacts of Cold Homes and Fuel Poverty'*, www.foe.co.uk/resource/reports/cold_homes_health.pdf
[2] CESI (Centre for Economic and Social Inclusion) (June 2011) *'Making work pay in London under Universal Credit'*, http://www.londoncouncils.gov.uk/policylobbying/economicdevelopment/welfarereform/default.htm

at minimum wage levels) will need to spend at least ten per cent of their disposable income ('spending power') on energy bills.

- Families with children where both parents work will have to spend a higher proportion of their income on energy bills than similar families where only one parent works. This situation is unlikely to incentivise both parents to enter the workplace.
- Should bills increase by as much as 30 per cent (equal to the average price increase seen between 2005 and 2010) single parents and couples where no adults work will be in fuel poverty.
- If bills rise by as much as 20 per cent most types of family will have to spend at least ten percent of their disposable income ('spending power') on energy bills.
- In the case of couples in full-time employment with three children the proportion of their disposable income ('spending power') needed for energy bills could be as high as 20 per cent.

Recommendations

Whether or not a household qualifies as fuel poor depends on three factors: its income, its energy costs and the thermal performance of its home.

- *Household income*

  We believe that the Universal Credit system should take account of the higher costs of living in London. The caps on the total amount paid to any recipient relate to national average incomes and do not take account of higher average incomes and living costs in London.

  The government should consider raising either the cap on the benefit total for Londoners or should consider raising the housing and childcare cost elements to reflect regional differences. Childcare costs in London are 23 per cent higher than the national average,

  The CESI report on Universal Credit recommends that employers should consider paying staff the London Living wage, currently £8.30 an hour. Not only would this boost families' incomes but it would also help to reduce government spending on Universal Credit.

- *Household energy costs*

  OFGEM, the regulator of domestic energy suppliers, should act swiftly to ensure that suppliers reduce domestic tariffs when they themselves benefit from lower wholesale prices.

- **Improving the energy performance of homes**

  We are working with the GLA to lobby DECC to ensure that the future Green Deal includes regional targets for the spending of the new Energy Company Obligation (ECO). This should be targeted to the retrofitting of hard-to-treat homes and those of fuel poor households.

1.0 Reform of welfare: Universal Credit

The Welfare Reform Bill, currently going through Parliament, sets out the government's proposals to reform the welfare system. It expects to begin to replace the current benefits system with the Universal Credit in October 2013.

1.1 The Universal Credit has been designed to overcome the widely acknowledged problem with the current benefits system; that it, in itself, acts a barrier for recipients looking to enter the workplace or increase the number of hours they work. In the existing system, as people increase their earnings, different benefits are withdrawn at different rates (know as tapering). Some of these tapers apply to gross earnings and some to net earnings. Overall it is difficult for an individual household to calculate what their income would be if they entered work or increased their working hours. The Universal Credit will instead offer recipients a single benefit stream combining all the different forms of income related support for people of working age. This will taper at a rate of 65 per cent, meaning that for every pound earnt benefit support will be reduced by 65p.

1.2 The Universal Credit system will also involve a series of caps, which threaten to disadvantage areas such as London where costs, such as rent, childcare and transport costs, tend to be considerably higher than some other areas of the country.

2.0 Worklessness in London

Worklessness is a serious issue for London. At present there are 1.3 million economically inactive Londoners and 100,000 households where no one has ever worked. London also has the lowest female employment rate among the UK regions at 61 per cent.

2.1 Less than half of London's single parents, 48 per cent, are currently in employment. This translates to around 78,000 workless lone parents with two or more dependent children. In addition there are 33,000 workless couples with two or more children and 156,000 couples with only one parent working. In total this amounts to 367,000 families and 689,000 children. [3]

2.2 However the introduction of the Universal Credit will not just impact on workless households. It will also apply to families currently in work (either part-time or full time) that claim other benefits such as Housing Benefit and Child Tax Credit; a large number of families in London. We estimate that over 40 per cent of current Housing Benefit claimants, claiming for two or more bedroom properties (and therefore not single people) are 'non-passported' meaning that they are unlikely to be claiming other benefits. This would usually indicate that they are working claimants.

3.0 Definitions of Fuel Poverty and Spending Power

Fuel poverty can be defined in more than one way. We have used the GLA's preferred method, the AHC definition. This looks at a household's income after housing costs have been deducted. Where the cost of fuel for satisfactory heating and normal electricity use exceeds 10 per cent of this residual income the household is categorised as being in fuel poverty.

3.1 However, the London Councils report also explored 'spending power', defined as a family's income after rent, Council Tax, childcare and transport costs had been deducted. The Universal Credit is intended to encourage benefit recipients to enter work or to increase their working hours. For single parent families or couples where both parents work this will automatically have

[3] All figures from the London Councils' report *'Making work pay in London under Universal Credit'* report.

implications for their childcare costs. Some may be able to rely on relatives to help, but many will need to pay for professional childcare. These costs are around 23 per cent higher in London than the national average.

3.2 In this analysis we have also looked at fuel costs as a proportion of 'spending power'. Though this is does not comply with the strict definition of fuel poverty we believe it is helpful to examine this as many working families will have no choice but to pay for childcare and for transport to and from work.

4.0 Assumptions made in this analysis

4.1 *Wage levels*

Pay for entry-level jobs in London differs very little from that in other areas, and most people entering the workforce for the first time or after a long absence will gain 'entry level' jobs. These tend to pay either the minimum wage of £5.93 an hour or a rate close to it.[4] Some 75,000 people in London (25 per cent of people in 'Elementary Occupations') were paid less than £6.16 an hour in 2010. For the purposes of this analysis we have looked at people's income when earning the minimum wage, as we believe many people accessing the Universal Credit will be earning at this level.

4.2 *Rent Levels*

London also has a higher proportion of privately renting households than other parts of the country and proportionally higher levels of rent. Social housing in the capital, though relatively cheaper than privately rented housing, is in very short supply. There are currently 350,000 households on local authority waiting lists and any available homes are almost always allocated to those households in greatest need. The result of this is that few social homes are allocated to families where one or more parents are in work. For this reason, in this analysis, we have looked at families that rent their home in the private sector.

4.3 *Rising fuel prices*

Levels of fuel poverty are significantly influenced by fluctuating energy prices. We have used figures published by the Department of Energy and Climate Change (DECC) for energy bills in London.[5] However, these figures are for 2010, several years before the introduction of the Universal Credit when prices are forecast to increase.

4.4 In May this year the Bank of England published its 'Inflation Report', which predicted 10 per cent increase in electricity prices and a 15 per cent increase in

[4] The minimum wage is reviewed by the Low Pay Commission each year. The CESI report used here to model fuel poverty levels uses current rates of pay for minimum wage and current costs for rent, transport and childcare costs. The minimum wage will rise by 15p an hour in October 2011, and possibly further in future years. However, it is also likely that costs will also rise at least in line with inflation (currently running at 4.5 per cent).

[5] These figures are broken down by payment system. In this analysis we have used the figures for pre-payment methods, as the majority of pre-payment customers tend to be those in rented housing and those on lower incomes. We have also used the average figure provided for London rather than the highest or lowest. Whilst lower-income households might be expected to rent relatively smaller properties, private rented housing tends to have a lower level of thermal performance. Those not in work are also likely to be in their home for a longer period each day and therefore may use more energy. See: DECC statistics; electricity prices: http://www.decc.gov.uk/assets/decc/statistics/source/prices/qep223.xls, and gas prices: http://www.decc.gov.uk/assets/decc/statistics/source/prices/qep233.xls

gas prices by early 2012.[6] We have also looked at the implications for fuel poverty using these percentages to uplift the 2010 energy prices. We note, however, that these are predicted prices for April 2012, eighteen months before the introduction of the Universal Credit in 2013. Prices may increase further by that time.

4.5 A House of Commons report last year into energy price rises highlighted that domestic bills had increased by 30 per cent in real terms over the previous five years.[7] Alongside the Bank of England's predicted energy prices, we have also modelled implications for fuel poverty for at 20 and 30 per cent price increases on the 2010 figures, which may give an indication of realistic fuel poverty level further in the future after the universal Credit is introduced.

5.0 Implications of the Universal Credit for fuel poverty in London

Table 1 uses data from the London Councils' report to calculate anticipated incomes for different types of family in London once the Universal Credit is introduced in 2013. Both income after housing costs and 'spending power' are listed. We have calculated the proportion of these income levels that would be spent paying the average 2010 energy bills for Londoners (table 2), and the average 2012 energy bills for Londoners, taking into account the Bank of England's inflation forecast (table 3).

[6] Bank of England (May 2011) *'Inflation Report'*, available at: http://www.bankofengland.co.uk/publications/inflationreport/ir11may.pdf

[7] House of Commons Library research (2010) *'Energy Price Rises and fuel Poverty'*, available at http://www.parliament.uk/documents/commons/lib/research/key_issues/Key%20Issues%20Energy%20price%20rises%20and%20fuel%20poverty.pdf

Table 1: Expected annual income after housing costs, and spending power, according to family type and working pattern under the proposed Universal Credit system

	Annual household income after housing costs			Annual Spending Power		
	Not working	Working part time (16 hours) on minimum wage	Working full time (35 hours) on minimum wage	Not working	Working part time (16 hours) on minimum wage	Working full time (35 hours) on minimum wage
Lone parent, two children, two bedrooms	£11,758.24	£18,762.64	£25,694.76	£10,548.20	£9,238.32	£8,418.28
Couple with two children living in a two bedroom property on private rent - no parents working	£13,694.72			£12,484.68		
Couple with two children living in a two bedroom property on private rent - one parent working		£16,264.04	£17,207.32		£13,661.96	£14,605.76
Couple with two children living in a two bedroom property on private rent - two parents working		£21,750.04	£30,350.84		£10,834.20	£11,682.84
Couple with three children living in a three bedroom property on private rent - one parent working		£17,106.96	£20,685.60		£14,505.40	£18,084.56
Couple with three children living in a three bedroom property on private rent - two parents working		£27,550.64	£34,196.76		£13,174.20	£7,490.08

Table 2: Proportion on annual income (after housing costs) and 'spending power' needed to pay average pre-payment energy bills (2010 energy prices)

	Annual household income after housing costs			Annual Spending Power		
	Not working	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**	**Not working**	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**
Lone parent, two children, two bedrooms	**10%**	6%	4%	**11%**	**12%**	**13%**
Couple with two children living in a two bedroom property on private rent - no parents working	8%			9%		
Couple with two children living in a two bedroom property on private rent - one parent working		7%	7%		8%	8%
Couple with two children living in a two bedroom property on private rent - two parents working		5%	4%		**10%**	**10%**
Couple with three children living in a three bedroom property on private rent - one parent working		7%	5%		8%	6%
Couple with three children living in a three bedroom property on private rent - two parents working		4%	3%		9%	**15%**

Table 3: Proportion on annual income (after housing costs) and 'spending power' needed to pay average pre-payment energy bills (2012 prices based on 2010 energy prices uplifted in line with Bank of England's inflation forecast)

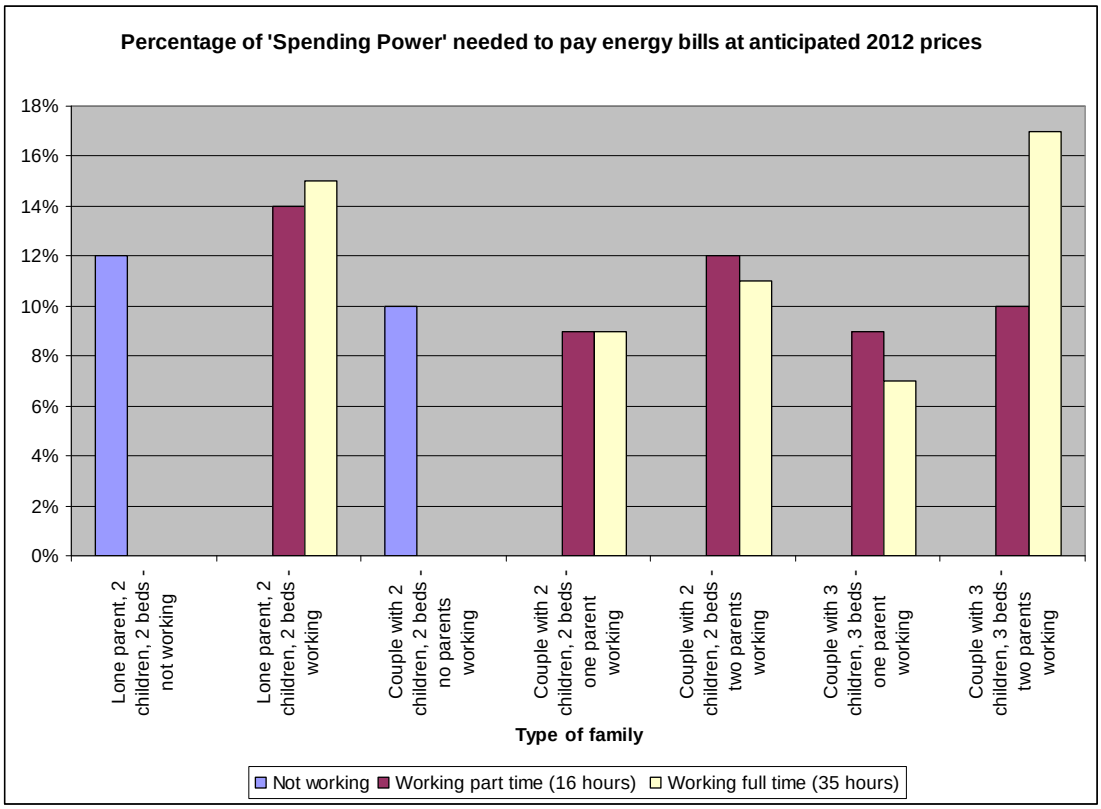
	Annual household income after housing costs			Annual Spending Power		
	Not working	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**	**Not working**	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**
Lone parent, two children, two bedrooms	**11%**	7%	5%	**12%**	**14%**	**15%**
Couple with two children living in a two bedroom property on private rent - no parents working	9%			**10%**		
Couple with two children living in a two bedroom property on private rent - one parent working		8%	7%		9%	9%
Couple with two children living in a two bedroom property on private rent - two parents working		6%	4%		**12%**	**11%**
Couple with three children living in a three bedroom property on private rent - one parent working		7%	6%		9%	7%
Couple with three children living in a three bedroom property on private rent - two parents working		5%	4%		**10%**	**17%**

5.1 ***At 2010 energy prices***

These estimates demonstrate that even at 2010 energy prices single parents not in work would qualify as fuel poor. When looking at 'spending power', energy prices account for more than 10 per cent of disposable income for all single parents, even those in full time work. Similarly both couples with two and three children where both parents work (both part and full time for couples with two children and full time in the case of three children) would need to spend 10 or more percent of their disposable income on energy bills.

5.2 ***At anticipated 2012 energy prices***

This picture is exacerbated when using the predicted 2012 prices. In this scenario the proportion of income needed for fuel bills increases for all households. Again single parents with two children who are not in work qualify as fuel poor.



5.3 When looking at 'spending power' single parents both out of and in work would need to spend more than 10 per cent of their disposable income to pay their energy bills. In this scenario couples with two children who are both out of work, and families were both parents work would all need to spend at least 10 percent of their disposable income on their energy bills. The only families spending less than 10 per cent of their disposable income on energy are those with two adults where one parent doesn't work (and are therefore able to avoid childcare costs). Indeed, the modelling suggests that there is unlikely to be an incentive for both parents in a family with children to work at minimum wage levels as childcare costs would leave them worse off than if just one parent works.

5.4 *At 20 or 30 per cent higher energy prices*

Further modelling looked at the implications of a 20 and 30 per cent increase in energy prices for fuel poverty (tables 4 and 5). In both the 20 and 30 per cent increase scenarios single parents and couples with two children not in work would qualify under the strict definition of fuel poverty. *Both levels of increase would see almost all types of family, including those with two full-time working parents, spending 10 or more per cent of their 'spending power' on energy bills*. In some cases the proportion of disposable income that would be needed is considerable higher than 10 per cent; a couple with three children with both parents working full-time would need to allocate 20 per cent of their 'spending power' to gas and electricity bills.

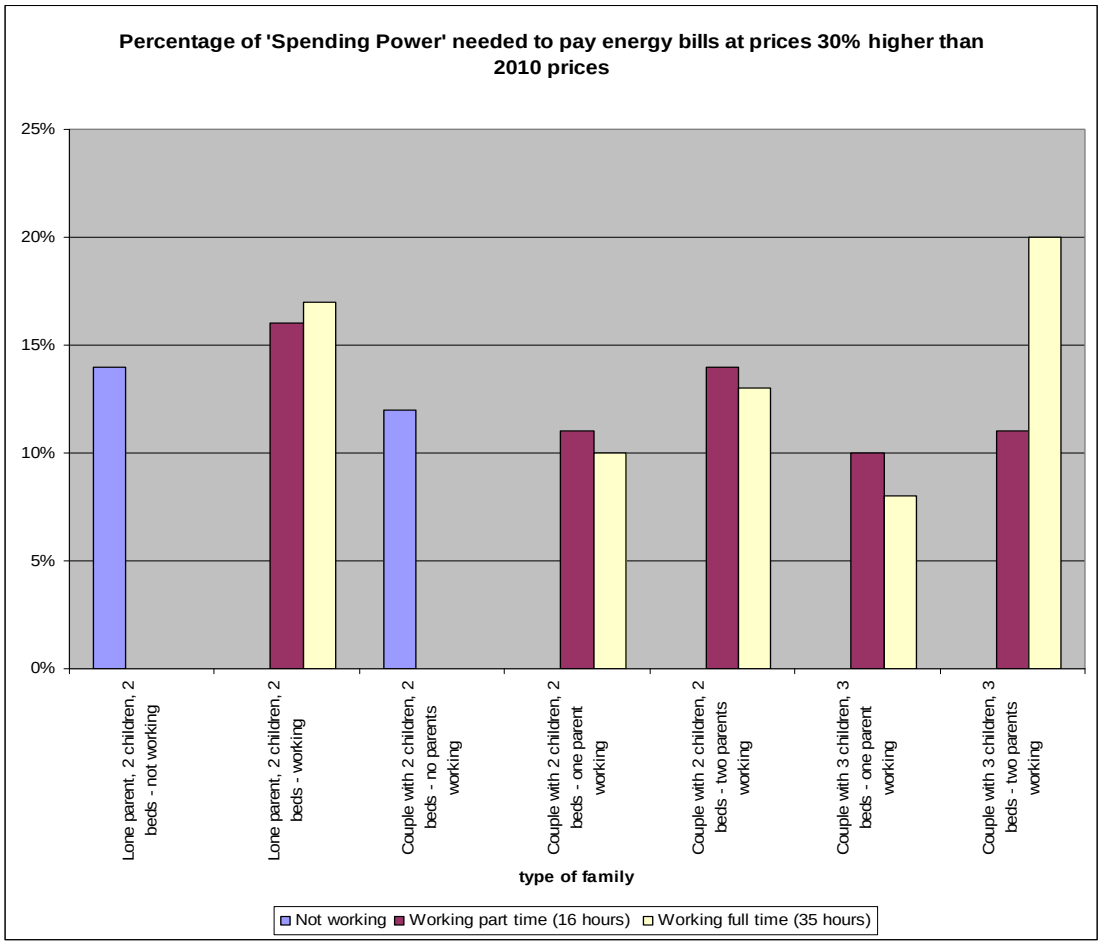


Table 4: Proportion on annual income (after housing costs) and 'spending power' needed to pay average pre-payment energy bills (2010 energy prices with 20% uplift)

	Annual household income after housing costs			Annual Spending Power		
	Not working	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**	**Not working**	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**
Lone parent, two children, two bedrooms	**12%**	7%	5%	**13%**	**15%**	**16%**
Couple with two children living in a two bedroom property on private rent - no parents working	**10%**			**11%**		
Couple with two children living in a two bedroom property on private rent - one parent working		8%	8%		**10%**	9%
Couple with two children living in a two bedroom property on private rent - two parents working		6%	4%		**13%**	**12%**
Couple with three children living in a three bedroom property on private rent - one parent working		8%	7%		9%	7%
Couple with three children living in a three bedroom property on private rent - two parents working		5%	4%		**10%**	**18%**

Table 5: Proportion of annual income (after housing costs) and 'spending power' needed to pay average pre-payment energy bills (2010 energy prices with 30% uplift)

	Annual household income after housing costs			Annual Spending Power		
	Not working	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**	**Not working**	**Working part time (16 hours) on minimum wage**	**Working full time (35 hours) on minimum wage**
Lone parent, two children, two bedrooms	**12%**	8%	6%	**14%**	**16%**	**17%**
Couple with two children living in a two bedroom property on private rent - no parents working	**11%**			**12%**		
Couple with two children living in a two bedroom property on private rent - one parent working		9%	9%		**11%**	**10%**
Couple with two children living in a two bedroom property on private rent - two parents working		7%	5%		**14%**	**13%**
Couple with three children living in a three bedroom property on private rent - one parent working		9%	7%		**10%**	8%
Couple with three children living in a three bedroom property on private rent - two parents working		5%	4%		**11%**	**20%**

6.0 **Action to tackle fuel poverty**

Much progress had been made reducing fuel poverty between the mid 1990s and 2004, but since then levels have again risen, partly as a result of sharp increases in domestic energy prices.[8] Whether or not a household qualifies as fuel poor depends on three factors: its income, its energy costs and the thermal performance of the home. There is no 'simple' solution to fuel poverty and all three factors should be examined.

6.1 **Household income**

The figures we present in this report demonstrate that when the Universal Credit is introduced there are likely to be families in London with two full-time working parents, receiving support through the welfare system on top of their wages, whose disposable income is too low to ensure that routine costs such as energy bills can be comfortably met. London's economy however, cannot survive without the contribution these workers make to entry level jobs such as administrating and cleaning offices, hotels and homes, the entertainment and catering industries, and many of the supply chains serving London's shops and businesses.

6.2 We believe that the Universal Credit system should take account of the higher costs of living in London. The caps on the total amount paid to any recipient relate to national average incomes and do not take account of higher average incomes and living costs in London.

6.3 The government should consider raising either the cap on the benefit total for Londoners or should consider raising the housing and childcare cost elements to reflect regional differences. Childcare costs in London are 23 per cent higher than the national average.

6.4 The CESI report on Universal Credit recommends that employers should consider paying staff the London Living wage, currently £8.30 an hour. Not only would this boost families' incomes but it would also help to reduce government spending on Universal Credit.

6.5 **Household energy costs**

The causes of the UK's sharply rising energy costs are many and include growing international demand for energy, political instability in oil producing areas, concerns internationally over the safety of nuclear power, and in the UK subsidies for the development of renewable energy infrastructure. OFGEM, the regulator of domestic energy suppliers, and energy suppliers themselves have been criticised by some commentators for not acting swiftly to ensure that domestic tariffs have been reduced when suppliers have benefited from lower wholesale prices. Clearly when there are many families struggling to pay their bills it is vital that suppliers do pass on any savings whenever possible.

6.6 It is worth noting that the definition of fuel poverty only includes gas and electricity costs. Households must also pay for their water supply. Bills for Thames Water customers, the majority of Londoners, are expected to increase by £60 a year by 2018 to cover the costs of building the 'Thames Tunnel'.[9] This

[8] For more information see: DECC (2009) *'Fuel Poverty Strategy, 7th Annual Progress Report 2009'*, http://www.decc.gov.uk/en/content/cms/funding/fuel_poverty/strategy/strategy.aspx

[9] See the Environment Minister's statement, Sept 2010, http://www.defra.gov.uk/news/2010/09/07/tunnel-sewers/

comes at time when VAT has recently been raised to 20 per cent and food prices are expected to continue to increase.

6.6 **Improving the energy performance of homes – RE:NEW**
London's boroughs are already involved in a number of schemes designed to improve the thermal performance of the capital's housing stock and tackle fuel poverty. Perhaps the most high profile of these is the RE:NEW retro-fitting scheme, which is due to be rolled out in specific areas in all of London's boroughs from this summer.

The RE:NEW project
The RE:NEW scheme works by approaching households in specific neighbourhoods. Homes are visited, street by street, and offered a free whole-house energy survey. The assessor is able to give energy and water saving advice and a range of free 'easy measures' (such as energy saving light bulbs). Households that could benefit from further measures, such as loft or cavity wall insulation, are referred on to programmes that can install these, often at no cost or at a subsidised rate. *For low-income households, RE:NEW assessors are also able to offer advice on fuel poverty and any benefits to which the household may be entitled*.

6.7 The RE:NEW scheme aims not only to reduce fuel bills by improving the energy performance of homes, but also to identify homes in fuel poverty and offer them advice on accessing the benefits and support for which they are eligible.

6.8 **The future of retro-fitting – the Green Deal**
The coalition government's Energy Bill is currently making progress through Parliament. Within it is provision for the government's future home retrofitting initiative, known as the Green Deal.

6.9 The Green Deal will enable private firms to offer consumers energy efficiency improvements to their homes, community spaces and business at no upfront cost. The cost of the improvement work will be recouped over time through savings from consumers' energy bills. The loan for the work will be attached to the property, in effect to the energy meter, rather than to any individual; an arrangement that will allow home owners to move between properties without taking the financial obligation with them.

6.10 Crucially, in order to qualify for a loan, the proposed measures for any property must be expected to generate savings on energy bills equal to or greater than the cost of installing them. This has been dubbed the 'golden rule'.

6.11 Not all households will be able to save on their energy bills by taking up Green Deal measures. Low income and vulnerable households may not be turning on their energy for long enough to sufficiently heat their homes at present. Other homes can only be made more energy efficient through measures which are more expensive to install. The Energy Bill provides for a new Energy Company Obligation (ECO) which will replace existing obligations (such a CERT and CESP). This money will be used to underpin the Green Deal and subsidise measures for households which would not otherwise meet the 'golden rule'.

6.11 **Effective use of ECO (Energy Company Obligation)**
London Councils and the GLA are currently working in partnership to lobby DECC over their plans for the Green Deal and the use of ECO. Officials at DECC have indicated that they plan to use ECO to support two categories of retro-fit - hard-to-treat properties, usually older homes without cavity walls or lofts, and fuel poor households. London has a relatively high proportion of both.

6.12 We are urging DECC to ensure that the Green Deal includes regional targets for the spending of ECO. Historically London has received a disproportionately low share of financial support for energy efficiency measures through schemes such as CERT and CESP. This has been due to the capital's high proportion of hard-to-treat homes and also the higher cost associated with carrying out these works in London. The government's Green Deal initiative represents a real opportunity for the city to reverse this trend, and we wish to see regional targets for ECO which relate to the relative proportions of hard-to-treat homes and fuel poor households.

6.13 We also believe there is an opportunity to ensure that employment opportunities, including apprenticeships, are made available to Londoners through the Green Deal. Future contracts for retro-fitting work, particularly that subsidised by ECO should include condition to ensure that people living with each region have access to employment opportunities.

6.14 The challenge of increased movement of vulnerable households
Retro-fitting homes is an important step in tackling fuel poverty. The government has ambitious aims for the Green Deal and ultimately intends to see every home in the country retro-fitted. In the short-term however retro-fitting alone will not solve the problem of fuel poverty, particularly for people in the private rented sector. These households tend to move home more often than social tenants and owner-occupiers, which makes their identification more challenging.

6.15 Of particular concern will be the impact of forthcoming changes to local authorities' statutory housing duties. From 2012, councils will be able to discharge their duty to homeless households by placing them in private rented housing, where they will continue to have a responsibility for the household for two years.[10] Recent changes in the government's housing benefit caps regime has reduced the proportions of private rented sector housing available to homeless households in receipt of housing benefit. In practise this means that many central London councils are not able to house families within their own council boundaries. Many placements will be made in outer London or outside London. Increases in rent levels may then see the same families having to move further away from central London when the two-year period of responsibility ends. This mobility of the most vulnerable families will make it more challenging for government and councils to identify them and offer help to improve the performance of their housing.

[10] At present councils place often place homeless families in temporary accommodation until such time as they can be offered an available social tenancy.

HPS Fuel Poverty Review Response
London Borough of Lambeth

A general comment is that out of the three main factors quoted by the review as contributing to fuel poverty, it is odd that the review, in examining the responsibility of energy companies to help reduce fuel poverty, will focus on energy prices in particular. This is peculiar because a large part of the current responsibility placed by the government on energy companies is to put funding into housing energy efficiency schemes to reduce fuel poverty. Making homes more energy efficient is a more long-term, and environmentally sustainable, solution than keeping volatile prices down for poorer customers, and it is also one which the Mayor could more easily support and tie in with his own projects. In addition, whereas high prices are likely to be a problem in very similar ways throughout the country, London is thought generally not to receive its fair share of energy company obligation funding for efficiency work compared to the rest of the country, and this is an issue in itself which needs to be addressed.

- How do London households experience fuel poverty and what support do they want to tackle it?

The biggest factor in causing fuel poverty in London is arguably the condition of our housing stock. Many houses are older ones which are 'hard to treat', with single walls and draughty sash windows; if they are in a conservation area it can be very difficult to get planning permission to do anything about these issues and even if they are not it can be prohibitively expensive.
London households generally want support with paying their fuel bills and with dealing with their fuel debt. It isn't clear that this is different to the support that the fuel poor in other places in the UK would want.
However, rather than financial support with bills it would be better in the long term to offer support to improve the efficiency of people's homes so that the bills themselves are lower for longer.

Energy companies' action on fuel poverty

- What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?

It isn't clear that energy suppliers are doing anything particularly different in London to that which they are doing in other parts of the country

- What challenges do energy companies in London face in delivering measures to tackle fuel poverty?

The largest challenge perhaps is the difficulty of working out who the most vulnerable are and who needs the most help; again though, it isn't clear that this is a different challenge to that faced all over the country.

A London-specific difficulty is London's housing stock and the expense associated with retrofitting it. This is a problem for energy companies which wish to help in London because of the above-mentioned obligation on suppliers to fund energy efficiency programmes. Energy companies look to get the greatest carbon savings to fulfil their government obligations for the smallest cost; due to the 'hard to treat' nature of much of London's stock and because of the larger cost of labour, materials and parking very much less energy efficiency work is funded in the city than elsewhere. It isn't clear whether this is really a challenge for energy companies, which can fulfil their obligations elsewhere, or for local government in London, which wishes to gain as much benefit as possible for its residents.

Mayor's role

- How can the Mayor work with energy companies to maximise the opportunity to eradicate fuel poverty?

Encourage them to invest more per tonne of carbon saved in London so as to enable local authorities, developers and individuals to better meet the cost of retrofitting London's housing stock.

Work with them to gather information on the fuel poor and to understand the best means of reaching them.

- How effectively are the Mayor's programmes contributing to reaching the national target to eradicate fuel poverty by 2016?

The Low Carbon Zone programme contributes to reaching the national target through the provision in many zones of home energy advice and workshops in things such as curtain lining. However it is as yet unclear whether the uptake of these is mostly among the fuel poor, rather than other residents who are interested in saving money or in cutting their CO_2 emissions. The Low Carbon Zones cover only a very small area of London so the contribution they make, while positive and high-profile, will be relatively small.

The Mayor's RE:NEW programme will contribute to reaching the national target. However this contribution is only likely to be significant if the pace of the programme and the amount of funding allocated to it is stepped up dramatically, with sufficient notice given to local authorities to roll out effectively. The current phase of the programme will make a difference to a certain number of households but it will by no means eradicate fuel poverty in London by 2016.

- What role should the Mayor have in reducing fuel poverty in London?

Raising the profile of fuel poverty at a national level so that the government will put funding back into grants for energy efficiency (e.g. Warm Front, which is being scaled down and then stopped), instead of relying on energy company obligations (ECO) to provide these grants. Energy company obligations, as mentioned above, are unlikely to benefit London as much as other areas because of the profile of London's stock and the higher expense associated with making the same carbon savings. In addition, ECOs are a regressive way of providing funding because they raise energy prices for everyone including those at risk of fuel poverty.

London Assembly Investigation into fuel poverty in London

Joint Submission from London Civic Forum and London Sustainability Exchange

Summary of All Recommendations

1. Data - How do London households experience fuel poverty and what support do they want to tackle it?

1.1 There needs to be a coordinated and consistent approach to tackling fuel poverty across all sectors (statutory, private and community and voluntary sector) in London which deals with specific issues facing the capital such as changing demographics and the high costs of living.

1.2 There is a need for work aimed at those living in the social and private sector rented accommodation.

1.3 There should be a focus on reducing demand for energy through more cost-effective energy efficiency measures, which will see a permanent reduction in any heating subsidies in the long term.

1.4 Alongside the measures above there is a need for income support programmes and income maximisation programmes.

1.5 Further to the introduction of new programmes, or improvement of existing ones, there needs to be a radical overhaul of the approach taken to promote and market these services.

***2. Energy companies' action on fuel poverty* - What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?**

2.1 The Assembly should be aware of the spectrum of projects that address energy efficiency and carbon reductions from different perspectives.

2.1 There is a need for improvements to these schemes, including: a more consistent approach; a more proactive and preventative approach; more joint working; suppliers should provide funding to local authorities; suppliers need to support organisations working in communities more.

***3. Mayor's role* - What role should the Mayor have in reducing fuel poverty in London?**

3.1 There is a vital role for the Mayor in reducing fuel poverty through coordinating action across London, establishing a consistent framework that ensures all groups can access the correct services and that details how local authorities, energy companies, voluntary sector and the GLA will contribute to delivering the services.

3.2 The Fuel Poverty Strategy should focus on five key points: reducing fuel use; identifying achievable measures on improving thermal comfort, energy efficiency and built environment measures; identifying measures to ensure that Londoners do not overpay for fuel; supporting work in partnership; ensuring a joined-up approach with other strategies and drivers.

Introduction

London Civic Forum and London Sustainability Exchange (LSx) are submitting evidence based on the extensive expertise we have developed through the delivery of our cross sector programmes around community involvement in public services and environmental sustainability. We recently conducted an online survey to gather the views of both statutory and VCS organisations who have experience and expertise in this area of work. LSx has also just completed a series of deliberative workshops on the topic of environmental and energy efficiency programmes with residents of the Queens Park Ward, City of Westminster, one of the most deprived in London. We offer some recommendations for action based on both these responses and our own work in this area.

1. Data - How do London households experience fuel poverty and what support do they want to tackle it?

Recommendation 1.1 - There needs to be a coordinated and consistent approach to tackling fuel poverty across all sectors (statutory, private and community and voluntary sector) in London which deals with specific issues facing the capital such as changing demographics and the high costs of living.

- Currently there are a number of schemes operating across London but these are inconsistent and uncoordinated. In order to ensure efficiencies of scale and reach the most 'hard to reach' and vulnerable households there will need to be a single co-ordinated programme of advice and grant-aided energy efficiency measures, including those necessary for hard to treat homes, which should be supported by access to income maximisation advice.
- The Mayor and GLA should lead this approach working closely with Local Authorities who have an overview of the needs of their communities, VCS infrastructure organisations and providers.
- Local authorities then need to work closely with both suppliers and community and voluntary sector organisations in their boroughs that have knowledge and understanding of how best to work with vulnerable groups who suffer fuel poverty. Local authorities should provide training and support for these VCS organisations in issues around fuel poverty, energy efficiency and funding opportunities using High Barnet Green Home Zone as an example of partnership working between local authorities and local voluntary sector groups.
- Funding to support this programme should be from central government, including green grants to insulate homes and a tax refundable grant to older residents (a growing demographic in London) to heat their homes. The GLA should back the funding, local

authorities should distribute it to their residents in need and community and voluntary sector organisations should be enlisted to build awareness at the grassroots level.

- In addition to these measures, the national fuel allowance scheme needs to take into account the high costs of living in London and there should be a specific grant for London.
- The new Energy Company Obligation (ECO) will play a big role in funding energy efficiency measures in fuel poor homes however, in order to ensure that the most vulnerable are reached and engaged with the energy efficiency message, Local Authorities, community and voluntary sector organisations and the GLA will need to work in partnership.

Recommendation 1.2 - There is a need for to work aimed at those living in the social and private sector rented accommodation.

- A third of households rented from RSL are fuel poor.[1] There should be specific funding allocated to enable all social rented properties to have an excellent standard of thermal efficiency.
- As recognised in the Energy Bill 2010 / 2011[2], there is an urgent need to engage private sector landlords in energy efficiency programmes. If enforcement action is not planned to come into effect before April 2015 the specific engagement programmes with private sector landlords and residents must be established in order to support the 'voluntary improvements' that The Energy Bill and its Green Deal proposals seeks to encourage. This could take the form of a targeted programme in an area with high private rental to be used as a pilot for both Green Deal delivery mechanisms but also to assess impact on rental value and tenant satisfaction.

Recommendation 1.3 - There should be a focus on reducing demand for energy through more cost-effective energy efficiency measures, which will see a permanent reduction in any heating subsidies in the long term. These include:

- Physical measures to improve the energy efficiency of properties, such as effective thermal insulation, thereby reducing demand for fuel. There will need to be different delivery mechanisms to successfully target different sectors, for instance private sector landlords as discussed above. An example of this is National Energy Action's London Warm Zone project, which helps householders improve the energy performance of

[1] http://legacy.london.gov.uk/mayor/publications/2009/docs/fuel-poverty-jul09.rtf
[2] [2] http://www.decc.gov.uk/en/content/cms/legislation/energy_bill/energy_bill.aspx

their homes by working to provide energy efficiency measures such as loft and cavity insulation, central heating installations and upgrades.[3]

- Across London, consideration needs to be given to combined heat and power initiatives (CHP) but on a district level and not small scale 'eco-bling'. Similarly there are likely to be instances of wasted heat from industrial processes where heat reclamation could provide district heating.

Recommendation 1.4 - Alongside the measures above there is a need for income support programmes and income maximisation programmes.

- Over two million of London's households are defined as vulnerable, and the incidence of fuel poverty in this group is higher than average.[4] In order to mitigate against the impact of welfare changes and rising fuel costs on these households there will need to be increased benefit advice and support, which is proven to have a significant impact on fuel poverty. For example, National Energy Action's London Warm Zone project has raised more than £1 million through its income maximisation programme.[5]

- Many vulnerable groups are not eligible for the winter fuel allowance, including households with members under 16 years old or the long-term sick or disabled who are proportionately more fuel poor than over-60s households, due to the greater housing costs they face.[6] Disabled people can be particularly affected by the cold either because their medical conditions are exacerbated by the cold or they have restricted mobility because of impairments. It should also be noted that disabled people are more likely to be on a low income and/or unemployed and therefore will not benefit from London Living Wage. People from BAMER communities are more likely to be disabled people[7]. Disabled people should receive similar support as older people receive, e.g. an annual winter fuel payment.

Recommendation 1.5 - Further to the introduction of new programmes, or improvement of existing ones, there needs to be a radical overhaul of the approach taken to promote and market these services.

[3] http://www.londonwarmzones.co.uk/about.htm
[4] Defined as having at least one household member being over 60, under 16 or long-term sick or disabled. http://legacy.london.gov.uk/mayor/publications/2009/docs/fuel-poverty-jul09.rtf
[5] http://www.londonwarmzones.co.uk/about.htm
[6] 41% and 36% respectively compared with 16% of over-60s households under the equivalised income definition. Ibid.

[7] Inclusion London Report: *All in this together? The impact of spending cuts on Deaf and disabled people in London* ***April 2011***

- Letters, leaflets and door knocking do not achieve the take-up rates required to meet these challenging objectives. Further to this, residents we have worked with report they do not like marketing in this way[8]. Marketing new or improved services in the same way will only achieve a limited take-up. To reach the most vulnerable people fuel poverty, energy efficiency and income support programmes need to find innovative ways to penetrate the community. We suggest for example, building on existing community infrastructure and networks that have already been developed in target areas.

- Energy efficiency and thermal comfort are not as engaging subjects as, for example, food, green spaces or cycle schemes.[9] Energy efficiency programmes can successfully build on other interests of the local community, engaging people in need of services once they have chosen to get involved for other reasons.

- Energy efficiency is not considered as much of a personal priority as, for example, personal health or childcare.[10] As part of developing a consistent and coordinated approach (see A1, above), fuel poverty programmes need to be built into provision of other services. For example 'Green Doctors' delivering door-to-door energy efficiency services need to be able to make accurate referrals to income support services based on their assessment of household circumstances and vice-versa.[11]

2. *Energy companies' action on fuel poverty - What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?*

Recommendation 2.1 - The Assembly should be aware of a spectrum of projects that address energy efficiency and carbon reductions from different perspectives.

- The Assembly should be aware of a number of national schemes that are delivered or funded through an energy supplier obligation, and recent changes proposed to this arrangement announced by the DECC. Currently, CESP[12] is an area-based approach in partnership with local authorities delivered in specific communities of low-income across the country. CERT[13] requires energy companies to install certain measures with a renewed drive to ensure that more vulnerable households receive support. The

[8] Direct, and unanimous, feedback received through LSx's deliberative focus groups held in Queens Park, 2011
[9] Ibid 2
[10] Ibid 2
[11] A good example of this in action is Lambeth Council's Brixton Low Carbon Zone
[12] http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cesp/cesp.aspx
[13] http://www.decc.gov.uk/en/content/cms/what_we_do/consumers/saving_energy/cert/cert.aspx

Energy Bill 2010/2011[14] proposes certain changes that use a new Energy Company Obligation to further increase support to low-income groups.

- British Gas's Green Streets programme[15] is an example of an energy supplier taking a very community-orientated and collaborative approach. However it is a very small-scale programme that naturally includes those who were already aware of their environmental impact and energy usage and those less likely to be fuel poor.

- At the other end of the spectrum, energy companies are increasingly trying to provide ways for customers to better visualise, track and monitor their energy usage. Requiring active involvement and engagement in energy usage and usually the Internet, this again is unlikely to benefit fuel poor households more than others.

- Through their pricing schedules, with discounts for direct debits and rates which incentivise higher usage, many tariffs discriminate against households with low usage and poor credit history. A crucial equity issue for fuel poor households is the higher prices associated with "pre-pay" supplies compared to those with meters and direct debits. An energy company established specifically to redress this imbalance is Ebico[16], who offer identical prices to their pre-pay and metered customers. Responses from our survey indicate that energy companies should take more responsibility for encouraging uptake of social tariffs and other support services.

- Actions and programmes by energy suppliers in tackling fuel poverty were however largely seen as ineffective and uncoordinated by our survey respondents. This was coupled with a strong negative perception that in a time of rising fuel prices and interest rates energy companies were making large profits, which they were not using to support the most vulnerable in society. This is corroborated by LSx's work in Queens Park where levels of trust in energy suppliers was very mixed[17].

- However, it was recognised that it is sometimes difficult, and resource intensive, to ensure that measures to tackle fuel poverty were taken up by those who need it most. It was pointed out that:

  '*There will always be problems in targeting individual fuel poor households because of the amount of information needed to definitively identify them. The most vulnerable groups are often those least likely to put themselves forward as in need, which is why there should be a national programme for improving energy efficiency of homes that all*

[14] http://www.decc.gov.uk/en/content/cms/legislation/energy_bill/energy_bill.aspx
[15] http://www.greenstreets.co.uk
[16] https://www.ebico.org.uk/about-ebico
[17] Ibid 2

can aspire to'.

LCF and LSx survey respondent, May / June 2011

And that:

> *'… there are communities and landlords that will not take up some schemes such as insulation schemes, which often only supply a percentage of the costs'.*

LCF and LSx survey respondent, May / June 2011

Recommendation 2.2 - There is a need for improvements to these schemes, including: a more consistent approach; a more practive and preventative approach; more joint working; suppliers should provide funding to local authorities; suppliers need to support orgainsations working in communities more.

- There needs to be a consistent approach from all suppliers with clear eligibility criteria for grant assistance. The options for homes that are difficult to treat need to be made more accessible, with flexibility for adaptation to different situations according to house type.
- Suppliers need to take a much more proactive and preventative approach, providing advice and support to those customers who could benefit from initiatives aimed at tackling fuel poverty and energy efficiency. They are in a position to identify customers who are using more than average energy consumption and could offer support to enable them to avoid high-energy costs, purchase energy efficient appliances and offer links with Energy Saving Trust. They should advertise social tariffs and other support options more effectively to their customers.
- Energy companies should continue to work with Local Authorities and community and voluntary sector organisations that are trusted within the communities.
- In order to ensure more targeted approach suppliers should fund local authorities to provide targeted interventions
- Suppliers need to support organisations that are working with communities in tackling fuel poverty and energy efficiency, sponsoring and supporting initiatives such as 'EcoTeams' run by the charity Global Action Plan.
- Government has a role to play in encouraging suppliers to engage in meaningful energy use reduction including effective whole building insulation – this could be based on the renewable obligation as part of the 'green deal'.

3. Mayor's Role - What role should the Mayor have in reducing fuel poverty in London?

Recommendation 3.1 - There is a vital role for the Mayor in reducing fuel poverty through coordinating action across London, establishing a consistent framework that ensures all groups can access the correct services and that details how local authorities, energy companies, voluntary sector and the GLA will contribute to delivering the services.

- Establish a programme, or improve existing ones, to ensure private sector housing is included, engaged and visibly taking action.
- The Mayor should use his influence to exert pressure to make energy tariffs more egalitarian and less discriminatory of vulnerable groups.
- A more positive approach to achieving 'affordable warmth' could help to avoid the stigma that deters some from identifying themselves as 'fuel poor'.
- The Mayor should develop a specific fuel poverty strategy in order to provide clearer direction towards dealing with fuel poverty and allow more useful targeting. The CCMES is laudable but is at very high level and related to the environmental and commercial consequences of climate change. Equal Life Chances for All doesn't tackle the specifics of fuel poverty even by protected characteristics. The Fuel Strategy should be backed by local authorities and London residents and implemented across the boroughs. The strategy should draw on and build on the resources and programmes identified through the CCMES and Equal Life Chances for All.

Recommendation 3.2 - The Fuel Poverty Strategy should focus on five key points: reducing fuel use; identifying achievable measures on improving thermal comfort, energy efficiency and built environment measures; identifying measures to ensure that Londoners do not overpay for fuel; supporting work in partnership; ensuring a joined-up approach with other strategies and drivers.

- Reducing fuel use by fuel poor households.
- Identifying achievable measures on improving thermal comfort, energy efficiency and built environment measures.

- Identifying measures to ensure that Londoners do not overpay for fuel and where strategic and effective pressure could be put on energy companies to adopt social tariffs / flat tariffs.
- Ensuring that energy companies, Local Authorities and particularly VCS organisations are supported to work in partnership to engage people, especially the most vulnerable, to take up measures tackling fuel poverty.

- Identifying measures and the links to other Mayoral strategies which can support fuel poor households to be able to maximise their income for example through access to benefit advice and London living wage.

Hello Jo
Irene and John's report, *No more lagging behind: securing London's fair share of insulation funding*, clearly sets out the barriers to carrying out energy efficiency work in London. The report recommends a mechanism for ensuring regional equity of ECO funds. I would support such a mechanism and would urge this also includes equity between the 3 countries. This will require Government to make provisions in the ECO mechanism to make sure regional equity is addressed. This may run counter to stated Government policy of limiting Government intervention in ECO to the minimum to "allow competition to flourish".

The Government may also need to make provisions for the use of an area approach to deliver ECO (another recommendation of the above report), as is currently the case for CESP. My understanding is that the Government currently does not consider such a provision necessary – it expects market mechanisms will deliver area approaches without intervention because of the inherent advantages of this delivery mechanism.

I understand the Government intends to issue a consultation document on ECO in October which will set out its thinking. I would suggest that the HPSC makes representations on these issues before the consultation is issued in order that options are set out in the consultation document itself.

As stated before, Consumer Focus considers ECO should focus exclusively on low income and vulnerable consumers, while recognising that further resources beyond ECO are required, given the scale of the fuel poverty crisis. We understand that Government envisages virtually all solid wall insulation activity (a major focus of ECO) will take place in social housing in the first couple of years, plus some limited activity in homes adjacent to social housing. Given that social housing tenants are predominantly low income, this appears a desirable outcome. However, we are concerned that the Government expects social housing providers/tenants to provide significant funds towards the costs of ECO refurbishment and have concerns about the ability of providers/tenants to do this, particularly in areas where rents are already at the maximum Housing Benefit cap. I would assume this is the case for much social housing in London. Consumer Focus has commissioned some research into how solid wall insulation may take off, including barriers and potential cross-over into private sector housing. We hope to publish this in early September.

I hope this helps - William

William Baker

Head of Fuel Poverty Policy
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Please note: my normal working days are Monday to Thursday

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A letterplate is a sizeable hole in an exterior door. It is the only part of a property that is publicly accessible 24 hours a day. It exposes the premises and its occupants to all four main risks defined by the Insurance industry: from fire, water damage, malicious damage and weather-related damage.

Often a flap stays open for hours wedged by a newspaper or mail items. Frequently there is no flap at all. This is equal to leaving a window or door open. The heat of a house or a room quickly disappears out into a colder space and room temperature can easily drop. A tight flap, secondary flap or draught excluder with brush strips do not work in this situation.

According to The Energy Saving Trust, a drop in room temperature by as little as 1°C will typically increase the heating bills by up to 10%. With the current (January 2011) energy prices, this would add around £75 per year to house energy bill and result in extra 300 kg of CO_2 emissions into the atmosphere. With freezing outdoor weather, room temperature can be easily reduced by more than 1°C. Imagine how much the heating bills can go up. This undermines costly investments in energy efficiency, like an efficient heating system, loft and wall insulation, solar energy, etc. It also spoils the chances of achieving the UK's 2050 target of reducing CO_2 emissions from all dwellings by an average of 80%. Loss of house heat through the letter box is the biggest unresolved challenge facing most properties and the energy products installers today.

The letterplate has further drawbacks. It lets someone to peep through, mail to fall on the floor, pets to destroy your mail. Uncontrollable air flow through the letterplate brings in noise, dust, street odours and pollen and contaminants the air inside. It affects the amount of condensation on walls and windows and affects mould build up in the property. In the summer, it brings in heat. These issues adversely affect a property and the health and comfort of the occupants. Mould is classed to pose the same level of threat to health as asbestos.

The major concerns are arson and firework attacks through a letterplate, theft of mail, theft of car keys and access to door locks for burglary. Since letterplates are universal in the UK, most properties are at risk of these shocking serious crimes where CCTV, alarms and good door locks cannot help. The currently available security letter box products can offer only a limited protection. None of them can stop introduction of flammable liquid, none can fit at low level, they can be easily pierced through if made of a fabric and a periodic maintenance/replacement is required if an inbuilt fire extinguisher is used.

Still, eliminating the letterplate would be inappropriate. It may mean replacing the whole door, nuisance with getting your mail and there is a certain heritage issue here. Therefore, an all-embracing technical innovation had to be found.

PowerPrize Limited delivered this ground-breaking all-in-one solution by merging the letterplate with an innovative patented letter box, which is based on a revolutionary new concept. A new brand IdealGuard™ is a new generation of letter box.

Multifunctional it brings an unprecedented total solution to all letterplate related problems, while door appearance remains traditional with the letterplate. When fitted indoor it is fully insulated, highly secure, maintenance-free and economical. Uniquely, IdealGuard™ is universally suitable for non-invasive fitting at any level to most doors and door materials both in domestic and non-domestic properties, by DIY or a contractor as a retrofit or at a door manufacturing plant. A clever mix of functionality, efficiency and aesthetic design IdealGuard™ exceeds current letter box related European and British Standard BS EN 13724:2002 in security, saving house energy, functionality, ergonomics and protection of the environment.

You always benefit from fitting IdealGuard™ – a marvellous fusion of multiple benefits and elegance – whatever letterplate related problem you focus on. For example, this is an easy and rewarding step to reducing loss of house heat. Since the product pays for itself just from the savings on energy bill, this alone would make sound commercial sense. However, you need this outstanding home improvement product if along with reduced energy bills and climatic impact on the building, you want a stylish door, improved comfort, security and hygiene – all in one package that will increase asset value of the house.

In terms of security IdealGuard™ is an ingenious marvel with no analogues in the world. Secure by design and maintenance - free, it obstructs introduction of non-mail items into a letter box and relies on the force of gravity to expel liquids out. These are the benefits of integration – you can just fit one designer door furniture product and it will work with whatever letterplate problems you had. For the responsible person in non-domestic premises fitting IdealGuard™ gives an ideal cost-effective opportunity to facilitate compliance with a number of the enforceable legislations, such as Regulatory Reform (Fire Safety) Order 2005, HHSRS System and Building Regulations. Also, IdealGuard™ provides jobs in the products supply chain.

Better still, in addition to its prime functions IdealGuard™ is designed as a superb platform and housing for deployment of various items and latest technologies. This opens new opportunities with endless possibilities. For example, IdealGuard™ can house a Key Cabinet, First Aid Kit, wireless door bell, etc., or home security and automation systems that can significantly improve the lives of people. For advertising agencies IdealGuard™ offers a remarkable opportunity to connect with consumers, as it provides innovative passive or dynamic internal or external advertising platforms.

Highly beneficial as a standalone, IdealGuard™ is complementary to wide-ranging fire, security and energy-saving solutions. Going to the expenses of investing in advanced security or energy-saving if IdealGuard™ is not in place can be a squander.

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Smart Homes, not just Smart Meters

SHIMMER

Naomi Kingsley

CEO London Rebuilding Society

In partnership with the Energy Saving Trust and HomeZone

energy saving trust

London rebuilding society

HomeZone

Smart Homes Integrating Meters, Money & Energy Research

To date, 17 fuel poor households installed with PV systems, smart metering equipment and smart plugs

- **2 stage field trial lasting 18 months**
  - **First 6 months install and system development**
  - **Further 12 months observation and data collection**
- **Measured, monetised electricity consumption and generation and advice and feedback**
- **Income/benefits maximisation**
- **Behavioural analysis**

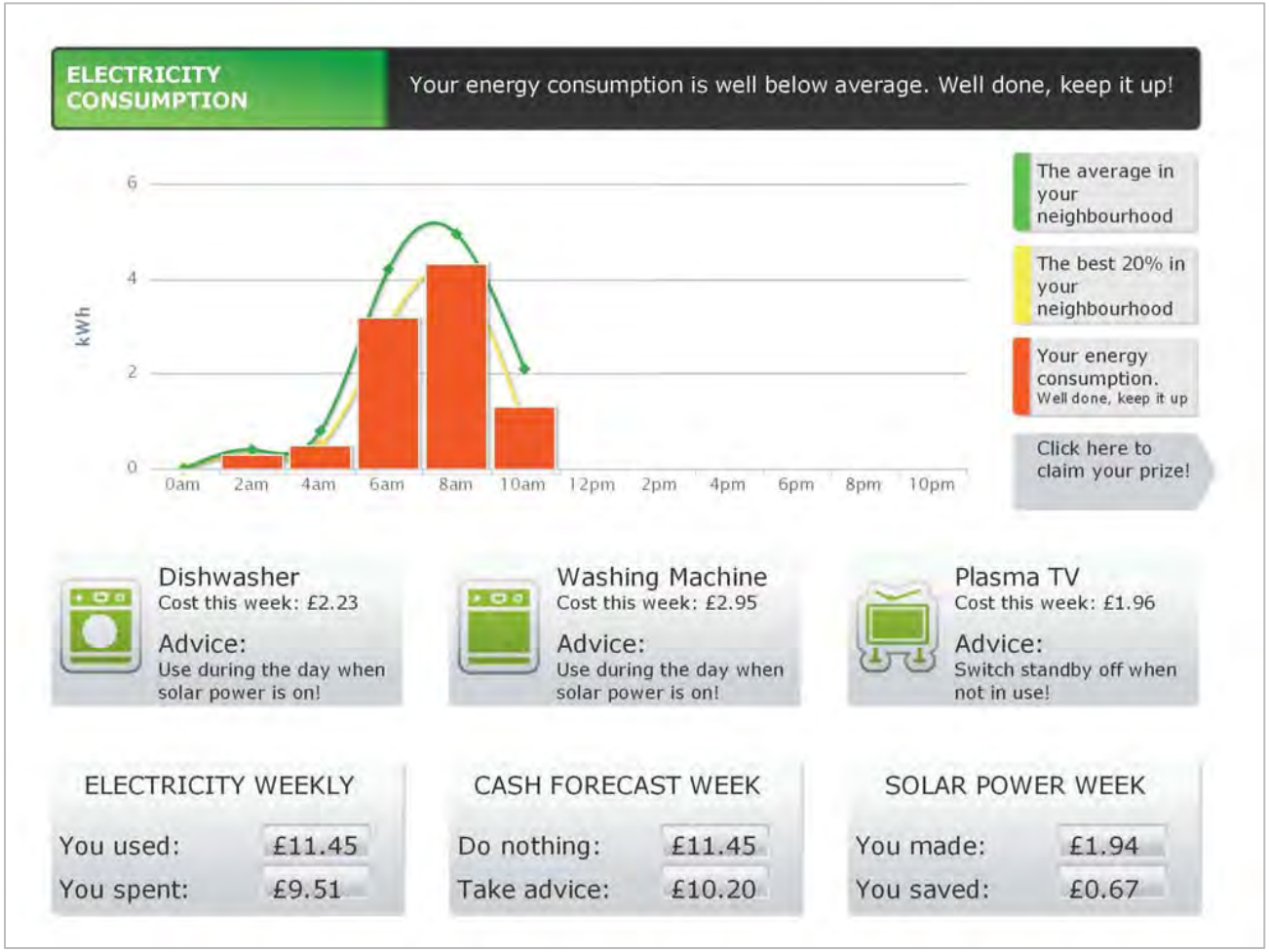
energy saving trust

London rebuilding society

HomeZone

(Page 3 of Energy Saving Trust Submission Omitted to save file space -copies available on request)

A Shimmer Power Bill



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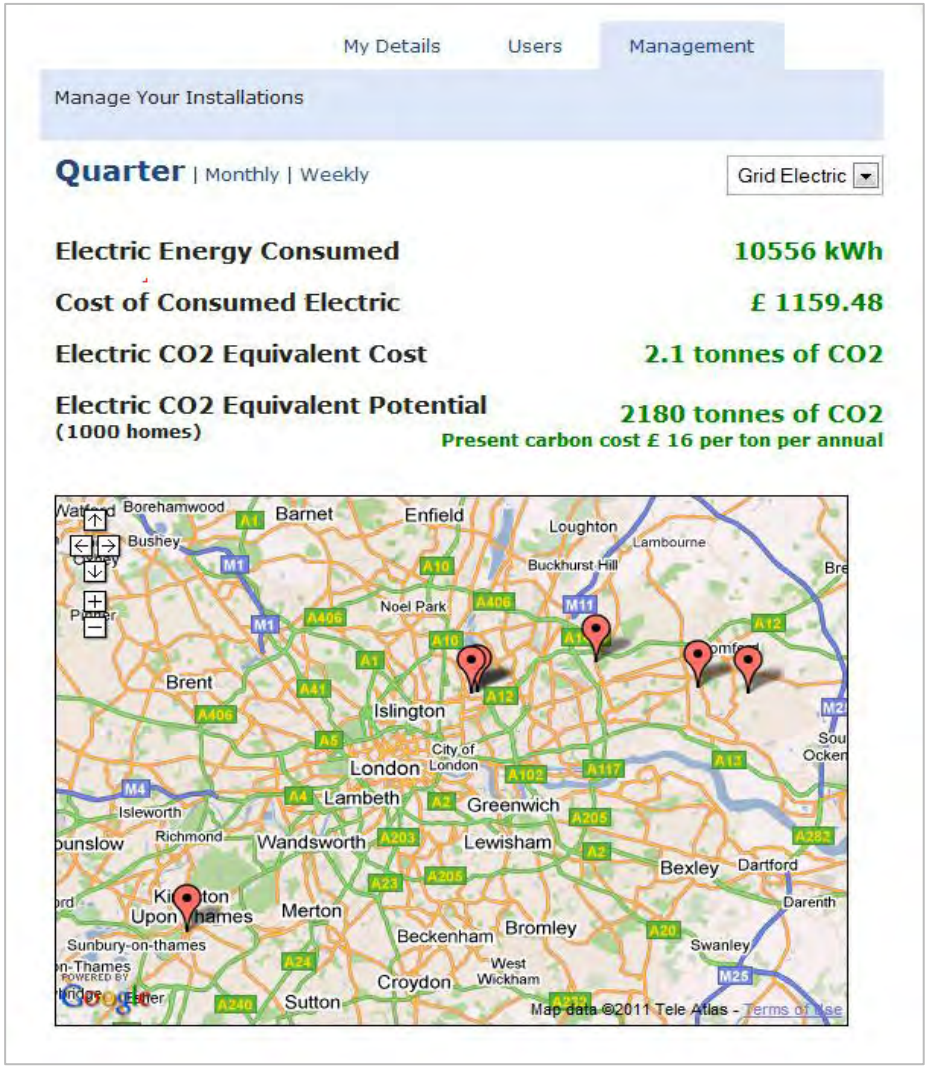
data services



- shimmer delivers a range of data services at an extremely low cost
- Data on carbon/ kWp/ £ by area, household
- data from shimmer can be integrated with any system

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Behavioural Change

- The target group are motivated by the possibility of saving money, rewards and discounts
- Regular positive reinforcement messages
- On-going support is required to enable energy saving
- Solar PV alone is not sufficient to achieve positive change
- Trusted provider needed to persuade consumers to make peak level demand behavioural change
- Ongoing incentivised behavioural change needed

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Lessons learnt

- **Positive behavioural change as a result of micro-generation technology**
- **Consumers need clear information about energy usage in cash terms not KW or CO2**
- **Technology needs to adapt to how people live to overcome interoperability and installation issues**
- **Engages with home economics**
- **Digital inclusion**

6 Home sample data	
Solar Energy Generated	2639kWh
Solar Revenue Generated	£1159.48
Solar CO2 Equivalent Saving	0.55 tonnes of CO2
Solar CO2 Equivalent Potential for 1000 homes	545 tonnes of CO2 @ £16 per ton =£8,720

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Benefits to Tenants

Financial

- **Income maximisation – up to £3,500pa for one Shimmer household**
- **Integrated household budgeting, arrears and debt management**
- **Potential for automated billing**
- **Energy saving increases disposable income and creditworthiness – bankability**
- **Access to fair and affordable finance and credit and to social tariffs**

Early intervention

- **Appliance use implications. i.e. winter cold scenario**
- **Addition of extra sensors i.e. Assisted Living and other services: direct route to tenants**
- **Debt early warning**

Social Impact

- **Digital and financial inclusion, increased communication and reduced social isolation**
- **Improved quality of life, sense of well being, self esteem, independence, low carbon living**
- **Heat AND eat**

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Benefits to Registered Provider

Financial

- **Shared FITS, RHI and Carbon trading revenues**
- **Income maximisation and benefits payments**
- **Improved revenue collection, arrears and debt management**
- **Potential for automated billing and reduced transaction costs**

Early intervention

- **Appliance use implications. i.e. winter cold scenario**
- **Addition of extra sensors i.e. Assisted Living and other services: direct route to tenants**
- **Debt early warning**
- **Lighter touch less intrusive interventions**
- **Remote maintenance notifications and applications**

Intelligence for decision making

- **Social impact reporting**
- **Sustainability**
- **Incentives and engagement are drivers for long term behavioural change**
- **Ongoing, improved housing support and care planning**

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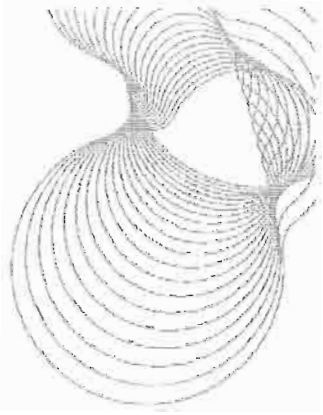
Next Steps

- Larger trial: Shimmer 2
- Demonstrate positive behavioural change over wider population
- Identify the most effective language of encouragement which engages our clients most effectively
- Develop platform to support intervention in other social issues

Cover Page: 'The Health Costs of cold dwellings'



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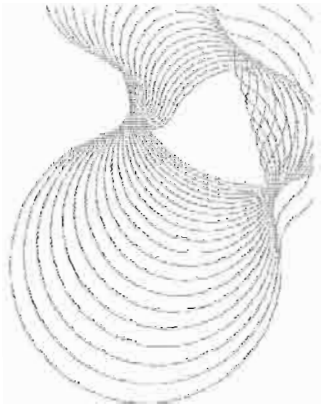
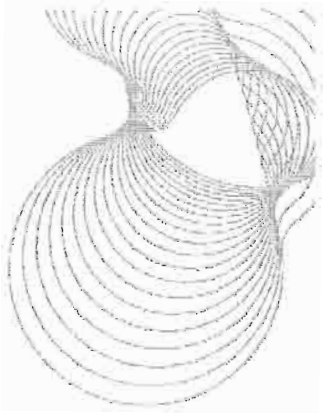


Executive Summary

This short report considers the numbers of dwellings within the English housing stock where the energy efficiency rating is considered poor. The associated estimated cost to the NHS of poor health as a result of these dwellings is calculated using the CIEH HHSRS calculator as a total of £192 million. £35 million of which is within the private rented sector. A comparable figure for the cost to the NHS of private rented sector using the BRE Category 1 calculator puts this figure as somewhere between £37 million and £674 million dependent on the exact SAP rating and actual occupancy. The limitations of the CIEH HHSRS calculator are explained as this calculator is only effective where the housing stock is average. The relationship between Energy Efficiency Rating (EER) bands F and G and Category 1 Excess cold hazards estimates 870,392 dwellings within band F are not included within stock totals as having Category 1 Excess cold hazards. The health effects of Excess cold are far reaching and it is estimated that up to 40,000 deaths per year are can be attributed to the hazard of Excess cold.

Additional work to clarify and refine the figures using The Real Costs of Poor Housing[1] puts the cost to the NHS of not improving these dwellings to the average SAP level at least **£145 million** per annum.

[1] The real cost of poor housing. M Davidson et al HIS BRE Press February 2010



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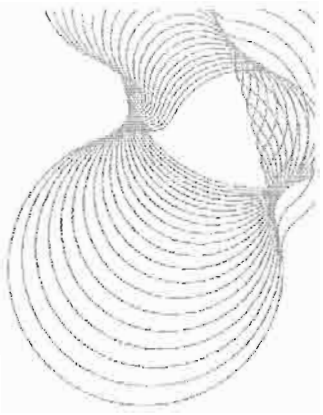
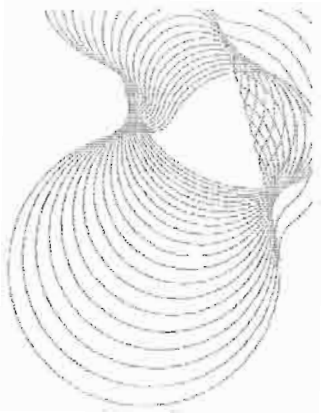


Introduction

This short piece of research has been commissioned by Chartered Institute of Environmental Health (CIEH) to help support a paper being prepared to lobby Government to legislate in favour of reducing the number of privately rented dwellings with poor energy efficiency.



Description of the project

The initial project was designed to produce a series of figures calculated using the Chartered Institute Environmental Health (CIEH) HHSRS[2] calculator[3] which is designed to show potential costs to the NHS associated with housing. In this instant the calculator is used to show the costs associated with dwellings with an energy efficiency band (measured in accordance with the Standard Assessment Process (SAP) of F or G. The dwellings will be divided regionally and those privately rented will be separately assessed. The estimated numbers will be drawn from EHS 2008[4] data. The CIEH is aware of both the usefulness and drawbacks of using this approach and an explanation of using this approach will follow the calculations. A general statement explaining the limitations of the CIEH calculator will be included for publication on CIEH web site. This will allow future users of the calculator to understand it's purpose.

The relationship between SAP rated dwellings F and G and Category 1 Excess cold hazards is discussed. Following this the common health impacts of Excess cold as included within the HHSRS operating guidance are considered.

Further work was commissioned which more clearly defines the estimated costs to the NHS of Excess cold hazards in private rented dwellings and states these costs by Region. This work uses the BRE HHSRS Category 1 spreadsheet developed as part of the Real cost of poor housing research[5] .

[2] Housing Health and Safety Rating System assessments carried out in accordance with Housing Health and Safety Rating System Operating Guidance ODPM 2006

[3] Good Housing Leads to Good Health CIEH September 2008

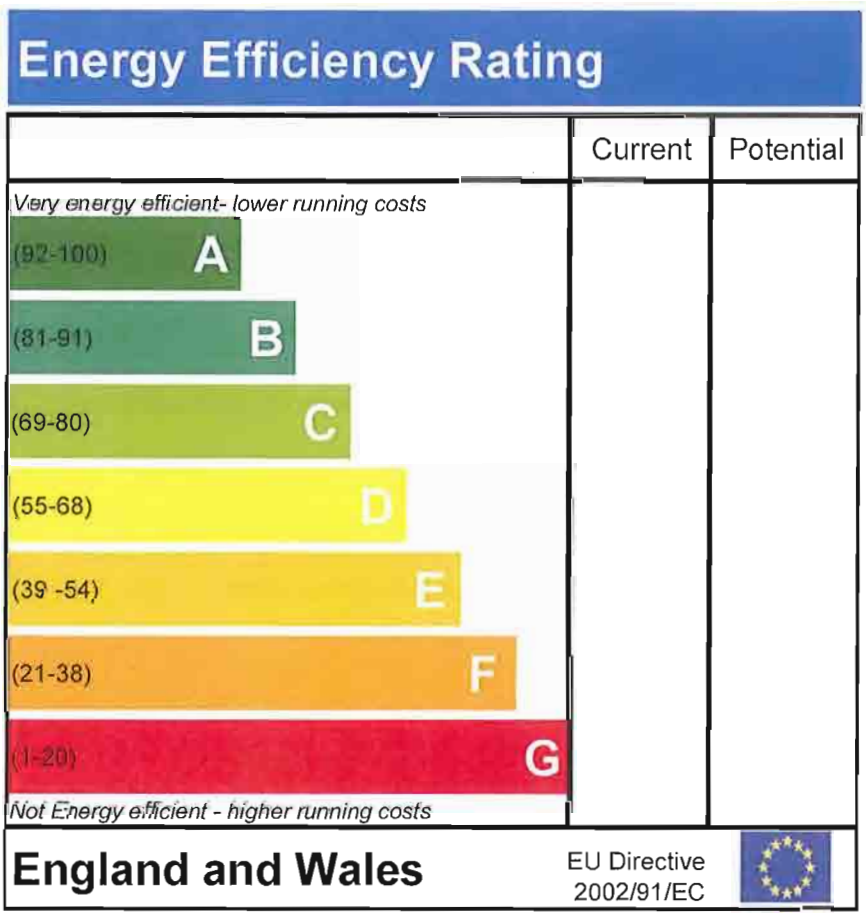
[4] English Housing Survey (EHS) Bulletin issue 2 CLG 27 October 2010

[5] The real cost of poor housing. M Davidson et al HIS BRE Press February 2010

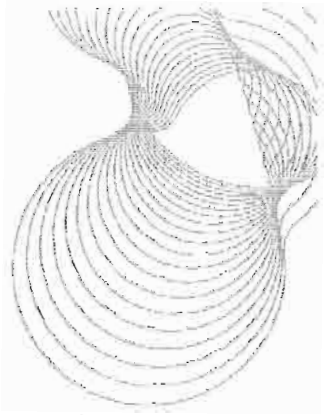
Methodology

The Standard Assessment Process (SAP) is a method of measuring energy efficiency used throughout the sector. SAP calculations produce an Energy Efficiency Rating (EER) in accordance with **Figure 1**. Bands F and G being the least energy efficient

Figure 1 Energy Efficiency Rating table



The numbers of dwellings rated as SAP band F and G are given in **Table 1** . A second set of figures giving the estimated numbers associated with a SAP less than 35 is also provided, as this corresponds with the Category 1 Excess cold numbers. This is explained in more detail below. These figures have been applied to the CIEH HHSRS calculator



The CIEH HHSRS calculator was delivered as part of the Good Housing leads to Good health project carried out in 2008[6] It is published on the CIEH website. This calculator is intended for use with 'average' stock and produces estimated costs to the NHS as a result of hazards.

Figure 2 A screenshot of the CIEH Calculator

bre

HHSRS Costs calculator

Chartered Institute of Environmental Health

Number of dwellings 655,810

		Hazard	Excess cold	affected group over 65	
	likelihood 1 in ...	%	expected number	Annual cost to NHS	
Class I harms	1013	31.6%	648	£	32,400,000
Class II harms	6957	4.6%	94	£	1,880,000
Class III harms	1488	21.5%	441	£	661,500
Class IV harms	757	42.3%	867	£	86,700
Total all harms	320	100.0%	2049	£	35,028,200

Estimated total cost of works where an incident is expected £ 10,230,657

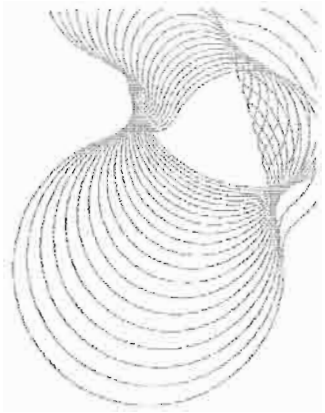
Ratio remedial works costs/NHS annual costs (if >1, need more than 1 year for payback) 0.29

The calculator works by emulating the HHSRS calculation used as part of the assessment process. A surveyor carrying out such an assessment has to judge the likelihood of an incident occurring and the expected spread of harm outcomes. The full calculation also uses a weighting attributed to each of the four classes of harm included. The methodology is complex and to understand and apply the calculator practitioners are expected both to be experienced housing surveyors and to attend a 3 day training course where the assessment process is explained.

The relationship between EER bands and Category 1 Excess cold hazards

There is no direct relationship between the two scales, since the first measures the dwelling in terms of energy efficiency and the second measures the dwelling in terms of the effect of Excess cold on health. The results provided are therefore a best estimate of the assumed relationship between the two scales and have been spread over a range of possible values represented as a sensitivity analysis. SAP calculations range from 1-100. The current average within the English housing stock is 51. The figures are put into EER bands between A and G with A being the best, see **Figure 1**. Bands F and G have SAP scores of between 1 and 38.

[6] Good Housing Leads to Good Health CIEH September 2008



The hazard of Excess cold is measured in accordance with the Operating guidance[7]. This requires a surveyor to assess the extent of insulation in a dwelling; the heating type, controls and operability; ventilation both controls and draughts; dampness and disrepair. This is not a comprehensive list and ability to maintain an indoor temperature and SAP ratings may be included. Where house condition stock surveys are carried out full assessment of Excess cold within dwellings is not possible due to length of time required for the surveyor to complete a full survey and the need to gain access to parts of the building structure that are not easy to observe (like wall cavities where present). In order for Excess cold to be included as an assessment, a proxy of SAP less than 35 is used. This methodology is defined in the Decent Homes guidance.[8] The proxy was based on the earlier version of SAP (2001). Since 2007 SAP has been reported using SAP 2005 methodology which (as shown in **Figure 1**) has changed the band F to include dwellings with a SAP between 21 and 38. There are 870,392 dwellings with a SAP score of 35-38 inclusive, within SAP band F which are not automatically included within the housing stock definition of having a Category 1 Excess cold hazard.

Where surveyors are required to carry out surveys for enforcement purposes a dwelling with a SAP over 35 maybe considered to have a Category 1 hazard (a dwelling with a particularly exposed north facing wall is an example) or where the SAP is less than 35 it may not be considered to be presenting a Category 1 Excess cold hazard (sheltered terrace dwelling with particularly high insulation but poor heating could be such an example).

Taking these pieces of information together it can be said that F and G banded dwellings are ***likely*** to present a Category 1 Excess cold hazard.

Health effects of Excess cold

A healthy indoor temperature is around 21°C, although cold is not generally perceived until the temperature drops below 18°C. A small risk of adverse health effects begins once the temperature falls below 19°C. Serious health risks occur below 16°C with a substantially increased risk of respiratory and cardiovascular conditions. Below 10°C the risk of hypothermia becomes appreciable, especially for the elderly.

There are approximately 40,000 more deaths between December and March than expected from the death rates in other months of the year. This seasonal fluctuation, Excess Winter Deaths, is greater in Britain than in most other countries of continental Europe and Scandinavia.

Cardiovascular conditions (e.g. heart attacks and stroke) account for half the excess winter deaths, and respiratory diseases (e.g. influenza, pneumonia and bronchitis), account for another third. The increase in deaths from heart attacks occurs about 2 days following the onset of a cold spell, the delay is about 5 days for deaths from stroke, and about 12 days for respiratory deaths.

Although there is some excess winter deaths in all age groups, it becomes significant for those in the 45+ age group. The risk increases with age in a roughly linear pattern up to the 85+ age group, after which there is a marked increased risk.

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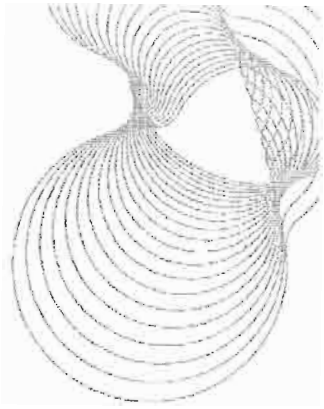
[7] Housing Health and Safety Rating System assessments carried out in accordance with Housing Health and Safety Rating System Operating Guidance ODPM 2006

[8] A Decent Home: Definition and guidance for implementation June 2006 – update Department for Communities and Local Government



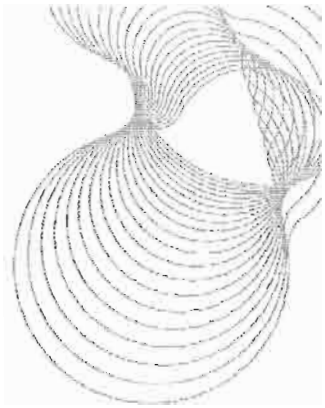
The main causal factor for excess winter deaths appears to be changes in ambient (outdoor) temperature, but seasonal infections, and changes in behavioural patterns, air pollution levels and micronutrient intake may also account for some of the seasonal pattern.

The extent to which housing contributes is not clearly known, but the indication is that people living in dwellings that are poorly heated are at significantly greater risk. There is less evidence on the relationship between housing characteristics and health other than mortality. However, it is very probable that the findings in relation to cold-related mortality can be extended in broad terms to cardio-respiratory morbidity and health related quality of life.

Low temperatures can impair the thermoregulatory system of the elderly, and the very young whose thermoregulatory system is immature. Both these groups may spend a greater time indoors in cold weather and both will not move about as much as other groups in the cold.

Cold air streams may affect the respiratory tract and can slow the heart temporarily, increasing cardiovascular strain. When the whole body is cooled, blood pressure increases. The effect of cold air on the bronchial lining and immune system can reduce resistance to infection. Thus, sleeping in cold bedrooms has been shown to substantially increase the health risk.

The symptoms of rheumatoid arthritis can be worsened by cold. Low temperatures also aggravate sickle cell anaemia and the related thalassaemia, and can affect the healing of leg skin ulcers.



Results

Table 1 Percentage of Dwellings with an EER band of F or G and Percentage of Dwellings with a Category 1 Excess cold hazard (SAP of less than 35)

Region	Percentage of dwellings with an EER banded F or G	Percentage of dwellings with a SAP less than 35. or having a Category 1 Excess cold hazard
North East	10	7.7
Yorkshire and The Humber	14.6	11.2
North West	12.6	9.6
East Midlands	19.5	15.1
West Midlands	18.9	14.2
South West	22.2	18.1
East of England	18	12
South East	16.5	12.8
London	12.5	8.9
Total	**16.2**	**12.3**
Privately rented dwellings	19.9	16.9

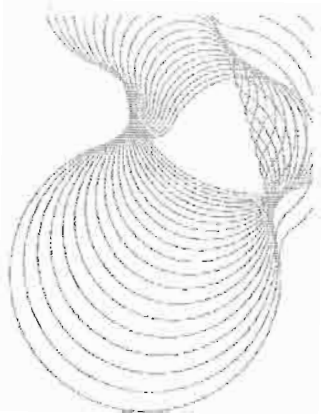


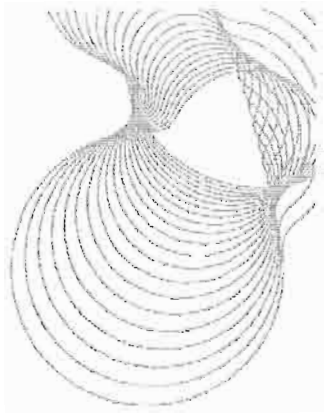
Table 2 Estimated numbers of dwellings with an EER rating of band F or G and associated health costs

Region	Total number of dwellings with an EER band F or G	Estimated costs to NHS using CIEH HHSRS Calculator
North East	115,027	£6,170,700
Yorkshire and The Humber	345,871	£18,493,700
North West	390,000	£20,814,600
East Midlands	379,351	£20,282,600
West Midlands	442,474	£23,634,000
South West	509,520	£27,190,400
East of England	437,767	£23,358,900
South East	580,537	£30,971,700
London	393,382	£20,988,000
Total	**3,593,929**	**£191,887,600**
Privately rented dwellings	655,810	£35,028,200

Table 2 shows predicted health costs of F and G SAP rated dwellings using the CIEH calculator. However, these costs are based on national averages and not simply on the worst cases. The health costs shown are all of those that can be applied to Excess cold. If all dwellings were brought up to an average SAP level there would still be health costs associated with Excess cold from occupier behaviour.

General Statement regarding use of the CIEH HHSRS calculator

The calculator is based on an average stock and designed to be used as a tool to bring to attention to the cost to health from the housing stock. It should not be used where the stock is not average unless the likelihood figures are available. Cost of hazard mitigation is only applied to those dwellings assumed to be



at risk, which are unknown without a stock model assessment. The model assumes that no risk remains within the dwellings when brought up to the average standard of the stock, which is known to be false.

Estimated Real Health costs

The new model for estimating the real cost of poor housing[9] can be applied to the 655,810 private rented dwellings in EER bands F and G.

Table 3 show the results. It is likely that the average likelihood of harm for dwellings in these bands will be higher than the average used in the CIEH HHSRS Calculator (1 in 320). Depending on what likelihood band is used the total estimated cost to the NHS ranges from £37 million to £674 million per annum.

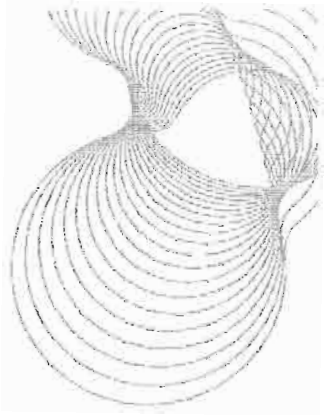
Unlike the CIEH hazard calculator, the cost of repair is applied to all the dwellings where a Category 1 hazard is assumed to occur. In addition, it is assumed that there is still some inherent risk in the dwellings where the hazard is mitigated. The cost to repair is assumed to be all up front, with a value of £5,433 per dwelling or a total of £3.56 billion. Using these assumptions payback (without net present value correction) would range from 5 years to 142 years.

Table 3 Estimated cost and benefits of improving private rented band F and G dwellings.

Likelihood ratios	Cost to NHS on average	Total cost to NHS*	HHSRS band	Hazard Score	difference in risk to SAP 50 (benefit)	cost to repair/improve	Payback years
18	£1,028.44	£ 674 million	A	19,546	£ 662 million	£3.56 billion	5.4
32	£ 578.50	£ 379 million	A	10,994	£ 366 million	£3.56 billion	9.7
100	£ 185.12	£ 121 million	B	3,518	£ 108 million	£3.56 billion	32.8
180	£ 102.84	£ 67 million	C	1,955	£ 55 million	£3.56 billion	65.3
320	£ 57.85	£ 37 million	C	1,099	£ 25 million	£3.56 billion	142.2

* if all 655,810 private rented band F and G dwellings at this likelihood.

[9] Nicol, et al. BRE Information Paper 16/10 Quantifying the cost of poor housing. Oct 2010



Improved estimates

The initial estimates provide a very wide band of possibilities. A better estimate can be calculated if the EER band G and band F properties are considered separately. The scale of likelihood ratios used in

Table 3 above cover the full range of likely dwelling conditions from a SAP of 1 through to a SAP of 38. It is reasonable to assume that those in Band G (SAP 1 to 20) will have a higher likelihood of harm than those in Band F (SAP 21-38). A sensitivity risk matrix has therefore been assumed as shown in

Table 4.

Table 4 Likelihood sensitivity risk matrix

	High Risk	Medium Risk	Low Risk
Band G likelihood ratios	18	32	100
Band F likelihood ratios	100	180	320

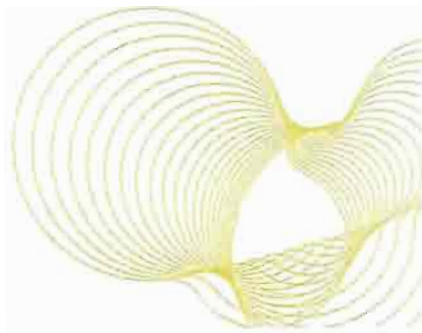
The average cost to improve band F and G dwellings to an average SAP value was calculated to be £5,433 and this value can be applied to each of the 655,810 dwellings. However it is highly likely that the cost to improve band G dwellings will be higher than the cost to improve band F dwellings. Estimates from the EHS data suggest that the cost to improve band G dwellings might be nearer £7,918, and to improve band F dwellings about £2,465. It is also likely that some dwellings cannot be cost effectively improved to a SAP of 50, although this calculation assumes all dwellings can be brought up to SAP 50 for this average cost.

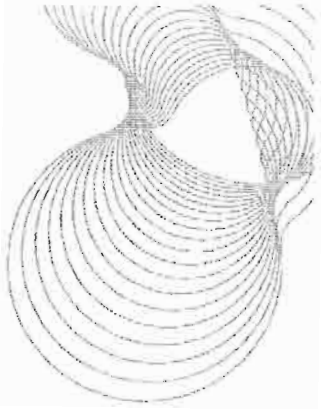
If we apply this average cost, across each of these three levels of risk, to the private rented dwellings in each region (see **Table 5**) the average payback is estimated to be 18.3 years, with a range of 9.9 years to 54.0 years. The combined benefit of bringing all of these properties up to a SAP score of 50 (roughly average for England) is likely to be £145 million per annum. Even if the risk was lower than expected, by splitting the data into these two groups the benefits are estimated to be around £50 million a year. Using this method there is very little difference in the payback periods across regions. The North East has the shortest payback period, estimated at 17.0 years, and the North West has the longest estimated at 21.2 years, when using the medium risk assessment for benefit.

Table 5 Cost-benefit analysis for privately rented dwellings in each Region

			Band F likelihood	100	180	320	£ 2,465				
			Band G likelihood	18	32	100	£ 7,918				
SAP 50				High risk	Medium Risk	Low Risk	Average cost	High risk	Medium Risk	Low Risk	
Region	Band F	Band G	F and G	Combined benefit			Cost to repair	Payback			
North East	9,000	9,000	17,000	£ 10,055,000	£ 5,497,000	£ 1,745,000	£ 93,447,000	9.3	17.0	53.6	
Yorkshire and The Humber	49,000	18,000	66,000	£ 25,957,000	£ 13,968,000	£ 4,795,000	£ 263,309,000	10.1	18.9	54.9	
North West	55,000	11,000	66,000	£ 19,789,000	£ 10,493,000	£ 3,859,000	£ 222,673,000	11.3	21.2	57.7	
East Midlands	53,000	14,000	67,000	£ 22,605,000	£ 12,073,000	£ 4,295,000	£ 241,497,000	10.7	20.0	56.2	
West Midlands	49,000	16,000	65,000	£ 23,900,000	£ 12,823,000	£ 4,464,000	£ 247,473,000	10.4	19.3	55.4	
South West	62,000	35,000	97,000	£ 45,562,000	£ 24,717,000	£ 8,156,000	£ 429,960,000	9.4	17.4	52.7	
East of England	49,000	19,000	68,000	£ 27,266,000	£ 14,690,000	£ 5,014,000	£ 271,227,000	9.9	18.5	54.1	
South East	82,000	45,000	128,000	£ 59,381,000	£ 32,197,000	£ 10,652,000	£ 558,440,000	9.4	17.3	52.4	
London	57,000	25,000	82,000	£ 34,945,000	£ 18,878,000	£ 6,360,000	£ 338,455,000	9.7	17.9	53.2	
All Privately rented dwellings	465,000	192,000	656,000	£ 269,460,000	£ 145,335,000	£ 49,340,000	£ 2,666,481,000	9.9	18.3	54.0	

* Assumes all dwellings will be repairable to a SAP value of 50



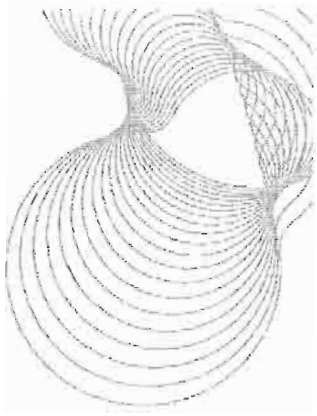


Conclusion

This report estimates the likely costs to the NHS of dwellings with F and G SAP bands and associates this, as far as possible with dwellings with Category 1 Excess cold hazards. The associated estimated cost to the NHS of poor health as a result of these dwellings is calculated using the CIEH HHSRS calculator as a total of £192 million. £35 million of which is within the private rented sector. A comparable figure for the cost to the NHS of private rented sector using the BRE Category 1 calculator puts this figure as somewhere between £37 million and £674 million dependent on the exact SAP rating and actual occupancy. The limitations of the CIEH HHSRS calculator are explained as this calculator is only effective where the housing stock is average. Further more accurate figures demonstrating the costs to the NHS from dwellings in the private rented sector are made using the BRE Category 1 cost calculator. The cost to the NHS of Excess cold in the private rented sector, using the BRE Category 1 calculator, puts this figure as somewhere between £50 million and £270 million dependent on the combination of risk likelihoods used. It is reasonable to assume that the cost to the NHS for not improving these dwellings to the average SAP level will be at least £**145 million** per annum. This is shown in **Table 6** which also gives the numbers of dwellings in each English region.

Table 6 Summary Table

Region	Number of Privately Rented Dwellings estimated to be Associated with Excess cold	Cost to the NHS of **NOT** improving these dwellings
North East	17,000	£5,497,000
Yorkshire and Humber	66,000	£13,968,000
North West	66,000	£10,493,000
East Midlands	67,000	£12,073,000
West Midlands	65,000	£12,823,000
South West	97,000	£24,717,000
East of England	68,000	£14,690,000
South East	128,000	£32,197,000
London	82,000	£18,878,000
All privately rented dwellings	656,000	£145,335,000



NOTE

There are 99,857 privately rented dwellings within the Energy Efficiency Rating (EER) band F with a SAP score above 35, which would not automatically be included within stock totals as having a Category 1 Excess cold hazard. These dwellings represent 15% of all band F and G dwellings

Alleviating Fuel Poverty in London
Joint submission to London Assembly Health and Public Services Committee's enquiry into Fuel Poverty

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1 Summary

Fuel Poverty is an issue affecting 1.05 million[1] (32%[2]) London households and is predicted to rise. An average of 3,710 Londoners die every year as a result of living in a cold home[3] and there are over 23,000 additional emergency hospital admissions and almost 93,000 additional attendances at outpatient care[4].

Cold homes are detrimental to both the physical and mental health of Londoners of all ages and all socio-economic groups. This issue has been discussed in a number of documents produced by the Greater London Authority (GLA), and the London Assembly[5]. However, new figures released by the Department of Energy and Climate Change (DECC) show that Fuel Poverty has risen in recent years and, is expected to rise further[6], largely due to rising fuel prices and other pressures on incomes.

The organisations involved in this submission feel that Fuel Poverty can and should be dramatically reduced and even eradicated in London. This is a realistic ambition, and there are actions that can be taken to achieve it through interventions regarding fuel prices, household income and domestic energy efficiency as outlined in the recommendations outlined in **Section 4**.

Appendix A highlights examples of previous work of authors' agencies on this issue
Appendix B contains case studies of local Fuel Poverty interventions from London and around the country.

[1] UKACE et al (2008) Fuel Poverty in London: Figures and tables illustrating the challenge of tackling fuel poverty- Final Report. GLA. From figure 10
[2] Denominator = 3,296,100 households in Greater London in 2011
from 2010 Round of Demographic Projections - SHLAA
Available at: http://data.london.gov.uk/datafiles/demographics/2010rnd_shlaa_hh_projections.xls
[3] Office for National Statistics (2010), Excess winter mortality by age group, 2009/10.
Available at: http://www.statistics.gov.uk/statbase/ssdataset.asp?vlnk=7089
[4] Age UK (2010), Excess winter deaths: preventing an avoidable tragedy.
http://www.ageuk.org.uk/pagefiles/2013/excess_winter_deaths_report_oct10.pdf
[5] Environment Committee (2008) Lagging Behind: Insulating London homes. London Assembly.
Mayor of London (2010) The London Housing Strategy. GLA
Mayor of London (2010) The London Health Inequalities Strategy. GLA
Mayor of London (2010) Delivering London's energy future: The Mayor's draft Climate Change Mitigation and Energy Strategy for public consultation. GLA
[6] DECC (2011) Fuel Poverty Statistics 2011. Released 14 July 2011. Available at:
http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx

2 Background and purpose

A number of the authors of this paper were present as panel guests or spectators at the recent London Assembly's Health and Public Services Committee enquiry into Fuel Poverty. A wealth of evidence and information was presented on the serious impacts of fuel poverty on London families and what has and can be done to try and alleviate it. As suggested by the Committee, the purpose of this paper is to outline the action that needs to be taken for London (**section 4**).

3 Evidence of the impacts of cold homes and Fuel Poverty

It is not the purpose of this paper to repeat evidence presented to the Committee, but a number of pieces of work completed by the author organisations are listed in **Appendix A**.

4 Recommendations for action to be taken on cold homes and Fuel Poverty for London

We have three overarching recommendations under which all our others (i-xiv below) sit. As such, we urge the Mayor to take specific actions on the following issues in the following order in the box below

Recommendation 1 - Fuel prices

Fuel prices continue to rise, without tighter controls and demands on fuel companies to keep prices affordable it will be very difficult to eradicate or reduce fuel poverty which is projected to increase. It is not sufficient to give payments to fuel poor households – these payments go to subsidise fuel companies. We urge the Mayor to lobby for action to reduce fuel prices and not to continue to subsidise energy companies.

Recommendation 2 - Household income

In times of increased unemployment and cuts to welfare spending it is very important that household incomes are sufficient to enable householders to keep their homes warm. This is a particular problem in London due to the increased cost of living in the capital. We urge the Mayor to continue his work in this area.

Recommendation 3 - Domestic energy efficiency

To address both fuel poverty and climate change it is important that improvements are made to the energy efficiency of homes, an activity that is challenging but not impossible in London. Domestic energy efficiency interventions should be based on evidence of what works from previous activities.

Appendix B highlights a number of case studies of local Fuel Poverty interventions from London and around the country. We would like to point out that despite these good examples, fuel poverty continues to rise. The following individual actions are suggested by the authors and their organisations, **they should be viewed in the context of the main overarching recommendations in the box above**

i. The Mayor should create a Roadmap to Warmth for London, setting out action required to eradicate or substantially reduce fuel poverty in the capital by a given date. The level of reduction should be established. London's boroughs through the organisation London Councils, social housing providers, private landlord representatives and others should be included in this roadmap creation.
ii. Fuel poverty should be mapped across London using the GLA's residual income definition rather than the government's full income definition which artificially inflates a household's income rather than looking at disposable income, and therefore does not give a true indication of ability-to-pay. Such an approach would give a truer picture of the incidence of fuel poverty, thereby enabling more intelligent targeting.
iii. The sharing of data on the location of fuel poor households and potential for measures is recommended on a London-wide basis to ensure that the assistance available through the

forthcoming ECO programme and other schemes is targeted as effectively as possible to avoid defraying to non-fuel poor households.

iv. A London energy obligation should be set. This should deliver funding to London proportionate to its population although additional funding to reflect London's high proportion of hard to treat homes would be beneficial. Priority for assistance should be given to low income and vulnerable households living in hard-to-treat homes. The Secretary of State has the power to set such an obligation and the Mayor should lobby him to do so.

v. Affordable Warmth Zones should be established across London with core funding from the GLA. Similar to Low Carbon Zones but focused on tackling fuel poverty in the domestic sector, these would aim to significantly improve the energy efficiency of vulnerable households. The authors would welcome the opportunity to explore a range of interventions that Affordable Warm Zones should include.

vi. With the removal of benefit entitlement checks from Warm Front assessments and significant welfare benefit changes due, it is imperative that income maximisation is retained in all schemes to address fuel poverty.

vii. NHS London and the London Health Improvement Board should take action to ensure that health and social care partners are aware of the importance of 'prescribing warmth' and that efforts are made to firmly link the fuel poverty and seasonal mortality agendas. We would suggest that programmes similar to SHINE in Islington or WISH in Camden are profiled as best practice.

viii. The Excess Cold Hazard within the Housing Health and Safety Rating System (HHSRS) scheme should be tightened to make F and G rated homes automatically Category 1 to assist fuel poor Londoners in private rented housing. The Mayor should lobby for legislation to ensure this. Cross-borough working should be encouraged and facilitated to identify and work with landlords that own large numbers of thermally inefficient properties and to share information and best practice.

ix. Figures published by the Energy Saving Trust (released on 4th August 2011) show that the five local authorities that have seen the lowest percentage of the housing stock insulated over the past three years through CERT are in London[7]. With London clearly lagging behind urgent action is needed. One simple proposal that could help to encourage a more rapid roll out for delivery would be to ensure that contractors and delivery teams under; CERT, CESP, Warm Zones, RE:NEW and other Local Authority led schemes' are exempt from certain parking and road-use charges. This would enable them to get to jobs faster as well as improving public visibility for the sector.

x. With a large number of difficult and potentially more expensive to treat properties in London, we are concerned that the Golden Rule for the Green Deal is less likely to be met for many Londoners. There is a possibility that a large share of the Energy Company Obligation will then be allocated to subsidising measures for more affluent households rather than being available to assist low income and vulnerable households, many of whom will be considered less 'credit worthy' to Green Deal providers, or who will take the savings in improved comfort rather than cost. We propose that a portion of the Energy Company Obligation is reserved for low income or vulnerable households and that the Mayor lobby for this.

xi. As social housing providers in London are unlikely to be able to use Green Deal financing mechanisms to fund the large and small scale solid wall insulation schemes needed for a significant proportion of their stock, alternative financing mechanisms are needed that do not require local authorities to significantly add to their borrowing. It is recommended that a London-wide social housing solid wall financing mechanism is developed centrally that draws in various sources of capital such as EU funding like JESSICA, Energy Company

[7] City of London (<0.1%); Westminster (0.3%); Kensington and Chelsea (0.8%); Hackney (1.3%); Hammersmith and Fulham (1.6%)

Obligations and borrowing. As the technical solutions required to address energy efficiency are not always a 'one-size-fits-all' approach, a degree of flexibility in the measures required within an Energy Company Obligation is recommended, for example replacing panels in prefabricated flats as opposed to retrofitting solid wall insulation.

xii. The Mayor and GLA should back the Friends of the Earth-led campaign for energy efficiency improvements in the private rented sector. More than 20% of London residents rent privately, compared to an England average of less than 13%, and this number continues to grow. In 2006 40% of private rented homes failed to meet the Decent Homes Standard and the energy efficiency standards of such housing continues to lag behind other tenures.

xiii. A financing mechanisms advisory service for local authorities and other social housing providers should be developed to provide expert social housing sector advice and hand-holding as well as best practice-sharing.

xiv. The GLA and London Councils should establish a London-wide affordable warmth information exchange that offers technical information, advice on installers that operate in London, advice on London-specific legal issues such as leaseholder or conservation issues, improving hard to treat homes and guidance on working with hard to reach communities.

Appendix A – Work of author's agencies on Fuel Poverty (not exhaustive)

Fernow, I. & Kolm-Murray, J. (2011), No More Lagging Behind: Securing London's Fair Share of Insulation Funding. London Carbon Action Network

Islington Council & NHS Islington (2010), Seasonal Health & Affordable Warmth Strategy. Available at: https://www.islington.gov.uk/environment/sustainability/sus_awarmth/affordable_warmth.asp

Islington Council & NHS Islington: Seasonal Health Interventions Network (SHINE) http://www.islington.gov.uk/seasonalhealth

Islington Council: IssyClad Project http://www.nea.org.uk/islington-housing-scheme-wins-environmental-award

Marmot Review Team (2011) Fair Society, Healthy Lives
Marmot Review Team (2011) The Health Impacts of Cold Homes and Fuel Poverty. London: Friends of the Earth and the Marmot Review Team.
Available at: http://www.marmotreview.org/reviews/cold-homes-and-health-report.aspx

National Energy Action (2011) NEA London Fuel Poverty Briefing. Issue 5: January 2011
Available at: http://www.nea.org.uk/assets/London-FP-Briefing-2011.pdf

National Energy Action (2011) PRESS PACK
Available at: http://www.nea.org.uk/assets/PDF-documents/Press-Pack-2011-final-England.pdf

National Energy Action have many related publications available at http://www.nea.org.uk/publication-list/, also contact Piya.malik@nea.org.uk for any further information

Appendix B – UK Case studies of local Fuel Poverty interventions

London Borough of Islington

Since the adoption of an Affordable Warmth Strategy in 2009 Islington Council has made energy efficiency improvements to over 15,000 homes, saving residents at least £1.8 million per year at today's energy prices. The borough has its own Energy Advice Team who advise over 3,000 residents of Islington and Camden each year on energy efficiency, grants available and fuel debt. From September 2011 the advice service will also cover Hackney.

The Safe & Warm grant scheme provides funding for heating and insulation improvements, and the Energy Doctor in the Home fits smaller energy saving measures such as draughtproofing and radiator panels. The Energy Doctor in the Community visits community venues and delivers workshops on draught proofing, curtain lining, managing energy bills and keeping cool in the heat.

Islington's housing stock is primarily solid-walled or otherwise hard to treat and a project is being run at present to insulate a number of Victorian properties. Extensive mapping is being carried out of the borough's housing stock to identify areas for potential joint programmes with other social landlords. A large-scale solar energy scheme is also planned.

The Council is starting a project focussing on vulnerable people in poor private sector housing in one of the most deprived wards of the borough, Finsbury Park. Community groups and health providers will be involved and proactive surveys of properties will be undertaken to find those properties where hazards, including excess cold, exist.

In December 2010 the Council and PCT started a comprehensive and integrated programme to tackle fuel poverty and reduce excess winter deaths and hospital admissions. Vulnerable residents are referred by health, social care and voluntary sector partners through the Seasonal Health Interventions Network (SHINE). They are then assessed for a range of 23 interventions such as affordable warmth, benefit checks, falls assessments and medicines use reviews. By the end of July 2011 615 referrals had been received leading to thousands of health and wellbeing interventions. The project has secured NHS Reablement Funding as a cost-effective means of delivering large numbers of preventative interventions to vulnerable residents with a history of admissions or a significant risk of admission.

Kent County Council

Kent County Council and other partnership agencies are working together to produce a single and effective referral point for Kent residents to maximise the energy efficiency of their home and reduce fuel poverty. Current systems operate disparately and in silos offering different schemes depending on a number of factors which make it confusing for residents to understand what support is available.

There are also a large number of agencies (eg. Kent Fire and Rescue Service, Home Improvement Agencies, Age Concern, Kent Benefits Partnership, Pensions Service and Occupational Health), providing in-home support and advice for Kent residents, primarily targeted at the elderly, vulnerable and those living in poor housing. Whilst the level of in-home support is very high (over 50,000 visits per annum), the level of complimentary referrals generated for energy efficiency is extremely low. Where referrals are generated it is mainly dependent on individual officers rather than a formal system, but all the agencies contacted for the report perceived that a single referral process for Kent would be a positive development.

Portsmouth City Council

The project was undertaken to educate people working with vulnerable older adults to impact on mortality rates in the winter time and that these deaths could potentially be avoidable.

The training itself raises awareness of the health challenges faced by people not appropriately protected from the cold in their own homes.

****the following examples were collated by the Local Government Association[8] and reprinted here with thanks to Abigail Burridge****

Burnley Borough Council
In 1998, Burnley Borough Council introduced the 'CRISP' scheme to reduce the incidence of fuel poverty, improve standards of energy efficiency and improve the health and welfare of households in the Borough.

In 2000, Burnley Borough Council was providing grants of up to £800 to improve the homes of residents aged over 60 or on means-tested benefits, in addition to Warm Front grants. In 2004, the CRISP scheme became part of the Burnley 'Switch into Savings' scheme, integrating a number of different private sector energy efficiency and heating initiatives into one programme. The £150,000 per year 'CRISP' grant programme is targeted at wards with the highest levels of fuel poverty on a ward-by-ward, street-by-street basis. The programme also provided a subsidy to reduce the cost of loft or wall insulation for all residents to £75.

The CRISP scheme has contributed significantly towards achieving Burnley's Home Energy Conservation Act target of target of a 30% improvement over 10-15 years by 2011[i]. It acts as a 'safety net' for households in fuel poverty whom may not be eligible for the Governments Warm Front grant that is worth up to £2,700. Since 1998, a total of £1,6 million has been spent on the scheme improving the energy efficiency of 5,252 Burnley households. This includes 3,467 lofts insulated, 1,724 cavity walls insulated, 1,727 houses draught proofed and 878 hot water tanks insulated.

London Borough of Croydon
Since 2006, as part of a scheme run with British Gas, Croydon Council residents can insulate their cavity walls or lofts at a discounted price and receive a £100 credit toward their next year's council tax bill. The rebate is part funded by the Council (£40) and part by British Gas (£60)[ii]. Nearly 1,300 households have taken up the offer, resulting in annual emissions savings of more than 210 tCO2.

South Lakeland District Council
For ten years, South Lakeland District Council has operated a local energy efficiency scheme. All private sector households which contain someone who is over 60 or under 16 years of age are able to access free loft and cavity wall insulation. All private rented households are also eligible

The scheme is very successful, not only tackling fuel poverty issues, but also reducing carbon emissions. South Lakeland has over 8000 households off the mains gas network, with significant use of carbon rich oil and coal for space heating[iii].

[8] Local Government Group (2001) Warm and healthy homes: How councils are helping householders improve the energy efficiency of their homes
Available at: http://www.local.gov.uk/c/document_library/get_file?uuid=fa7ecd27-9571-4d30-bb20-a267870461a6&groupId=10161

In the last financial year, works have been carried out at 745 dwellings at a cost to this Council of £192,400 and an estimated carbon dioxide saving of 438 tonnes each year.

Greater Manchester

The UK Public Health Association and Greater Manchester Fuel Poverty Initiative[iv] has established a central point of contact for fuel poverty and other housing-related referrals, with the aim of reducing health inequalities by improving energy efficiency and housing conditions. The Affordable Warmth Access and Referral Mechanism[v] (AWARM) brings together the services and grants available from councils, central government and energy suppliers to better target vulnerable people identified by primary care trusts, social services and third sector organisations.

Since April 2008, 1,350 households have been referred to AWARM and have received a range of services including energy advice and Warm Front[vi] grants. Referrals have led to heating and insulation installations with a value of more than £650,000 that will deliver lifetime fuel bill savings exceeding £2.1 million

Blackpool City Council

Blackpool has been working in partnership with NHS Blackpool to find their residents most vulnerable to the effects of fuel poverty by including information in the NHS flu-mailing lists. This has been very successful. Blackpool are seeking to build on this success by linking up with local GPs to pilot direct referrals of vulnerable people to local energy efficiency and insulation programmes.

Blackpool has found that a very high number of vulnerable residents live in private rented accommodation, often in the most deprived wards of Blackpool. The majority of these properties are classified as hard to treat and in poor condition, and are also inhabited by older residents on low incomes. A jointly funded initiative between Blackpool Council, NHS Blackpool and Age Concern, is the 'Counter Attack Services[vii]' sitting within Blackpool's Care & Repair Agency. 'Counter Attack' provides a complete service to vulnerable residents by providing them with benefits advice, completing applications with them to maximise their income, giving fuel provider advice, energy efficiency advice, home safety checks, as well as many other services that Care & Repair offer. The partnership has just received funding from Scottish Power to fund outreach staff to set up a network of energy champions to provide further health and other advice to Blackpool's most vulnerable residents.

The Council considers itself in a unique position to deliver on health and environmental agendas. They have the data and understanding of what is required in the area, where the worst properties are and with the most vulnerable residents. Blackpool Council has access to ownership details and has no other agenda other than improving housing stock and life chances of their residents.

Sheffield City Council

Sheffield City Council are offering free insulation to thousands of private homes in an ambitious initiative to reduce the city's carbon footprint and cut fuel poverty among local people. The scheme is being rolled out on an area by area basis. However, the Council want to fast track those people who need it most across Sheffield. Therefore, those aged 70 or over - or on qualifying benefits - are also eligible, wherever they live in the city[viii].

Since the scheme started in April 2009 Sheffield has signed up nearly 28,000 households across the city. Over 13,000 households across Sheffield have received installations. Working with Eaga Insulation (now Carillion Energy[ix]), they've identified or installed 4,622 cavity walls and 12,042 loft insulation measures so far.

By insulating homes the Council aims to prevent cold related diseases and reduce the number of winter deaths from fuel poverty.

The project aims to cover the whole city, ward by ward, street by street over the next few years.

The scheme is being funded by the Council, alongside funding for Carbon Emission Reduction Target (CERT) which has come from the Council's partner Scottish Power. Residents wanting to benefit from the scheme simply need to contact the council on a free contact number. The rest is done by the Council – absolutely free!

Worcestershire County Council
Worcestershire is a predominantly rural county with some large urban centres. Some of their rural areas are off-grid, and so rely exclusively on heating oil, LPG, or solid fuel to heat their properties. Worcestershire predicts that over a quarter of their population will be over 60 years of age by the end of 2011.

In 2008 Worcestershire Council started the 'Warmer Worcestershire' project[x]. This project conducted a thermal image aerial survey of the County to promote the work of the project. This information was invaluable in helping the council talk with the public and helped engage local residents with the issue of energy in their area.

Each District Council in Worcestershire collects benefit data which is cross-referenced with the worst performing properties on the thermal imaging map. This allows the council to identify householder and who may be at greatest risk from fuel poverty. These householders are then given information on grants and how to improve their properties. Worcester City Council housing is provided grants for free installation to properties in a deprived area of the city, personally inviting each resident to take up the offer.

Kirklees Council
Kirklees has used Energy Performance Certificates (EPCs) generated from re-lets of privately rented properties to identify areas of fuel poverty in their privately-owned housing stock. To do this, Kirklees has used a sample of 2500 EPCs and has looked properties with a SAP rating of under 65 SAP, assuming that any properties below this rating could be experiencing fuel poverty. Even with Kirklees' extremely successful free home insulation programme, their figures have shown that approximately 13% of the private housing stock is at risk from fuel poverty. Kirklees has an ambition to treat all properties in fuel poverty by 2015.

Kirklees is running an external cladding scheme for non-traditional properties and have a gas-heating replacement scheme targeted at inefficient systems. Kirklees has also developed a scheme to deliver 1000 solar panels for fuel poor properties, (those below SAP 65), starting in summer 2011.

In partnership with Kirklees Neighbourhood Housing, Kirklees Council is proactive in its fuel poverty and climate change ambitions, supporting and authorising funds for schemes from their capital resources. This helps bring in funding from other sources, such as Energy Supplier Obligation funds and European Regional Development Funding (ERDF).

London Borough of Sutton
Sutton council has adopted a highly ambitious vision to become a One Planet Living Borough[xi]. This includes a target to become zero carbon by 2025. A number of innovative programmes are underway to identify how borough wide retrofits of energy efficiency measures can be implemented - especially for hard to treat homes with solid walls which makes up most of the boroughs housing

stock. As part of this work Sutton piloted a Pay as You Save[xii] scheme which installed energy efficiency measures (including solid wall insulation) for homeowners through an interest free loan. The findings of the pilot will feed into the Government's new Green Deal scheme[xiii].

Since 2006 Sutton has helped residents tackle fuel poverty by providing grants for energy efficiency works through its Coldbuster scheme[xiv]. Sutton also provides empty property grants, to upgrade the energy efficiency of homes. Currently Sutton is delivering a scheme of residential energy audits and funded energy efficiency measures under the Hackbridge Low Carbon Zone Scheme[xv], so far the scheme has provided 2,365 energy efficiency measures since it began last year.

A similar government funded area based energy efficiency programme under the banner of Re:NEW[xvi] is also planned for later this year in the North Cheam/Worcester Park area. Within Hackbridge, Sutton council is working with developers to deliver a heat network to the area which will help reduce CO2 and energy costs to local residents. Within the social housing sector work is currently underway to implement a scheme to provide solar PV to all suitable housing which would provide the occupants with free solar electricity.

Cheshire West and Chester Borough Council
Chester West and Chester is developing its Affordable Warmth Strategy which will draw on data from the Homes Energy Efficiency Database[xvii] (HEED), the local Private Sector Stock Condition Survey[xviii] and other local sources of data including council tax benefit recipients and Primary Care Trust (PCT) data on excess winter deaths. They currently offer grants of up to £100 towards the cost of both cavity wall and loft insulation to households where someone is aged between 60 to 69, not in receipt of "priority group" benefits and the property is in council tax bands A to D.

London Borough of Camden
The make-up housing in Camden is predominately solid wall, so they have more "hard to heat" homes than the average. Camden also has a high percentage of private renters who are difficult to reach and identify as they are highly transient.

In targeting their Camden energy efficiency grants, Camden uses the CERT criteria for vulnerable people, and to understand the fuel poverty problem across their borough, they use DECC COA data and information from their 'Small Steps Sustainability Helpline'. The Council has both private sector energy efficiency and renewable energy grants and another energy efficiency grant for social housing, outside the repairs and maintenance budget. The Council has also installed cavity wall insulation in almost all of their cavity-walled blocks of council flats, funding the programme of works using a mixture of their own funds, CERT and grant funding. Camden also allocated £1.15M to install cavity wall insulation in privately owned blocks of flats in the borough.

In addition to these insulation schemes, Camden runs a scheme called WISH (Warmth, Income, Safety, Health) Plus for vulnerable residents[xix]. WISH works as an umbrella referral service, offering residents a range of services delivered by the Council as well as other organisations relating to warmth, income maximisation, safety and health. This scheme is funded by NHS Camden and costs £93k per year. Organisations offering services and support sign up to become WISH partners. Vulnerable residents can self refer to WISH or they can be referred by a WISH partner. In the last three quarters WISH plus referred almost 4000 residents onto support services, 620 of these were referred onto an affordable warmth services.

Walsall Council
Walsall is targeting households with low income (under £21K) in their 'Health Through Warmth Grant[xx]', in partnership with NPower and Walsall NHS, to tackle fuel poverty, cold related illnesses

and excess winter deaths. The scheme trains a wide range of workers, who visit people in their homes, to establish whether the clients they are visiting are suffering ill health as a result of living in a cold damp home.

This way of identifying those at risk from fuel poverty is preferred by the council to the requirement for households to be on a means-tested benefit, as poorer households that do not receive or apply for these benefits often miss out on grant aid. They also rely on referrals from local organisations including health services, Sure Start and Age UK.
The scheme also trains people such as health professionals, housing staff and community workers to recognise that the clients they visit are seriously ill, made worse because they live in a cold/damp home.

Bolton Council
Fuel poverty in Bolton is recognised as a health issue – with life expectancy falling behind other parts of the country. This reduced life expectancy is caused by circulatory disease and respiratory disease (linked to fuel poverty) as well as some other causes.

Bolton has an energy efficiency scheme for the whole borough, but has also been leading on an area-based scheme to address fuel poverty, prioritised through the mapping of indices of multiple deprivation. This is in addition to a general scheme for the whole borough.

Bolton's PCT Public Health team have been involved in developing Bolton's Affordable Warmth Strategy, which was taken forward by the Health and Well-being Partnership of the Bolton Local Strategic Partnership. Health professionals of all disciplines have been trained in identifying fuel poverty, including health trainers, GPs, District Nurses, Midwives, etc. GPs can prescribe referrals to an energy efficiency advice centre with grants available for home energy efficiency improvement.

Eastleigh Borough Council
To satisfy its commitment to operate on a virtual carbon neutral basis by the 2012 Olympics, Eastleigh Borough Council has allocated over £50,000 per year for the past 4 years to the CarbonFREE scheme[xxi]. Residents who are not otherwise eligible for free home insulation under national CERT schemes are offered either loft or cavity wall insulation, or both, at no cost.

This year the scheme is focussing particularly on helping to facilitate the insulation of both privately rented dwellings and large blocks of flats, where there are many vulnerable households who are in fact eligible for free insulation but have been unable to convince other – non-eligible - tenants to pay their share. Eastleigh Borough Council are covering the costs for the flats not eligible under CERT, and thus enabling, so far, one block of 20 flats, and another of 12, to have cavity wall insulation installed.

So far under CarbonFREE around 200 individual homes have been insulated, and another 250 households, including those in blocks, will benefit.

In addition, in 2010, Eastleigh Borough Council invited two local partners, the Wheatsheaf Trust[xxii] and the Environment Centre[xxiii], to assist in organising a young persons' loft insulation training scheme. Support was obtained via the Future Jobs Fund[xxiv] and Scottish Power to offer to local residents who were over 60 both a loft clearance service and free insulation, even where they would otherwise have had to pay.

Finally Eastleigh is now a partner in the Hampshire wide area based insulation (ABI) scheme, 'Insulate Hampshire!, which is to be launched this summer. Under the scheme residents will be

offered both loft and/or cavity wall insulation for only £99, and Eastleigh Borough Council will share the excess costs with Hampshire County Council.

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[i] http://www.burnley.gov.uk/egov_downloads/Switch_onto_Savings_Appendix_1_26-09-06.pdf
[ii] http://www.keepcroydonwarm.org.uk/council_tax_offer.htm
[iii] http://www.southlakeland.gov.uk/services/housing/grants-for-private-properties/save-money-on-fuel-bills.aspx
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[v] http://www.partnersinsalford.org/AWARM.htm
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[vii] http://www.ukpha.org.uk/media/2917/A17.2%20G.Agboado.%20%20A%20Project%20Counter%20Attack..pdf
[viii] http://www.sheffield.gov.uk/in-your-area/housing-services/environmental-sustainability/free-insulation-scheme
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[x] http://www.warmerworcestershire.com/
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[xxiv] http://campaigns.dwp.gov.uk/campaigns/futurejobsfund/pdf/fjf-guide.pdf

Sub-023

Thank you for allowing us to make this submission, we very much appreciate it.

In summary, our overarching recommendations are

Recommendation 1 - Fuel prices

Fuel prices continue to rise, without tighter controls and demands on fuel companies to keep prices affordable it will be very difficult to eradicate or reduce fuel poverty which is projected to increase. It is not sufficient to give payments to fuel poor households – these payments go to subsidise fuel companies. We urge the Mayor to lobby for action to reduce fuel prices and not to continue to subsidise energy companies.

Recommendation 2 - Household income

In times of increased unemployment and cuts to welfare spending it is very important that household incomes are sufficient to enable householders to keep their homes warm. This is a particular problem in London due to the increased cost of living in the capital. We urge the Mayor to continue his work in this area.

Recommendation 3 - Domestic energy efficiency

To address both fuel poverty and climate change it is important that improvements are made to the energy efficiency of homes, an activity that is challenging but not impossible in London. Domestic energy efficiency interventions should be based on evidence of what works from previous activities.

We have also included further actions that can be taken in our paper.

I know that the authors of this paper would be happy to answer questions on our submission, so if you require any further clarification or information from us, we would welcome the opportunity to further support the London Assembly to eradicate Fuel Poverty in the capital, and nationally.

Very best wishes

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Wilberforce school in My Back Yard Project

Summary of survey results on the impact of high cost of energy bills on low-income families in Queen's Park, Westminster

Background

In 2010/11 children from two classes in Year 5 at the Wilberforce primary school participated in a Save the Children In My Back Yard programme. In My Back Yard (IMBY) is an innovative, grassroots programme which empowers young people and families living in areas affected by poverty to make a genuinely positive impact on their lives and the lives of others in their communities.

In Wilberforce school, one of the classes involved in IMBY decided to run a campaign around the impact of the cost of utilities bills on low-income families which they recognised to be an important issue in their local area. As one of their campaign actions, the group decided to design and conduct a consultation survey with local families in order to find out what impact utilities bills have on their family lives.

The class designed the questionnaire and distributed copies to other Wilberforce students asking them to pass these on to their parents to be completed. This is a summary of the survey results, along with the recommendations which the project group came up with in response to the problems highlighted in the survey and in their own experience.

Wilberforce school is located on the edge of Mozart estate in Queen's Park, North Westminster which has particularly high levels of deprivation. Queen's Park has the SOA (Super Output Area) with the highest level of child poverty nationally. Mozart estate is one of the largest residential areas in Queen's Park with approximately 2000 residents. Parts of the estate have been recognised as home to the worst child poverty in the country.

Designing the survey

The group focused on the following issues for the survey:

- Identifying whether families found the cost of their bills as high, average or low
- Determining how, if at all, the cost of bills impacted on their family lives
- Identifying if families were actively trying to save on bills and in what ways
- Identifying the level of need and interest for participating in a training session on energy-saving (one of the campaign actions which the group was planning to undertake)

Survey results

The class distributed around a 100 questionnaires and received responses from 66 families. 58% of them indicated that their utilities bills were too high and thus, taking money away from other family expenses. When asked how the bills were affecting their lives, the following reasons were frequently given: can't buy latest things/ lots of things, can't go on holiday, can't afford the bills.

Selected quotes from parents:

How does the cost of bills affect your family?

"We are in debts always"

"The higher the bills, less money to spend on food or clothes; we have to keep an eye on our spending before having to look for a loan"

"I think sometimes take from the family daily budget and save from other expenses to pay the bills"

"We survive because we have no other choice"

"Need to cut down on other luxury goods like spending less on going out, clothes and organic food"

"I have to budget a lot, and try to save what I can and find it hard to bring the children on holidays and buy school uniforms"

At the same time, 77% of respondents indicated that they were actively doing something to save energy in their homes and thus, reduce the cost of their bills. The most common examples of actions undertaken involved: turning off lights/ sockets/ other appliances when they were not used (62%) and using energy-saving bulbs (14%).

27% of respondents indicated their interest in participating in energy-saving training with particular need for the following elements to be included in the training: energy efficiency advice, information on grants and home improvements, fuel switching and getting the best deal, advice on how to talk to fuel suppliers and information on initiative in community and how to get involved.

Recommendations from the IMBY group

Having familiarised themselves with the results of the survey, the group have decided to come up with a number of recommendations for the government and the major UK energy suppliers in order to create support mechanisms for low-income families who struggle with the cost of bills. These included:

- Companies should help low income families to save money on their energy bills by giving discounts on special occasions such as winter, when many people will need to use their heating and require a discount.
- Companies can help save money by investing in energy saving equipment and technology.
- Companies and/ or Local Authorities need to invest in more information classes for families on how to save on their utilities bills.
- The government should give financial support for elderly, disabled and low income families to help them keep up with their energy bills.

British Gas Response to London Assembly Health and Public Services Committee

June 2011

Executive summary:

Over the last decade, considerable effort has been made to eradicate fuel poverty in the UK at both Government and non governmental level. Since 2005, £20bn has been spent in providing benefits and energy efficiency to assist the fuel poor whilst combined Government and energy supplier funding currently amounts to around £4bn per annum. Yet 20% of homes are still in fuel poverty and energy bills are likely to continue to rise to pay for climate change policies.

We share the view of many commentators that there needs to be a fundamental review of fuel poverty so that the money available to spend on the fuel poor is more effectively targeted and support the announcement by DECC of the Hills Fuel Poverty Review. Against the backdrop of tighter public spending it is essential that the resources that are available are targeted at those who need the support most. For example, £2.1bn is spent on making winter fuel payments to pensioners when only 18% of the 12 million pensioners who receive them are estimated to be fuel poor.

Energy suppliers are also seeking to better target the assistance they provide their customers. We welcome the Government's progress on data sharing on pensioners on Pension Credit. From 1st April 2011, pensioners on pension credit can receive a rebate on their electricity bill under the Warm Homes Discount Scheme as well as free energy efficiency measures under our CERT programme. We hope that the data sharing measures will be extended further so that other groups of customers such as low income families and the disabled can benefit from our programmes.

Social tariffs and rebates are important in helping our most vulnerable customers. However they will only ever be a sticking plaster solution. Indeed, these will inevitably be funded by all the other energy consumers, putting overall bills up and putting more people in fuel poverty. It is right that specific tariffs are available for certain vulnerable, low-income customer groups to support them in managing their fuel bills. However it is questionable how far the household energy bill should be used as an instrument of wealth redistribution, particularly given its regressive nature.

Ultimately we believe that energy efficiency is the only durable solution to ensuring warm, well-lit homes. British Gas stands ready to deliver energy services to our customers and to radically improve the energy efficiency of Britain's homes. The energy efficiency of social housing is a particular priority given the higher levels of households on lower incomes and the relatively inefficient housing stock. Partnerships between local authorities and energy suppliers will be important to address this gap. Local authorities have 'on-the-ground' knowledge about the communities they operate in meaning they have the potential to play an important co ordination role in the delivery of energy efficiency, particularly by highlighting lower income areas. Programmes such as CESP are an important precedent and lessons from this programme should feed into the development of ECO which will replace CERT and CESP at the end of 2012.

Introduction & Context

1. British Gas is the largest energy supplier in the UK, supplying over 12m customers with gas and electricity, as well as being the largest supplier of energy efficiency. As such we recognise our responsibility to support those customers that struggle to pay their energy bills. We do more than any other company and in doing so have gone beyond our three year Voluntary Agreement with the Government. We believe that, with a future outlook of increasing energy prices it will become an increasingly difficult task to reduce the number of households living in fuel poverty, estimated today to be around 5 million.

2. The original fuel poverty targets, set down in the 2000 Warm Homes Act, were conceived in a very different energy world. Liberalisation of the energy markets had helped keep energy prices low and in so doing helped support the dramatic initial reductions in the number of people considered to be in fuel poverty. However, since 2004 the UK has become a net energy importer opening up the UK's domestic energy sector to the pressures and volatility of international energy prices. Since then a rise in energy costs has led to increasing numbers of homes in fuel poverty. This is despite over £20bn being spent to help tackle this issue, from Winter Fuel Payments to Warm Front, and from Social Tariffs to CERT and CESP supplier obligations.

3. Energy prices in the short, intermediate, and long terms are subject to upward pressures. As the UK becomes a net importer of gas we are more exposed to volatile global commodity prices, and as the global economy recovers, there will be an increase in global gas demand pushing prices up. This is also combined with the joint threats of energy security and climate change. In order to ensure that there is sufficient energy to meet demand, and to decarbonise the power sector it is estimated that between 2010 and 2020 the UK requires in the region of £200bn of infrastructure investment[i]. This scale of investment will have an impact on the price of energy paid by the consumer. Ofgem, as part of its Project Discovery work in 2009, predicted that by 2020 the average energy bill would be 23% higher, but included a peak of around 60% by 2016. These increases will inevitably have a significant impact on those in fuel poverty.

4. A significant problem in achieving these targets is the definition itself. The way in which fuel poverty is defined places an unnecessary bias on the role of energy prices. For example, if an individual household had an income of £1,000 a month and a £120 (12% of income) fuel bill they would be considered to be in fuel poverty. If this fuel bill were to be reduced to £95 (a £25 reduction leading to 9.5% of income spent on fuel bills) they would no longer be considered to be in fuel poverty. If instead the household received £25 in benefits, increasing income to £1,025 and the bill remained at £120 (11.7% of income) then the household would remain in fuel poverty. In both scenarios the house hold is £25 better off, but only one is taken into account when measuring the impact of fuel poverty programmes. This places too great an emphasis on the role of the energy bill within this debate

and detracts attention away from the importance of energy efficiency and benefits uptake. Despite the material difference to the household remaining the same in both scenarios, the fuel poverty definition does not acknowledge this. So although benefits payments will have a material impact on the economic wellbeing of the household, they will have far less of an impact on whether the household fits within the current definition of fuel poverty.

5. It is crucial, particularly in these financially constrained times that resources are focused on where they have most impact. One of the key barriers to directing resources was that Government was unable to share data with energy suppliers as to which customers were on relevant benefits. We welcome the Government's progress on data sharing on pensioners on Pension Credit. From 1st April 2011, pensioners on pension credit can receive a rebate on their electricity bill under the Warm Homes Discount Scheme as well as free energy efficiency measures under our CERT programme. We hope that the datasharing measures will be extended further so that other groups of customers, such as low income families and the disabled, can benefit from fuel poverty programmes.

6. According to the Policy Exchange Report, *Cold Comfort*, of the £2.7bn spent on Winter Fuel Payments (WFP) in 2009/10, £2.2bn is estimated to go to non-fuel poor households. Indeed there are as many households in receipt of the WFP in the top income decile as in the bottom. The Fuel Poverty Advisory Group, the NAO, the EFRA and DECC Select Committees, and think tanks Reform and Policy Exchange have all called for better targeting of the WFP. If the **£2.1bn were directed at the 5m fuel poor households, it would amount to £420 a year per household; almost half the average fuel bill**. In addition, there are estimated to be £5bn in unclaimed pensioner benefits, and billions of further unclaimed income related benefits. These, plus the WFP could pay the entire fuel bill for millions of households.

12. Energy efficiency measures are widely accepted as being the most effective and sustainable way of tackling fuel poverty and as prices rise the focus will increasingly be on energy efficiency. Poor insulation means that £1 in every £4 currently spent on heating UK homes is being wasted. According to the Energy Saving Trust loft insulation can save customers on average £145 per annum, and cavity wall insulation can save £110 per annum, and further considerable savings can be made from taking simple energy efficiency steps. The success of British Gas in delivering energy efficiency is underlined by an independent report from the CEBR that analysed over 40m British Gas customer meter readings over a period of five years and found that our customers had reduced their gas consumption by, on average, 22%, with some customers reducing consumption by as much as 44%. Through our Green Streets programme the IPPR reported that a combination of energy efficiency and behavioural change can see energy consumption decrease by 25%.

13. British Gas is changing its business model from a gas and electricity company that also provides services to a services company that also provides gas and electricity. British Gas is already the leading supplier of energy efficiency and microgeneration

as well as being the leading provider of smart meters to our customers. The aim of our future business is to help customers manage their energy consumption rather than sell them more units of energy. This business model, along with our unique delivery assets (such as our 10,000 strong engineer force) means we are best placed to understand and manage our customers' energy needs.

14. The future roll out of **smart meters** will empower customers to see how much energy they are using in real time and enable people to be more energy efficient. This roll out is a once in a generation opportunity to also provide energy efficiency audits of homes around the country so that the information provided by a smart meter can be acted upon. It will also provide a useful process for ensuring that fuel poor customers are encouraged to seek help that they require, either directly from their supplier or via other benefits routes.

15. The **Community Energy Saving Programme** (CESP) is an obligation on supplier and electricity generators on a community basis. It has been particularly successful in 'fuel poverty proofing' homes and communities in deprived areas. The total obligation is £350 million, and British Gas will contribute £70 million. CESP promotes a "whole house" approach i.e. a package of energy efficiency measures best suited to the individual property and community. The programme is delivered through community-based partnerships between Local Authorities, community groups and energy companies, via a house-by-house, street-by-street approach. This partnership working allows CESP to be implemented in a way that is best suited to individual areas and coordinated with other local and national initiatives. British Gas believes that this kind of partnership working offers an effective approach to the roll out of energy efficiency. British Gas can bring a wealth of experience in how to implement home energy efficiency and local authorities, housing associations and third parties can provide the expert knowledge of the local area. CESP is expected to deliver annual average fuel bill savings for those households involved of up to £300. This programme is still being rolled out and can be a prototype approach to how future energy efficiency roll out may be targeted at areas of high levels of social deprivations, for example in shaping the 'Energy Company Obligation'. We are now working with around 60 communities around the country to develop more suitable projects including in rural areas and areas off gas grid.

16. Under the **Carbon Emission Reduction Target**, and its predecessors, suppliers have consistently delivered energy efficiency savings to their customers at least cost. 40% of the target has been focused on a priority group. Furthermore suppliers have applied much innovation to increase take up of energy efficiency. For example the British Gas "here to Help" scheme which has helped over 320,000 households with a range of energy efficiency solutions, income maximisation options and social measures to tackle the root causes of household poverty working in conjunction with 5 charity partners. We also encourage all our customers to complete our on-line Energy Savers Report (ESR) which provides a free energy audit of the energy efficiency of their home. The ESR shows the savings customers could make for the improvements recommended. Over 2.2

million customers have completed the ESR with an average recommended energy saving of up to £175. We have been hugely successful in encouraging a mass take-up of energy efficiency products by British households in the last five years, and have supported the delivery of over 100 million products, including the insulation of more than 1.5 million homes.

17. The future of energy efficiency delivery, as programmes such as Warm Front are wound down, is the Government's Green Deal. This enables customers to gain access to energy efficiency measures at no upfront costs, and then repay the costs through savings made in the energy bill. The "golden rule" of the Green Deal is that no repayment should ever surpass the costs of the savings of the energy bill. British Gas is fully supportive of the Green Deal and believes it could be a transformational step change in the world of energy efficiency. However, we also agree that Green Deal finance may not be suitable for a all households such as those that require more complex and expensive technologies. Fuel poor households may not find Green Deal financing suitable for numerous reasons, such as simple debt adversity, or they will take the savings as extra warmth. For this reason we further support the introduction of the Energy Company Obligation, to build on the success of previous supplier obligations. We believe that lessons should be learnt from CERT and CESP in how best to deliver this new obligation. Suppliers should remain at the heart of delivery, as it is an obligation on suppliers, and it should look to give greater flexibility in terms of technologies and targets. This will enable fuel poor homes to get the right support for the right property.

Area of work	Project	Detail
CESP	Tower Hamlets	Treves and Lister: we have installed External Wall Insulation (EWI), replaced old boilers with energy efficient ones as well as installing flat roof insulation.
	Barking & Dagenham	Harvey & Bowers House: we have installed External Wall Insulation (EWI), replaced old boilers with energy efficient ones as well as installing draft-proofing and loft insulation.
	Hammersmith & Fulham	Edward Woods estate: We are installing external and cavity wall insulation, flat roof insulation, boiler replacements (where current

		boilers are G rated) and Solar PV on three high rise blocks.
	Southwark	Southwark Low Carbon Zone: we have installed External Wall Insulation (EWI), replaced old boilers with energy efficient ones as well as installing solar thermal systems.
CERT	BGCE has allocated 18% of their CERT spend to be deployed in London and the South East, and we have recruited 2 ESM's to specialise in CERT and CESP funding in the Greater London area.	At present, we have funding contracts with 15 London housing organisations to provide CERT funding and are actively engaging.
Low Carbon Zones	Southwark: Solar Thermal, Central heating installations, Solid wall insulation, draft proofing	Southwark's Low Carbon Zone covers almost 240 buildings, including a school and a community centre. To date, we have installed solar thermal systems, central heating systems, solid wall insulation and draft proofing.
	Lewisham: Loft and cavity insulation, energy efficiency advice, small measures as part of an energy expert lead program	The Low Carbon Zone in Lewisham had a wide and challenging range of buildings to assess for energy efficiency. It included 850 households, three tower blocks, two schools, the main fire station, a hospital, and a mortuary. As part of an Energy Expert lead programme we've already installed loft and cavity wall insulation, small energy efficient measures and given whole house energy assessments.

	Richmond: Solar PV as part of our ”Green streets” communities program	The Borough of Richmond upon Thames aims to be ‘the greenest borough in the capital’. British Gas has been part of this ambition from the start. As part of our Green Streets programme, we installed Solar PV, provided discounted energy saving products to homes and tips about how to live a more sustainable lifestyle.
	Barking & Dagenham: EWI, boilers, loft, draft proofing as part of a CESP scheme	As part of a Community Energy Saving Programme (CESP) at Harvey & Bowers House, we have installed External Wall Insulation (EWI), replaced old boilers with energy efficient ones as well as installing draft-proofing and loft insulation. All households will receive a free energy assessment from one of our Energy Experts who will also make recommendations about ways to save energy and money, and how to go about getting energy improvement grants.

1) What action are London's energy suppliers taking to target fuel poverty among vulnerable groups?

HELPING VULNERABLE AND FUEL POOR

- British Gas is keenly aware of our responsibilities towards our more vulnerable customers. Supporting those most in need and contributing to developing communities is crucial to making a difference during these difficult economic times. Through working with charities, partners and employees, we channel our support to those suffering real hardship.

Here to Help

- We are helping more than **1.6 million** disadvantaged customers through our tailored support programmes at British Gas. We're proud of our results. Our Here to Help programme helps over **300,000** of our most vulnerable and low income customers through discounted bills. In 2010, we helped **983,000** low income customers receive advice on tackling their energy debts and **542,000** priority group customers benefited from our energy efficiency products and services.
- We offer extra support to our customers, especially those that are:
  - Aged over 60
  - Disabled or living with a chronic illness
  - In receipt of means tested benefits with children under 5
- A summary of our services:
  - **Priority Register:** We work to proactively identify vulnerability and provide a continuous supply and will never knowingly disconnect a vulnerable customer. We ask customers to tell us if anyone in their homes relies on electrical medical equipment, such as a dialysis or breathing-support machine, and endeavour to provide our customers advance notice if there are planned interruptions to their electricity supply.
  - **Secure password process:** Our password security system is available for our customers that are concerned about opening their door to strangers. Customers need to choose a memorable word, and we arrange for our representatives to use this password when visit.
  - **Moving customer meters:** We want to make sure our customers pay the right price for their energy, and it's important that they can read their meters easily. If a customer finds it difficult to reach their meter, we may be able to move it to a better position.
  - **Free Gas Safety Checks:** We offer a Free Gas Safety Check to customers eligible for our Priority Register.

- **What the check covers:** We look at our customer's gas installation and appliances and make sure that they're safe for continued use. We will also carry out a detailed examination of all free-standing gas fires, appliances and fittings.
- **Eligibility for a Free Gas Safety Check:**
  - They (or someone they live with) are over 60
  - They (or someone they live with) are disabled or are living with a chronic illness
  - A child under 5 lives in the customer's household
  - They receive a means tested benefit

- **Discounted Schemes**
  - We work closely with DECC and DWP to identify our customers most at risk of fuel poverty so that we can apply rebates on their electricity accounts to help them with their winter bills, and to provide ways in which they can save energy and money.
- **Expert advice on benefit entitlement and signposting to relevant agencies**
  - We help customers to claim government benefits that they may be entitled to by providing free benefit assessments.
- **Accessibility for all**
  - If customers have difficulty reading their gas and electricity bills, we can send them in large print, Braille, or audio. We also have a Textphone service and provide interpreters for customers who would prefer to speak in a language other than English.

HELPING CUSTOMERS IN DEBT

- We have improved our visibility of customers' ability to pay by aligning our debt recovery to credit risk information, shared via Experian. This enables British Gas to understand how customers pay their bills, & how their credit rating is affected, enabling us to align them to an appropriate collections activity and customising the level of contact & types of contact with customers who may be struggling to pay.
- Disconnecting customers is an exceptional occurrence and one used as an absolute last resort, or in cases of theft or abstraction, where a safety issue is highlighted. We also maintain our Xtracare database to ensure the most vulnerable of our customers are guaranteed to be exempt from debt-related disconnection policies. Customer eligibility includes being aged over 70, dependent on mains-powered medical equipment or in financial difficulties with children under the age of 12.
- **Payment options**

- We have a range of payment options including Direct Debt, Pay as you go meters, payment cards and standing orders. Our letters contain full information of how a customer can contact us if they need any help with paying their bills, & Energy Efficiency advice is either provided, or signposted in our letters.
- Working with the other large energy suppliers we provide funding to the Home Heat Helpline, which offers independent free practical energy advice for people concerned about paying their energy bills.

- **Financial support & advice for customers struggling to cope with everyday bills**
  - For help with finances, we encourage customers to seek assistance from independent agencies such as Citizens Advice Bureau and National Debtline.
  - For those having difficulties paying their bills, our dedicated British Gas payment team are available to help.
  - Making sure homes are energy efficient is an essential measure to saving money in the home. British Gas offers an Energy Savers Report, which now includes an Energy Planner that shows how energy can be saved.
- **British Gas Energy Trust**
  - The British Gas Energy Trust is an independent Charitable Trust that provides grants to help individuals and families meet arrears of energy charges and other household bills and costs.
  - The Trust can also provide support for Further Assistance Payments, including white goods (fridge, freezer, washing machine, dryer, electric cooker, and microwave), boiler repairs / replacements, funeral expenses and other household debts.
  - The Trust has worked closely with charity partners, such as National Energy Action (NEA), to develop and deliver a fuel debt training course and associated documents to enable frontline staff to provide fuel debt advice.
  - We are working closely with the Trust to open 14 Centres of Excellence across the UK in Cardiff, London (Bromley by Bow and Newham), Manchester, Bradford, Nottingham, Glasgow, Coventry, Sunderland, St Helens, Preston and Liverpool. These centres will provide face to face, home, online, and telephone debt and energy efficiency advice for consumers across the UK.

Warm Homes Discount Background

- Over the next four years, suppliers will ramp up spending to support vulnerable customers. Suppliers' collective expenditure for 2009-10 was £153m (exceeding Government's target by £28m). This will increase to £250 million in 2011/12 with the introduction of the Warm Home Discount rising to £310 million by 2014/15.

- Suppliers are permitted to over or under spend on their non-core spending obligation by 1% in scheme years 1, 2 and 3, Any under spend greater than 1% will result in non–compliance. We believe this is very stern for a new scheme and could well be difficult to achieve.
- Data Sharing between the Department for Work and Pensions (DWP) and suppliers will identify eligible consumers in the Core Group (pension Credit claimants) who will automatically receive the Warm Home Discount.
- Although DECC have provided guidelines to Suppliers, it is the responsibility of suppliers to decide their broader group criteria and how they will identify and verify the 'Broader Group' customers. The proposed processes then needs to be agreed with Ofgem who will then audit all Suppliers to ensure their validation processes are robust and customers are eligible. This puts an enormous amount of burden on Suppliers in terms of resource and operational impact.
- In terms of verification measures which will determine if a customer meets the eligibility criteria set, there is a real risk that the proposed level of questioning and declaration of verification measures outlined by Ofgem will be too daunting for many vulnerable customers, potentially deterring them from coming forward and applying for the new scheme. While we understand and concur with Ofgem's desire to minimise potential cases of fraud, we consider that this must be balanced with the need to make such processes as simple and straightforward as possible in order to encourage the intended beneficiaries of the Scheme to come forward and submit their details.
- With regards to providing documentary evidence of at least 5% of the Broader Group, we believe suppliers should provide customers' details to DWP for them to validate against their records. This should be introduced as soon as possible to alleviate both the administrative burden currently placed on Suppliers and the onerous requirement placed on customers to provide information. In the meantime, guidance on any suitable methodologies to ease or streamline the process would be helpful.
- Over the next four years, suppliers will transfer some customers on their current social tariff or rebate schemes onto the WHD. As part of this process, suppliers will need to understand and assess the circumstances of all the customers on their existing social and discounted tariffs. It is likely that some suppliers' existing social tariff customers will not be eligible for the Broader Group of the Warm Home Discount scheme which may present distress to many customers.

Key figures for London:

- Since 2009 nearly 3,000 Londoners have received £1.6 million in grants from the British Gas Energy Trust, averaging over £530 each
- British Gas have insulated 115,000 homes in London since 2005
- Nearly 12,000 customers in London receive the British Gas Social Discounted Tariff

2) What challenges do energy companies in London face in delivering measures to tackle fuel poverty?

Delivering energy efficiency measures in London has traditionally been more difficult. There are a number of challenges in London that make delivering energy efficiency measures more difficult and expensive than in other parts of the country. These include:

- **The number of hard to treat properties** – 71% of London's homes are considered hard to treat, with an estimated 57% of homes with solid walls. This makes them more expensive and challenging to retrofit than homes with cavity walls due to the higher costs of the insulation and the disruption for the household of installing the insulation.

- **The number of flats** - almost 50 per cent of London's homes are flats, which are logistically harder to retrofit than a house. This is firstly because of the multiple owners within a block or house and secondly because the external building fabric of a block itself is often owned by the freeholder and managed by a managing agent on their behalf. Therefore measures such as cavity wall insulation, cladding and windows must often be installed for all flats in a building at the same time. Flats are also individually less suited to accommodating renewable technologies unless they are designed to serve the entire block, such as communal heating, due to the smaller amount of available roof space to install technologies such as solar photovoltaics.

- **The number of properties in conservation areas** - Some 13 per cent of London's homes are in conservation areas and current planning policy in these areas can reduce options for externally-visible efficiency measures. This includes replacing sash windows with more energy efficient double glazing, installing external solid wall insulation and renewable technologies. This only compounds the retrofitting challenge in London, where the majority (70 per cent) of the housing stock actually requires these types of installations to reduce CO_2 emissions.

- **The number of properties with loft insulation** - Only 30% of London's homes have lofts and approximately 95% of lofts in the London area already have some loft insulation. Insulation schemes are therefore essentially top–up schemes. Although this can deliver significant CO_2 savings, many people are unaware that they require additional insulation, and energy savings from additional insulation will be less than for an empty loft. This makes them less cost effective to insulate than lofts that have no insulation.

- **The higher associated costs of installing measures** - The high density urban nature of London increases the associated logistical costs of running a programme and installing energy efficiency measures. Additional costs include transport costs and congestion charging, car parking and the time it takes for installers to travel from job to job in London's traffic.

- **Private rented properties** - The private rented sector in London represents 15% of London's homes. Landlords have little incentive to improve the energy efficiency

of their properties as they do not receive any direct return from the installation, and have historically felt they could not charge higher rent to recoup the cost. This has meant that rates of insulation installation in this sector have been low, even where fiscal incentives have been offered.

- **Fragmented delivery** - In addition, there are over 30 home retrofit schemes in operation in London. Although some have been very successful in meeting their specific carbon reduction and fuel poverty eradication goals, all are limited to certain energy efficiency measures and certain recipients. This fragmented approach to delivery creates a level of confusion that reduces the uptake of the energy efficiency programmes that are being offered. It also means that opportunities for realising economies of scale are being lost.

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[i] Securing the UK's energy future: Seizing the investment opportunity (July 2009), Ernst and young

FUEL POVERTY IN LONDON

1. Energy efficiency of the social sector (SAP rating)

Nationally, social housing has higher average energy efficiency ratings than owner occupied and private rented homes.[1] However according to recent analysis for Federation, 1.2 million social homes nationally (nearly a third) still require major energy efficiency improvements. There is currently little evidence of regionalised SAP ratings by tenure.

London members are investing considerable resource into improving the energy efficiency of their stock. As one example, the recent FutureFit report by Affinity Sutton[2] calculated that they have already made 24% carbon reduction across their stock to date through combinations of low carbon refurbishments and energy lifestyle advice.

Nevertheless higher energy efficiency doesn't guarantee freedom from fuel poverty, and there are concerns that fuel poverty in social housing is rising more rapidly than in the private rental sector. DECC's figures show that fuel poverty amongst social tenants (using Government's preferred full income definition) has increased from 628,000 (2008) to 762,000 (2009), an increase of 134,000 or 21%. In contrast for PRS the numbers rose from 600,000 (2008) to 693,000 (2009), an increase of 93,000 or 15.5%.[3]

It is therefore crucial that the social sector is resourced to improve stock conditions in order to reduce the incidence of fuel poverty. The Green Deal could be one key tool in this if the issue of consent is adequately resolved.[4] Social landlords' track record on delivering the Decent Homes Programme has demonstrated their capacity to improve housing stock cost-effectively at scale and across whole neighbourhoods. With this in mind it is disappointing that the London Plan concentrates almost exclusively on new development when so much more can be achieved in relation to existing homes. In the plan's policy 5.4 there is no mention of current policy initiatives, particularly the Green Deal and 'Allowable Solutions'.

2. What are the general challenges of tackling fuel poverty in the sector?

Our members are aware of the extent of fuel poverty among their tenants and the challenge this poses for the vulnerable and those on very low incomes. 1.4 million social homes are classified as 'hard-to-treat' because of the high cost of measures to improve their energy efficiency.[5] Housing associations are committed to combating this and are concerned that the current and projected increases in energy prices will further exacerbate the extent of fuel poverty.

London members have reported that there is a problem with targeting interventions when landlords do not have detailed knowledge of tenants' financial situation and cannot therefore easily identify which households may be in fuel poverty. Greater levels of data sharing from local authority partners would allow housing associations more of the information that they need to understand the financial situation of their tenants and to map that to energy efficiency levels of their stock.

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[1] *English Housing Survey*, Headline Report 2008-09, Communities and Local Government
[2] http://www.affinitysutton.com/futurefit
[3] DECC, *Trends in Fuel Poverty*, England, July 2011
[4] See our proposed amendments to the Energy Bill at http://www.housing.org.uk/policy/greener_neighbourhoods/green_deal/energy_bill.aspx
[5] *A study of hard to treat homes using the English House Condition Survey*, Building Research Establishment, 2008, p3

Depending on details of design, on which DECC will be consulting shortly, Green Deal may provide a mechanism for funding social housing energy efficiency improvements. But for reasons of fuel poverty and stock characteristics, many installations will not be viable without funding from supplier obligation or other mechanisms. It is vital that DECC design eligibility for ECO so that social landlords have the necessary access to it. They also need to ensure the transition from the current subsidy mechanisms (CERT and CESP) is planned and managed to minimise uncertainty and disruption for landlord and the supply chain.

3. Do you have any evidence of standing charges make communal heating very expensive?

Some of our members have reported that communal heating systems have the effect of raising their tenants' fuel bills and service charges. A report by Hyde Housing in 2010[6] raised concerns about the relation of community heating schemes to fuel poverty, stating that for Hyde, providing decentralised heating systems had an extra-over cost of £31-40 per unit per week. If these costs were recovered from residents then their heating bills would be more than quadrupled.[7]

Furthermore, the report stated that these systems were less efficient, in carbon dioxide terms, than conventional systems, and recommended that such systems should no longer be promoted or required until the issues of cost and inefficiency were solved.

This is further evidence to support the need for subsidy from ECO or other sources.

4. Are there any examples of negotiations leading to reduced standing charges with energy suppliers for residents?

Members advised that suppliers were reluctant to negotiate. One member did reference one particular development where standing charges have been reduced by capping debt at £10 for pre-payment cards and direct debits, and reducing paper billing and moving to electronic billing where possible.

5. How effective are the various Government programmes for social housing in London, including:
    a. CESP - we know that only a handful of CESP projects have been approved in London; what are the barriers to getting more CESP projects approved in London?

Members have reported that the complexities of the criteria for accessing CESP funding often make it unviable for social landlords in London. In many cases it is very difficult to meet all the criteria to be successful – members have reported having been asked for evidence of several months' fuel costs for each dwelling covered by the bid. Housing associations are very unlikely to be able to access this level of information, and have also reported to us the difficulties of entering into a project where the final costs are unknown.

The criteria for CESP funding – relating to house size, percentage penetration of stock in an area and maximising the number of measures carried out at once – are not a good fit for London stock which tend to be smaller homes, in higher density areas. London homes are also more likely to be flats, where some forms of energy reduction works are not practical to carry out. This makes it much harder for London stock to attract sufficient funding to make

[6] *The Technical and Financial Viability of Community Heating (CH) Systems: A review of performance over the period 2007 – 2010*, 8th July 2010

[7] The report states that as these costs cannot, in general, be recovered from residents they represent a significant financial burden on the developing landlord of approximately £40,000- £52,000/unit.

the scheme viable. Housing associations are also finding that the penetration level requirement means that some areas of their stock, while they may be areas of great need, do not attract sufficient funding. CESP projects receive an uplift in funding when a landlord reaches 25% of stock in a Low Super Output Area (LSOA). This is difficult to achieve in London because of the nature of the stock, and as housing associations are keen to offer a consistent level of service to their residents this often means a large, potentially prohibitive, financial investment in areas where they own a lower percentage of stock.

The funding matrix is understandably set up to concentrate funding on areas with higher deprivation, however this can have the unintended consequence of reducing its uptake, as stock in areas with higher deprivation levels tend to be flats rather than larger houses and therefore are less likely to attract the larger levels of funding. Indeed, one member suggested that owner-occupiers who fit the criteria – in large homes in poor areas – tend by definition to be asset rich and cash poor and therefore unable to fund the remaining contribution themselves. It is therefore not always easy to get the cross-tenure buy-in that is often necessary to make a scheme work.

My understanding is also that CESP funding is only offered if the utility companies' own contractors carry out the work and that this often attracts a premium compared to the same work carried out by housing associations' own contractor partners. This means that CESP money, and indeed the association's own contribution, does not go as far as it otherwise would. This reduces the attractiveness of the scheme to some providers.

The banding system can be seen to penalise landlords who have already invested significantly in their own stock: many housing associations have already upgraded G rated boilers, insulated lofts and cavities and installed upgraded glazing. They are therefore unable to achieve the multiple energy efficiency measures that would increase CESP funding. Planning can be an obstacle to CESP projects: there are examples of planners refusing external wall insulation due to altering the appearance of the building in a conservation area.

b. FIT scheme - how easy is it for social landlords/ tenants to access this? Can you give any evidence of examples where FITs are making a significant impact on reducing residents' fuel bills?

Many social landlords are developing a FIT Solar PV programme, through either DIY or Rent/Licence a Roof. It would be hard to quantify significant savings at this time but it is clear that the level of savings will depend on occupancy and lifestyle patterns: a resident in their home during the day will benefit more than residents that are out during the day, for example.

Some members reported that the business case for FITs simply did not stack up for them.

6. Targeting fuel poor households in social housing

Generally energy efficiency works are targeted at buildings that have low SAP ratings and have clear opportunities for improvement. In practice, targets for improvements also tend to be funding led. The overall assumption is that there is a correlation between low SAP, high fuel bills and therefore likely incidence of fuel poverty, but there is some anecdotal evidence that targeting the very deprived might not always be the most efficient use of resources, as reaching these groups can itself be costly.

One member reported that they seek to carry out works to whole buildings wherever necessary, in order to minimise disruption to residents, and to achieve cost and efficiency savings. It is difficult and inefficient to target works at fuel poor households as incomes

fluctuate, family circumstances may change, and clearly families can move and a family with different financial means could move in. Some members therefore find it more effective to target low SAP homes and bring them all up to an equal standard, coupled with targeted advice and guidance for households as to how they can keep their bills as low as possible. The SAP standard to target can be varied in order to track energy price fluctuations as well.

7. The new Energy Company Obligation and solid wall insulation - what is your view on the use of ECO for social housing and the ability of landlords/ tenants to contribute some of the funding to support it?

ECO will be essential for works that fall outside of the Golden Rule within the Green Deal. The effectiveness of the scheme will depend on the accessibility of the funding, however: the mechanism for allocating funding needs to be simpler and easier to access than current CESP funding. A reduction in geographical constraints and a simplification of the rules would make it more accessible to landlords. It is crucial that the Green Deal and ECO are accessible to social landlords, who are thought to house 60% of the financially excluded population.

8. Can you estimate the number and percentage of fuel poor households amongst your London stock?

Members have reported that it is extremely difficult to measure the extent of fuel poverty. Landlords do not have detailed knowledge of their residents' finances other than whether or not they receive housing benefit.

British Gas Response to London Assembly Health and Public Services Committee

Additional information requested following committee meeting

September 2011

Percentage of customers in London that will receive support through the Warm Homes Discount Scheme

Unfortunately we are unable to provide data relating to the number of customers in London that will receive support through the Warm Homes Discount Scheme. However, British Gas had 12,000 customers in London on our Essentials Tariff and we estimate that the bulk of these households are likely to be eligible for the scheme.

Confirmation how people on PPM will receive their WHDS rebate

There are a number of British Gas customers who are eligible for the Warm Homes Discount Scheme and who are using a Pre Payment Meter (PPM). British Gas will be working with outlet stores to ensure that the rebate is paid.

Where this is not possible, British Gas will be issuing cheques or providing customers with a bar-coded letter for outlets to add on the rebate to their accounts.

Supporting vulnerable customers on the right tariff

We are committed to making all the tariffs we offer – including our cheapest – clear to customers. We are also working hard to improve training for our customer service agents to ensure consistency in the advice given to customers. However, it's important to remember that the cheapest tariff isn't necessarily the best for every customer – for example, some customers are happy with a no-frills online account, while others prefer the reassurance of paper bills and access to over-the-phone advice. These preferences will affect the discussions we have with customers. The best advice for all customers is to check they are on the tariff that's right for them, and we invite all our customers to contact us, discuss the options available and check they're on the best British Gas deal for them.

Our call centre staff are trained to identify signs of vulnerability and make a note on the customer's account. A "flag" is then placed on the account so that future contact with this customer is monitored and help offered where necessary. British Gas also works with a series of charity partners that refer customers to our programmes and help us identify the most appropriate form of assistance for that particular individual. British Gas is further working with the Coalition government so that British Gas bills will contain signposting that will direct customers to check whether they are on the best tariff for them. This will encourage customers to contact British Gas, or visit our website, to see if moving to cheaper or more appropriate tariffs is right for them. This signposting has been included on all bills going to customers currently on standard credit tariffs as off the 27th September. Also through datasharing and the Warm Homes Discount British Gas will be directly providing a £120 payment to customers on Guaranteed Pensions Credit.

PPM price differentials

We can confirm that British Gas has equalised the prices of PPM with standard credit customers for both gas and electricity.

Energy price increases

On the 8th July British Gas announced increases in both gas and electricity by an average of 18% and 16% respectively which came into effect on 18th August 2011. Around 1.2 million households on fixed price tariffs will not be affected in any way by this price rise. This was not a decision we took lightly. Wholesale energy prices which are driven by international events had risen sharply with wholesale gas prices for winter 30% higher than the previous year. As a result of the increased cost of buying gas, combined with rising network costs and additional costs to meet the Government's environmental obligations, British Gas had been selling energy at a loss in the months leading up to this announcement.

We know that rising energy prices come at a difficult time for many in Britain. We continue to help our most vulnerable customers through our Essentials social tariff (until the Warm Homes Discount Scheme is introduced), which offers extra help, discounted rates and energy efficiency measures and products. We have 330,000 UK customers on our Essentials tariff that will save an average £134 compared to a customer on a standard tariff. Earlier this year, we announced an additional £37 million of support for our vulnerable, elderly and disabled customers including an additional £50 payment to Essentials customers totalling £17 million and an investment of £20 million in the British Gas Energy Trust, an independent charity which helps people who are struggling with household debts.

Higher prices needn't mean higher bills for households - this year alone, we've fitted over 56,000 energy efficient boilers and have carried out more than 100,000 loft and cavity wall installations. We are also offering free loft and cavity wall insulation to all our customers, each of which could save them more than £100 each year on their annual dual fuel bill. In addition, customers can take advantage of our free on-line service, EnergySmart, with a free 'real time' electricity monitor, which can help save households up to £125 each year.

As a result of our announcement, average annual dual fuel bills for British Gas customers are forecast to be £1,046 this year, compared with £941 in 2010, using industry average measures. However, owing to the very warm spring weather and continuing energy efficiency efforts by British Gas and its customers, in real terms, average annual dual fuel bills this year are expected to be 4% lower than last year - £1,021, compared with £1,061 in 2010 based up on current weather patterns.

Standing charges

In a competitive market, charges to customers will tend to reflect the underlying costs of provision. In the energy retail market, consumers incur fixed costs to serve (such as metering and billing) that are similar for each household, together with variable costs that reflect the level of energy usage. Suppliers therefore generally structure their tariffs to recover fixed costs through either a daily standing charge or an initial usage "block" at a higher unit price, and variable energy costs through a flat per unit charge (p/therm in gas or p/kWh in electricity). British Gas opt for a "block" charge approach.

Door stop sales

British Gas has announced that it has formally ended unsolicited doorstep sales. In the future we will only visit a potential customer's home to talk about energy with their prior agreement, and at an agreed time. We have worked with our customers and staff to run trials and explore different ways to offer face-to-face energy sales advice that customers find both acceptable and convenient. Feedback has confirmed a demand for face-to-face advice, but only on a customer's terms and without the pressure from an unannounced sales visit.

As a result, British Gas will now offer face-to-face advice in a number of different ways:

- It will continue to offer face-to-face advice – including energy efficiency advice – to customers in their homes, workplaces, or other suitable location, but only with a pre-arranged appointment.
- The existing partnership with Sainsbury's will continue to grow, with more Sainsbury's Energy Advisers available in store.
- There will be a new team of advisers who will make publicised, pre-arranged visits to local venues, such as shopping centres and community centres, to highlight the products and services available from British Gas. They will also attend community events and shows.

Further background information on door stop sales

- British Gas announced on 12 August that its field sales agents would cease doorstep energy sales activity for an initial three-month period and has now confirmed an end to unsolicited doorstep sales.
- This was in line with a request to all suppliers made by Consumer Focus, which called for a 90-day moratorium on this type of cold calling, and suggested energy suppliers should instead offer appointments, which would be agreed before a sales visit.
- Doorstep selling, in its current form, is an increasingly outdated way for energy companies to engage new customers who no longer regard it as a preferred or trusted way to review their energy arrangements.
- British Gas has been reducing the use of doorstep selling for many years; the number of British Gas field sales agents is now less than a third of the 1,300 employed in 2006
- The internet has also become an increasingly important way for customers to manage their energy bills and research products. British Gas customers carried out more than 10 million online transactions in the first six months of this year, more than double the amount in the first half of 2010.

Energy Savers Report

The British Gas Energy Savers Report allows customers to understand their homes energy efficiency performance, cut your energy use and save money.

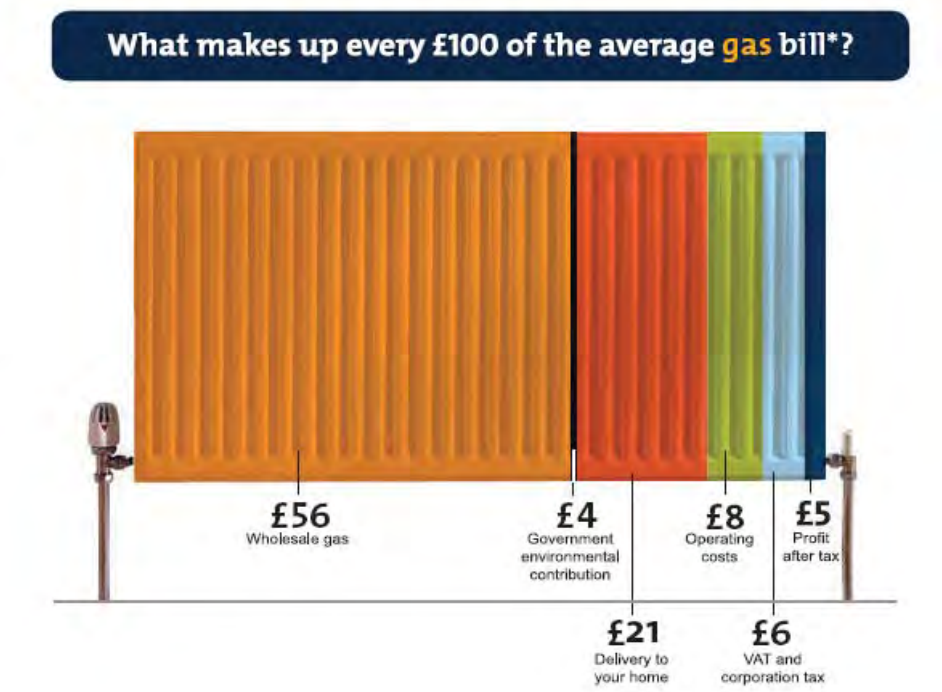
Customers are requested to fill in our simple online questionnaire. Then we work out their home's current energy rating and provide personalised suggestions about how they can reduce your energy bills and consumption.

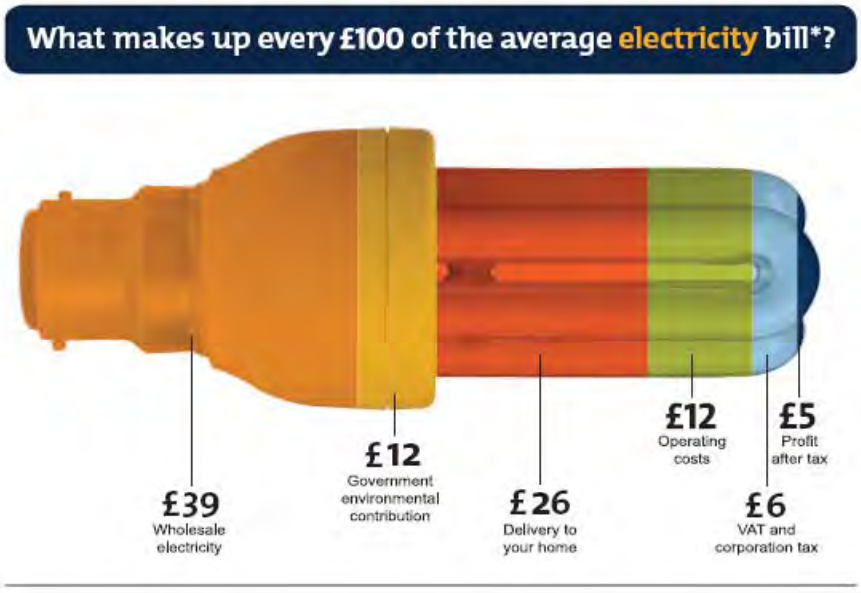
Unfortunately, at the current time the Energy Savers Report service is only available online.

Further information can be found online here: www.britishgas.co.uk/energy-efficiency/energy-savers-report.html.

An example Report can be downloaded here: www.britishgas.co.uk/energy-efficiency/energy-savers-report.html.

Levies on bills





Number of households supported (in total)

In 2010 we helped 1.6m households through all of our different programmes, however we are unable to provide a figure specifically for London.

Recent press releases

Friday 14th October – Ofgem quarterly market report
Response from Energy UK: http://www.energy-uk.org.uk/press-releases/energy-uks-response-to-ofgems-announcement-on-the-energy-market.html

Christine McGourty, Director of Energy UK, commenting on Ofgem's announcement on the energy market, said:

"A snapshot of profits every few months does not provide a realistic picture of the average profits over a year of companies in the sector. Research published by the regulator this year showed that average profits in the sector were lower than in high street retailers, supermarkets and in telecoms. As Ofgem points out in today's report, it is the rising cost of wholesale energy that has contributed to the increase in customers' bills this year.

"Companies are already looking closely at the structure of tariffs and at the information provided on bills and are developing ways of making them easier for people to understand and compare so that people can ensure they are on the best deal for them. People who are worried about bills this winter may be able to save money by switching to pay by direct debit or shopping around, especially if they have never switched before.

"Energy companies do need to make a profit as they are investing billions each year in providing the secure, clean energy supplies needed for the future. But they are also spending over a billion pounds over the next few years on direct help for those households most in need."

Response from British Gas – British Gas rebuts Ofgem profits claim
British Gas has rejected claims from UK energy regulator Ofgem that its profit margins have risen to £125 per customer per year.

Managing Director Phil Bentley described Ofgem's report as misleading, adding: "Their methodology is flawed, excluding as it does, the discounts we give our customers and the benefits they receive from fixed price contracts, as well as understating our commodity costs.

"In 2010 alone, this methodology overstated industry profits by 100% compared with Ofgem's own analysis of audited accounts."

British Gas' own audited accounts show that, for the first six months of this year, margins per dual fuel household were £24 after tax, and 2011's will be lower than 2010.

Ofgem's report, which hit the headlines this morning, claims that energy firms' profit margins have risen to £125 per customer per year, up from £15 in June. The regulator also said it would force suppliers to simplify tariffs.

Energy UK, which speaks on behalf of energy suppliers, dismissed Ofgem's profit margin figures as unhelpful. Christine McGourty, Director of Energy UK, said: "A snapshot of profits every few months does not provide a realistic picture of the average profits over a year of companies in the sector. It is the rising cost of wholesale energy that has contributed to the increase in customers' bills this year."

She said companies were already looking closely at the structure of tariffs and at the information provided on bills, and were developing ways of making them easier for people to understand so they could ensure they were on the best deal for them.

Sunday 16th October – BG announces 'Warmer Winter' package

BRITISH GAS ANNOUNCES NEW PACKAGE OF MEASURES TO REDUCE WINTER BILLS

Recognising the economic difficulties many households are facing today, British Gas, Britain's largest energy provider, has announced a range of extra support for its customers to help them keep their homes warm, save energy and keep bills as low as possible this winter.

Working closely with its independent Customer Board, British Gas has developed the following:

- A British Gas ***"Warmer Winter"*** package including: a commitment not to raise energy prices this winter, a discount for low income customers, free insulation offer and flexible payment plans.
- A mailing to its customers to ensure they get the maximum benefits and rewards available. A new "***Tariff Checker"*** will ensure customers are on the right deal for them.

Furthermore, to encourage more competition and stable prices, British Gas is going further than any generator selling around 80 per cent of the electricity it produces from its own power stations into the forward open market.

A "Warmer Winter" from British Gas

British Gas' ***"Warmer Winter"*** package will provide **extra help to over one and a half million homes:**

- **A firm commitment to hold prices down**
  At a time of rising commodity prices, British Gas is committing to hold its energy prices for all its variable rate customers throughout the winter.
- **Helping more customers to claim the Warm Homes Discount**
  British Gas has the broadest eligibility criteria for the new Warm Homes Discount Scheme – all eligible customers who apply before the end of January 2012 will receive a £120 discount off their winter electricity bills.
- **Extending the offer of free insulation to all our customers**
  British Gas is extending its insulation offer to allow customers until 22 December 2011 to sign up for free loft and wall cavity insulation (worth at least £200 per home), together saving the average household more than £200 on their annual dual fuel bill. This year alone, British Gas will insulate 200,000 of its customer's homes.
- **Helping all customers to get a better deal**
  British Gas is contacting its customers helping them get the most from British Gas, including all of the discounts, rewards and benefits to which they are entitled. A ***"Tariff Checker"*** will help customers find and move to the right British Gas tariff for them.
- **Priority service for vulnerable customers**
  Vulnerable customers receive a priority service in boiler breakdowns, ensuring that they will not be without heat and British Gas will not disconnect domestic customers.
- **Flexible payment options**
  Last year, British Gas helped more than a million households with flexible payment plans and other direct financial support – and it is now offering

direct debit customers the same opportunity to set and manage their own payments.

Phil Bentley, Managing Director of British Gas, said:

"With rising energy prices, hard-pressed households need extra help this winter. Our ***"Warmer Winter"*** package is a £100 million commitment helping British Gas customers get the best value for money in keeping their energy bills as low as possible.

"We want our customers to be confident they are on the right deal for them. That's why we're ensuring everyone benefits from the discounts and rewards available."

ENDS

Notes to Editors

1. Warm Homes Discount

The Warm Home Discount (WHD) Scheme has been introduced to replace energy suppliers' existing social tariffs. There are two groups of customers who will qualify for the WHD – a 'core group' and a 'broader group'

British Gas has set the broadest eligibility criteria. British Gas customers may be eligible for the broader group rebate if they are:

- In receipt of Cold Weather payments
- Or have a household income below £16,190 and are elderly or in receipt means tested eligible benefit
- Or have a household income below £16,190 and have a disability or long term illness
- Or have a household income of below £16,190 and are spending more than 10% on fuel for adequate heating (usually 21 degrees for the main living area)

British Gas will pay the rebate in spring 2012 to all eligible British Gas customers who apply before the end of January 2012

Existing British Gas customers in receipt of the Pension Credit Guarantee don't need to apply, we will contact them. Our "Essentials customers will stay on their discounted tariff through the winter and do not need to contact us. Any other British Gas customers who think they might be eligible, can call British Gas for free on: 0800 048 0202

2. Supporting vulnerable customers

Today's announcement of extra help for customers this winter and the campaign to better target the winter fuel payment, is in addition to British Gas' existing, extensive package of help for elderly, disabled and vulnerable customers, which includes:

- Extra support with household bills and essential household items available through the British Gas Energy Trust grant scheme. Consumers who are struggling with bills may be eligible for help and can contact the Trust by visiting www.britishgasenergytrust.org.uk, or by calling 01733 421 060
- Benefits Entitlement Checks for customers who are unsure of the benefits they are entitled to
- A dedicated 'Here to Help' scheme, offering extra support with password and nominee schemes
- Free gas safety checks
- Priority attention for those who are most vulnerable and without heating due to faulty appliances
- Alternative bill formats

Monday 17th October – DECC Energy Summit

Centrica has described the Downing Street summit on energy as "a great first step" in rebuilding trust with stakeholders.

The summit, opened by Prime Minister David Cameron, was the first time the energy industry, the Government, consumer groups and the regulator had met to have an honest conversation about how customers could save energy and manage their bills.

British Gas Managing Director Phil Bentley, who attended the summit, said: "Rebuilding trust is a key priority for us at British Gas and for this reason I think the summit has been a great first step."

The summit took place on the day British Gas launched its £100 million 'Warmer Winter' package as part of the support offered to customers. The package includes a commitment not to raise energy prices this winter, a discount for low income customers, an extension to the free insulation offer, and flexible payment plans.

Alongside this, existing customers will be contacted by mail with details of a new 'tariff checker' to help make sure they're on the best possible deal and getting the maximum benefits and rewards available to them.

Phil added: "The majority of the discussion focused on looking after customers this winter and I'm proud that British Gas led the industry by launching our Warmer Winter package. It's an inconvenient truth that energy prices will continue to rise as the international price for gas increases, along with the need to invest in the future of energy. It's our job to do all we can to help our customers manage their bills and save energy."

The summit prompted headline news through the day. Phil and Ian Peters, Managing Director British Gas Energy, faced a series of television and radio interviews, both focusing on the challenges the business faced and warning that prices of gas on the international market would keep rising.

They made it clear that there was a great deal that British Gas was doing proactively to help customers.

British Gas was praised for its announcement by Ann Robinson, Director of Consumer Policy at uSwitch.com, saying: "British Gas' winter price freeze will be warming news for customers. Prices have rocketed in the last 12 months and as a result many cash strapped households are dreading their winter fuel bills. This move won't turn the clock back on price rises, but at least it will reassure customers that there won't be any further increases at least for a short while.

"British Gas has also announced a 'tariff checker'. This should give customers greater transparency over British Gas' deals and prices, allowing them to ensure that they are getting a fair deal. It means that those customers who are unable or unwilling to use the competitive market can still get some benefit from the lower prices and more innovative energy plans that are out there."