Addressing pockets of fuel poverty in middle and higher income areas in Oxfordshire

A shared learning resource from the EVALOC project





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ADDRESSING POCKETS OF FUEL POVERTY IN MIDDLE AND HIGHER INCOME AREAS IN OXFORDSHIRE: ⊳ shared learning resource from the EVALOC project











EVALOC is one of seven projects funded by the Economic and Social Research Council (ESRC) and Engineering and Physical Sciences Research Council (EPSRC) Energy and Communities stream of the Research Council UK (RCUK) Energy Programme (Grant reference: RES-628-25-001). EVALOC project brings together researchers from Oxford Brookes University and University of Oxford with six Department of Energy and Climate Change (DECC) funded low carbon communities.

This report should be referenced as:

Ruth Mayne and Jo Hamilton (2014). Addressing pockets of fuel poverty in middle and high income areas in Oxfordshire, University of Oxford, Oxford

For more information on EVALOC project, please visit: **www.evaloc.org.uk** or contact Professor Rajat Gupta, rgupta@brookes.ac.uk

Published by:

Low Carbon Building Group, Oxford Institute for Sustainable Development, Oxford Brookes University Environmental Change Institute, University of Oxford © Low Carbon Building Group and Environmental Change Institute, 2014

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Aims

Urgent and far reaching changes are needed to reduce carbon emissions in order to avoid climate change of above 2%. These involve decarbonising our energy supply, improving the efficiency of energy use, reducing energy demand and hence making allied changes in many of our everyday (energyconsuming) behaviours or practices (Low Carbon Plan, 2011), whilst ensuring those in fuel poverty are not affected in terms of health and comfort.

This report is one of a series that share emerging learning from the EVALOC research programme which is investigating the contributions and limits of six Low Carbon Communities (LCCs) in changing energy behaviours and reducing local carbon emissions. This report draws on learning from a shared learning workshop suggested by Low Carbon West Oxford (LCWO), one of the EVALOC communities. The workshop was one of 20 community-based events supported by EVALOC as part of the community level action research strand , including shared learning workshops and reports on Carbon Reduction in Communities of Disadvantage and on Partnership Working (available on the EVALOC website).

The idea for this workshop arose from LCWO's concern that there are hidden pockets of low income and vulnerable owner occupiers and private tenants in West Oxford (and other middle and higher income areas across the county) that energy efficiency services might not be reaching, thereby limiting potential carbon reductions, further disadvantaging low income households, and exacerbating income and health inequalities across the county. The workshop aims were to:

- Share learning from a number of case studies in Oxford and Oxfordshire about strategies, opportunities and barriers to address fuel poverty among the pockets of low income fuel poor in the many middle and higher income communities across Oxfordshire and Oxford;
- Draw out lessons for local authorities, other statutory agencies, community groups and government policy;
- Inform communities about the available affordable warmth and energy efficiency services in Oxford and Oxfordshire this winter.

The workshop was held on November 27th 2013 and attended by representatives from local authorities, networks, agencies and community groups from across Oxfordshire. The agenda consisted of presentations, and discussion about gaps, barriers

and opportunities for addressing fuel poverty, and recommendations for government, local authority and community groups.

The workshop included case studies presented by Oxford City Council, Oxfordshire Affordable Warmth Network, a Green Deal assessment company, and two community groups, Low Carbon West Oxford and Low Carbon East Oxford. Participants were then divided into groups to discuss gaps/barriers, opportunities and recommendations for government, local authorities, other statutory agencies and community groups.

The workshop and report focuses on affordable warmth services provided to low income and vulnerable owner occupiers and private tenants (rather than social tenants whose properties tend to have higher energy efficiency ratings due to the Decent Homes Standard for social housing). Affordable warmth services may include energy efficiency or saving, income maximisation (such as benefit uptake, job/training and debt advice) and/or tariff switching advice. The report does not cover the affordable warmth services provided in Oxfordshire by district councils, social landlords, energy suppliers or private providers.

Acknowledgements

The report was written by Ruth Mayne and Jo Hamilton based on case studies presented at the workshop, the contributions of workshop participants during and after the workshop, comments from ECI colleagues and the wider literature. Please contact ruth.mayne@ouce.ox.ac.uk if you have any comments, corrections or can provide relevant additional data.

Workshop participants included:

Debbie Haynes, Oxford City Council; Kate Eveleigh , Oxfordshire County Council; Anne Clilverd, LCWO; Lorna Edwards, LCWO; Brenda Boardman, Low Carbon Oxford North (LCON); Sam Clarke, LCON; Alison Grunewald, Low Carbon Headington; Ruth Conway, Low Carbon East Oxford; Diocese and Affordable Warmth Network; Sue Roberts, Sustainable Wallingford and Eco Morph; Ian Bacon, Sustainable Blewbury; Sarah Northall, Curate of Church at Iffley/Rose Hill; Dale Hoyland Affordable Warmth Network and National Energy Foundation; Linda Watson, ORRC; Peter Lefort, Community Action Groups Oxfordshire. Robin Morris from Low Carbon East Oxford drafted the case study and provided comments after the workshop.

Summary of findings

Although Oxfordshire is a relatively wealthy county there are pockets of deprivation and fuel poverty. Improving household energy efficiency is the most permanent way of tackling fuel poverty. Despite the continued efforts of local organisations to alleviate fuel poverty across Oxfordshire only a fraction of the estimated 26,088 fuel poor households in Oxfordshire appear to have received energy efficiency improvements to their homes in 2013, a significant reduction from the previous year.

According to a freedom of information request there were **990 energy efficiency measures**

recommended in Oxfordshire in 2013¹ under the new Energy Company Obligation (ECO). This was the first year of the new ECO² so some teething problems were to be expected, and government do statistics show an upward trend in installation over the year nationally (DECC, 2013). However, the figures represent a significant overall reduction compared to the 9.832 households which received energy efficiency improvements in 2012 under the final year of the previous energy obligation scheme, Carbon Emissions Reduction target (CERT) (EST HEED)³. Unless the rate of delivery is greatly accelerated in future years the 2016 fuel poverty elimination target will be significantly overrun, low income households will be further economically disadvantaged by rising fuel bills and existing health problems and income inequality will be exacerbated across the county.

Workshop participants identified the following problems in helping improve the energy efficiency of low income fuel poor households in both lower and higher income areas of Oxfordshire:

² The figures are for 8 months from January 2013 (the start of ECO) until September 2013.

Government policy

- There are not clear lines of responsibility or targets for fuel poverty reduction nationally or locally.
- There is reduced funding available for household energy efficiency improvements generally, and for low income fuel poor households specifically compared to previous years. (Jansz, A. and Guertler, P, 2012).
- The recently introduced Energy Company Obligation (ECO), which is now the main source of funding for energy efficiency measures, is difficult to access and does not provide full funding for all needed measures including for the fuel poor.
- There are no consistent sources of revenue funding for local organisations to enable an adequate level of home visits and/or to coordinate the area wide delivery of energy efficiency measures that have been proven successful elsewhere such as in Kirklees (Butterworth et al 2011; Eldrich et al 2010; EST, 2005), or to deliver behaviour change programmes.

Local infrastructure

- Linked to these problems in the policy framework and financial incentive structure the organisations represented at the workshop:
- Find it difficult to access and obtain adequate ECO funding for energy efficiency measures for low income fuel poor households (including owner occupiers and private tenants) and hence provide a clear simple and understandable offer to residents, whether in lower or higher income areas.
- Rely heavily on signposting and phone advice, rather than home visits or the area wide coordinated delivery of free household energy efficiency households which has proven successful in Kirklees and elsewhere.
- Tend to provide energy efficiency and behaviour change services in a piecemeal and fragmented way to low income fuel poor (owners occupiers and private tenants) across the county.

Recommendations

 Workshop participants made a number of recommendations to address the identified problems including:

¹ It is not possible to tell from these figures: how many energy efficiency improvements were actually implemented; precisely how many reached low income fuel poor households (although the budget share initially allocated to the fuel poor under ECO is estimated to be 33% (Jansz, A. and Guertler, P, 2012) and whether these were in lower or higher income areas; whether the improvements were sufficient to have lifted households out of fuel poverty; or what the effect of other Affordable Warmth Services on benefits might have been.

³ The figures are for 8 months from April to December 2012.

- For the Government to:
 - Delineate clear responsibilities, targets and time lines for national government and local authorities to address fuel poverty;
 - Increase funding/subsidies for energy efficiency improvements particularly for low income fuel poor households via ECO or grants, and via the NHS;
 - Replace ECO with easy to access publically funded grants for the low income fuel poor; or simplify and reform ECO to provide clear and easily accessible free energy efficiency measures;
 - To provide revenue funding for the delivery roles of local actors including for home visits, the coordinated area-wide delivery of energy efficiency measures to residents (starting with the most deprived areas first) and energy behavioural advice;
- For Local Authorities to lead the development of a joined up county-wide strategy to address fuel poverty co-designed with appropriate health and statutory agencies and community groups. The strategy should include clear targets and delineation of responsibilities and roles between local organisations, a clear offer to residents, and the area wide delivery of free energy efficiency improvements to households in partnership with health agencies, other agencies and community groups (if funding permits).
- For community groups to hold local authorities and health agencies to account for addressing fuel poverty and to provide complementary support for example helping identify and link the fuel poor to existing affordable warmth services.

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Chapter 1 Introduction

1.1 Climate change and fuel poverty

Urgent and radical reductions in greenhouse gas emissions are needed to avoid dangerous climate change (i.e. global surface temperatures increases of above 2°C over the pre-industrial average). This will involve decarbonising our energy supply, improving the efficiency of energy use, reducing energy demand, and making allied changes to many everyday (energy-consuming) behaviours or practices (HM Government, 2011 (a)). The fairness of carbon mitigation policies and programmes will also be crucial to winning public support for, and thus ensuring an effective response to, climate change, as recent public debate on energy prices in the UK has illustrated.

Residential energy use is responsible for almost 30% of the UK's carbon emissions, and is seen as a sector which can deliver considerable energy and carbon savings. Within this sector 4.82m households in the UK are currently considered to be fuel poor⁴ which means they are unable to afford sufficient energy to keep their house warm and hence suffer from the many physical and mental health problems associated with cold homes (Boardman 2010, Marmot Review, 2011). The numbers of people living in fuel poverty, according to the old definition⁵, have increased by 13% in the last year and by 51% since 2011 (Guertler, P. 2014).

Fuel poverty is caused by a combination of the poor energy efficiency of the home, low incomes and energy bills (and can also be linked to under occupation) and means people are often unable to heat their homes adequately. There are many health risks associated with living in a cold, damp home including heart attacks, strokes, respiratory illness, hypothermia and falls. Also residents can suffer from psychological and social problems linked with living in cold conditions, such as depression. Young people may be less likely to socialise with friends leading to social exclusion and could suffer with poor school performance. (Marmot Review 2011; Affordable Warmth Network, 2013).

Fuel poverty can be addressed by improving household energy efficiency, maximising income, and reducing fuel tariffs. Of these measures energy efficiency provides the more permanent solution and is widely recognised to bring many benefits. It contributes to carbon reduction, improved health and reduced health care bills, reduced fuel bills, creation of jobs and indirect economic benefits (Marmot Review, 2011; Butterworth et al, 2011; Eldrich et al, 2010; EST, 2005).

1.2 Demographics and fuel poverty in Oxfordshire

Although Oxfordshire is relatively wealthy county there are hidden pockets of deprivation and fuel poverty across the county which can be difficult for affordable warmth and energy efficiency services to identify and reach.

1.2.1 Demographics

Oxfordshire is in the south-east of England with a population of approximately 653,800 (260,886 households) of which 152,000 (57,168 households) live in Oxford city. Twelve lower super output areas (LSOAs)⁶ in Oxford rank among the 20% most deprived areas in England – Rose Hill, Littlemore, Barton, and the Leys (Blackbird and Greater). Seven of these are among the 15% most deprived and one area to the west of Greater Leys is among the 10% most deprived (Oxford City Council, 2013; Oxfordshire Council dashboard of multiple deprivation). In addition 5 LSOAs in Cherwell and 1 in the Vale of the White Horse rank among the 20% most deprived areas in England (See Appendix B).

1.2.2 Fuel poverty

In 2011 nearly 10% of households – 25,874 households- were living in fuel poverty in Oxfordshire (using the old fuel poverty definition) compared to about 15% across the UK as a whole and around 12% in the South East. In Cherwell 8.3%, in South Oxfordshire 10.2%, in the Vale of the White Horse 9.7%, and in West Oxfordshire 10.4% of households respectively were living in fuel poverty, and in some LSOAs as many as 20% of households were living in fuel poverty in 2011.Much

⁴ Until recently, a household was considered to be fuel poor if it spent more than 10% of household income on energy (to warm the house to 21C in the living room and 18C elsewhere in the house). Following the Hills Review (Hills 2012) the government has now formally adopted a new definition for fuel poverty whereby a household is said to be in fuel poverty if (a) they have required fuel costs that are above average (the national median level) and (b) were they to spend that amount they would be left with a residual income below the official poverty line. However, DECC is still reporting fuel poverty against the previous definition. See https://www.gov.uk/government/collections/fuelpoverty-statistics.

⁵ Using the previous definition of fuel poverty.

⁶ LSOAs are geographical units used in the Census, each of which contains approximately the same number of households - about 400.

of the fuel poverty is concentrated in Oxford where 11.1% of homes (around 7000 households) were estimated to be fuel poor in 2011, with this figure rising to as high as 17% in some LSOAs (HM Government, 2011 (b)).

Assessments using the new 2011 definition of fuel poverty (see Appendix A, Case Study 5, Figure 1) indicate that the major concentrations of fuel poverty in Oxford city are in wards like St Marys, St Clements, Iffley Fields, and New Hinksey which are not the wards with the highest levels of multiple deprivation in which energy efficiency programmes would traditionally be concentrated (such as Blackbird Leys, Northfield Brook, Barton and Sandhills, Rose Hill), although this may be in part due to data inaccuracies.

There were 335 excess winter deaths⁷ in Oxfordshire and 53 in Oxford in 2012. (Public Health England, 2013). These are considered to be the tip of the iceberg of a wider set of poor health outcomes associated with cold unhealthy housing (Oxford City Council, 2013). According to Public Health England for every excess winter death there are 8 hospital admissions and 100 visits to a doctor (Wookey, 2014).

⁷ Excess winter deaths' is defined as the difference between the number of deaths which occurred in winter (December to March) and the average number of deaths during the preceding four months (August to November) and the subsequent four months (April to July).

Chapter 2 What is being done to address fuel poverty

2.1 National policy framework and financial incentive structure

At national level the government is obliged under the 2008 Climate Change Act to reduce carbon (and other greenhouse gas) emissions by 80% by 2050 compared to 1990. Previously the government had a legal obligation to eradicate fuel poverty as far as reasonably practical by 2016. This was recently overturned by the Energy Act 2013 which will set a new fuel poverty target in April 2014. Below we briefly describe some of the current government policies that have been put in place to address these issues in the residential sector.

The recently introduced Energy Company Obligation (ECO) imposes carbon saving targets on large energy companies to improve residential energy efficiency and is now the main source of financing for domestic energy efficiency measures. The affordable warmth strand, which is supposed to provide free measures for low income households (see below), replaces the previous government grant scheme, Warm Front.

As with previous energy obligations schemes such as CERT suppliers achieve their targets by subsidising measures, recouping their costs by across the board increases to consumers' energy bills. They can either deliver the residential energy efficiency improvements directly to households themselves or sub contract this role to an ECO Provider, whether private installers, social landlords, local authorities that deliver them on their behalf. In the latter case ECO Providers develop a portfolio of eligible households and then bid to Energy Companies to get access to ECO subsidies.

There are 3 different strands of ECO: (a) the Home Heating Cost Reduction Obligation or Affordable Warmth strand that provides measures which help low income and vulnerable households heat their homes (b) the Community Obligation that provides insulation measures and connections to district heating systems for people living in the 15% most deprived areas of the UK and (c) the Carbon Emissions Reduction Obligation that provides funding to insulate solid walled properties (internal and external) and those with "hard to treat" cavity walls that cannot be fully funded through the Green Deal. 40% of ECO funding is to help low income and vulnerable households through the affordable warmth and community obligation strands. The government is currently consulting on reducing the carbon savings element and extending it to March 2017, reducing targets for external wall insulation and extending the community element strand from the 15% to the 25% most deprived areas.⁸

The government also provides a number of energy related benefits that low income fuel poor can access such as the warm home discount scheme, cold weather payments, and winter fuel payments.

2.2 Local infrastructure

Oxfordshire has a 2 tier system of local government – the county council and five city/district councils –as well as numerous parish councils. There are also approximately 300 geographic communities in Oxfordshire of which nearly 60 have a low carbon community group, many of who promote information and action on energy conservation, energy efficiency and renewable energy generation with local residents. Church groups and other community groups sometimes also provide affordable warmth advice to residents.

At the workshop Oxford City Council, the Oxfordshire Affordable Warmth Network, a Green Deal advice body called Ecomorph, Low Carbon West Oxford, and Low Carbon East Oxford (see Appendix A) presented case studies about their fuel poverty (and carbon reduction) strategies. A summary of these strategies is provided below.

2.2.1 The Affordable Warmth Network (AWN)

The Affordable Warmth Network (AWN), which is funded by the County council, Oxford City Council and the district councils, is a key strategy for addressing fuel poverty among low income owner occupiers and private tenants across Oxfordshire. The Network provides: (a) a free phone advice line for all residents (including a referral system to relevant agencies for energy advice, grants, benefits, advice on tariff switching); (b) home visits for properties identified as needing insulation, heating including access to ECO subsidised measures or locally funded grants for eligible households; (c) outreach and training of front line workers and (d)

⁸ The government also introduced the Green Deal in January 2013 which offers upfront loan capital for 'able to pay' households for low cost energy measures, and institutes a system of accredited, mainly private, 'Green Deal Providers' to provide energy assessments, finance, and the installation of measures to households. Early takeup of the Green Deal has been extremely low (DECC 2013) and there has been criticism of the design of this scheme, including the high interest rates for loans, and its potential for delivering significant savings (Guertler et al 2013, Rosenow and Eyre, 2012).

produces a range of relevant information (see case study, Appendix A).

2.2.2 Oxford City Council Affordable Warmth Services

Oxford City Council recently signed up to the End Fuel Poverty Coalition's Local Authority Commitment to eliminate fuel poverty by 2016 and provides the following fuel poverty services (Tables 1 and 2):

- Funding for the Affordable Warmth Network.
- Implementation of a pilot project in 2013 to address fuel poverty and reduce carbon emissions in Barton, an area of multiple deprivations in the north east of Oxford, in partnership with the Low Carbon Hub, a social enterprise that works to lower carbon emissions across Oxfordshire, and a local community group. This approach is in part informed by the successful Kirklees Warm Zone scheme (Energy Saving Trust 2005; Eldrich et al 2010; Butterworth et al 2011) involved the coordinated area wide delivery of energy assessments and energy efficiency measures to residents.
- A small repairs service and flexible home improvement loans and essential repair grant for people over 60.
- Administration of a Winter Warmth scheme (funded by the Warm Homes Healthy people fund from the Department of Health) which funds city-based advice centres/CAB and community groups to promote affordable warmth services to elderly and vulnerable people.
- Advice to private sector landlords, and enforcement of minimum standards under its Housing in Multiple Occupation (HMO) scheme, informed by EPC data and Housing Stock Modelling data from Building Research Establishment (BRE).⁹
- Signposting residents to affordable warm services, including energy efficiency subsidies, available benefits and/or fuel switching, through its web site and leaflets. The information is tailored to different household types (i.e. older people, people on low incomes or benefits, and private tenants).

2.2.3 Community Groups

Additionally low carbon community groups across Oxfordshire, such as LCWO and LCEO, use a range of strategies to help residents improve energy efficiency and conserve energy in their homes. These may include awareness raising, signposting and linking residents to affordable warmth services; directly providing energy assessments, energy saving advice and/or small measures; and providing participatory behavioural programmes, among other things. However, voluntary community groups often lack the capacity and resources to access energy supplier subsidies, do home visits and/or install energy efficiency improvements, which can be necessary to improve the energy efficiency of low income or vulnerable households. (See case studies in Appendix A).

2.2.4 Other Affordable Warmth Services

Residents in Oxfordshire may also receive the following energy efficiency services in addition to those identified above, but which are not documented in this report:

- Some District Councils have Home Repair Loans that may cover small energy efficiency improvements;
- Oxfordshire County Council and some district councils fund and signpost the Benefits in Practice project. Through this project, the Citizens' Advice Bureau (CAB) provides welfare rights and legal advice information services to individuals in GP surgeries in deprived areas including Banbury and Witney to help people maximise their income and/or switch tariffs;
- Energy suppliers or other private providers may provide energy efficiency improvements directly to households;
- Registered social landlords may improve the energy efficiency of their properties thus benefitting social tenants.

2.3 Energy Efficiency outcomes

In 2012 a total of **9,832 households** (of all tenures) in Oxfordshire received cavity wall and loft insulation in the last year of CERT which ran from April to December 2012 (EST, HEED). Of these 3657 were in Cherwell, 1663 were in Oxford, 1693 in South Oxfordshire, 1431 in Value of the White Horse and 1388 in West Oxfordshire. Data provided by workshop participants show that of these:

 The AWN provided 509 energy efficiency improvements (heating or insulation) in 2012-13 to 417 households across Oxfordshire (not including Oxford city), of which approximately 73% - or 304 households- were estimated to be

⁹ For example between 1 January 2013 to 31 December 2013 Oxford City Council HMO licensing team set: 42 conditions to provide additional heating; 78 condition to remedy dampness in living accommodation (bedrooms); 155 conditions to remedy dampness in common parts, and 36 conditions to deal with mould growth.

Table 1. Summary of Affordable Warmth services provided by the Oxfordshire Affordable Warmth (This does not cover affordable warmth services separately provided by the District Councils).

Name of Scheme	Service offered	Service providers	Eligibility	Funding Source				
Oxfordshire Affordable Warmth Network (AWN)								
Affordable Warmth free phone help line	Free phone help line	AWN	All residents	Local Authorities across Oxfordshire, and Public Health Oxfordshire				
Affordable Warmth home visits	Home visits & Energy efficiency improvements	AWN	Residents needing insulation or heating	ECO, energy supplier trust funds, benevolent trust, flexible home improvement loans and/or small fuel poverty grants from local authorities				
Affordable Warmth Outreach Service	Outreach	AWN	Talks to local groups/events	Local Authorities across Oxfordshire, and Public Health Oxfordshire				
Affordable Warmth Training	Training	AWN	Energy related training to front line council/housing association and agency staff and community groups	Local Authorities across Oxfordshire, and Public Health Oxfordshire				

fuel poor (Oxfordshire Affordable Warmth Network, 2013, End of Year Report 2012-13).

- The Governments' Warm Front grant scheme, which closed on January 19th 2013, provided 97 insulation and heating measures to 72 households. (Affordable Warmth Network, 2013).
- 'Cocoon Free' run by the United Sustainable Energy Agency provided 509 free insulation and heating measures to 417 households. (This marked a decrease from 2011 when CERT was still plentiful and 3,500 measures were provided to 2,580 households).
- Oxford City Council Essential Repair Grants provided double glazing for 3 properties and boilers to 7 households in 2012/13 (one of which was a flexi-loan).

According to a freedom of information request there were **990 energy efficiency measures recommended** in Oxfordshire in 2013 under the new Energy Company Obligation (ECO). Of these, 257 where in Cherwell, 336 in Oxford (which may include the 25 measures recommended under the Warming Barton scheme described in Appendix A), 130 in South Oxfordshire, 167 in the Vale of the White Horse and 100 in West Oxfordshire¹⁰.

This was the first year of the new ECO¹¹ so some teething problems were to be expected, and government do statistics show an upward trend in installation over the year nationally (DECC, 2013). However, the figures represent a significant overall reduction compared to the 9,832 households which received energy efficiency improvements in Oxfordshire in 2012 under the final year of the previous energy obligation scheme, Carbon Emissions Reduction Target (CERT) (EST,

¹⁰ It is not possible, however, to tell from these figures: how many energy efficiency improvements were actually implemented; precisely how many reached low income fuel poor households (although the budget share initially allocated to the fuel poor under ECO is estimated to be 33% (Jansz, A. and Guertler, P, 2012) and whether these were in lower or higher income areas; whether the improvements were sufficient to have lifted households out of fuel poverty; or what the effect of other Affordable Warmth Services on benefits might have been.

¹¹ The figures are for 8 months from January 2013 (the start of ECO) until September 2013.

HEED)¹². Unless the rate of delivery is greatly accelerated in future years the 2016 fuel poverty elimination target will be significantly overrun, low income households will be further economically disadvantaged by rising fuel bills and existing health problems and income inequality will be exacerbated across the county.

 $^{^{\}rm 12}$ The figures are for 8 months from April to December 2012.

Table 2. Summary of Affordable Warmth services provided by Oxford City Council (This case does not cover affordable warmth services separately provided by the District Councils).

Name of		Service					
Scheme	Service offered	providers	Eligibility	Funding Source			
Oxford City Council(OCC)							
Warming Barton	Free energy assessments Subsidised energy efficiency improvements for 27 households	OCC, Oxford Hub, Low Carbon Barton	Residents of Barton	Energy Company Obligation (ECO). Government (DECC pioneer places scheme).			
Signpostin g to affordable warmth services	Signposting to Affordable Warmth Services, including accessing energy efficiency grants, income maximisation (benefit take up) and tariff switching tailored to different household types	Citizens Advice Bureau ¹ , Affordable Warmth Network, Energy Saving Trust	Older people or people on benefits. Private tenants if eligible	ECO. Government.			
Advice and enforcemen t for private landlords	Energy efficiency and health and safety advice or enforcement to private sector landlords	The Environmental Development service, the Private Sector Housing team and HMO licensing & enforcement Team	Tenants in the private rented sector	Oxford City Council.			
Small repairs service, flexible home loans and essential repair grants	Small plumbing, electrical, basic house hold repairs and small heating works. Labour charge is £18 plus the cost of any materials	OCC Home Improvement Agency	For all tenures aged 60 or over or vulnerable. Charges may be waived if on means tested benefits	Oxford City Council.			
Winter Warmth scheme	Small grants for community groups to identify and link elderly vulnerable people to affordable warmth services	OCC	Community Groups	Department of Health via OCC?			

¹ The Citizens Advice Financial Inclusion scheme provides advice on a) benefits (warm home discount scheme, cold weather payments, winter fuel payments, b) ECO affordable warmth, c) tariff switching.

Chapter 3 Gaps, barriers and opportunities

3.1 National policy

- There is a lack of clarity about the duties, responsibilities and roles of different actors in addressing fuel poverty locally and nationally, which has been exacerbated by the government's recent removal of statutory targets on local authorities to address fuel poverty and reduce carbon emissions.
- There is reduced funding for household energy efficiency improvements generally, and for low income fuel poor households specifically¹³ (ACE, 2013; Jansz, A. and Guertler, P, 2012). This reflects both the lower levels of funding for the fuel poor under ECO and the abolition of the Warm Front programme, the only centrally funded Government programme to make fuel poor homes more energy efficient. The latter previously provided free energy efficiency assessments, measures and installation (such as insulation, boilers, double glazing) for people on benefits and the elderly, and was relatively easy to access. At the time of writing there was very little money left in the affordable warmth strand of ECO.
- It is difficult to access ECO or to obtain full funding for identified energy efficiency measures including for the fuel poor.¹⁴This is in part due to reduced funding, in part because ECO's eligibility criteria are complex and in part because it is a market based mechanism energy which means that suppliers tend to choose portfolios with the highest estimated carbon gain for the least money (such as cavity wall insulation) rather than other needed measures. Some of the problems reported by workshop participants include:

¹³ Figures from the Association of Energy Conservation (ACE) show that only 15% of fuel poverty spending in 2014/15 will be used to make homes energy efficient, and that expenditure on energy efficiency schemes to help the fuel poor in England was 56% lower in 2012/13 than its peak at 2010/11 and in 2014/15 will be around 20% below that in 2010/10.

¹⁴ This contrasts with the previous energy supplier obligations (Carbon Emissions Reduction Targets) which subsidised large numbers of low cost energy efficiency measures.

- It did not fully fund solid wall insulation in the Warming Barton scheme as it is expensive, which left a funding gap of up to 50% of the total cost of identified and recommended measures (Ecomorph, 2013 (a); Ecomorph 2013 (b); Low Carbon Hub 2013)¹⁵.
- Energy suppliers or providers may charge low income householders contributions for boilers, and discriminate against smaller properties or those requiring additional work.

The difficulty in accessing full ECO funding for measures is affecting local providers: one local Green Deal/ECO Provider has gone bankrupt, and Insulation North East (INE) was not able to maintain a service in Oxford.

"The transaction costs of delivering ECO are high so ECO providers need high volumes of houses. They are not interested in providing measures to small pockets of households (Workshop participant)

- Energy assessments take a long time (2-3 hours), are costly, and local evidence indicates that customers will not pay up-front for them.
 ECO and Green Deal Providers and other interested parties selling energy efficiency services may provide them free but this jeopardises their impartiality (Ecomorph).
- There are no consistent sources of revenue funding for local organisations to (a) provide home visits, coordinate the area wide delivery energy efficiency measures (which have proven effective elsewhere) such as in Kirklees (Butterworth et al 2011; Eldrich et al 2010; EST, 2005), ¹⁶ or (b) to run the related behaviour

¹⁵ In principle the excess cost for any measure can be covered by a Green Deal loan, but in practice it is unlikely, even after the grant, that a householder could borrow the whole remaining sum in this way, as there is no guarantee that the carbon savings would be sufficient to meet the Golden Rule. Additionally, Green Deal loans are also very expensive with 7% interest, and the costs of Green Deal installations are also very high cost to customers (the bureaucracy may inflate the price of an installation. (Ecomorph, 2013 (a); Low Carbon Hub 2013)

¹⁶ Evidence from Kirklees Warm Zone programme (Energy Saving Trust 2005; Eldrich et al 2010; Butterworth et al 2011) demonstrates the effectiveness and efficiency of the coordinated area wide delivery of energy efficiency

change programmes needed to maximise energy and financial savings.

3.2 Local infrastructure

Linked to these problems in the policy framework and financial incentive structure, local organisations:

- Find it difficult to access and obtain full funding from ECO for energy efficiency measures.
- Find it difficult to provide a clear simple and understandable offer to residents.

"It is not possible to tell low income fuel poor households that they can have their home improved for free or with no up-front costs." (Workshop participant)

- Rely heavily on signposting and phone advice which participants' experience, and wider evidence indicates, is not an effective way of improving energy efficiency of low income fuel poor households (Boardman, 2010; Cheshire Lehmann Fund, 2013).
- Provide energy efficiency services to residents in a piecemeal and fragmented way.
- Have difficulty locating properties with the poorest thermal performance due to problems with poor quality of Energy Performance Certificates due to rushed assessments.

In addition there is:

- A related lack of clarity about roles and responsibilities at local level, and who and where the fuel poor are located; and
- A lack of clear and timely information about affordable warmth services to residents and community groups.

Participants also felt there was scope for more joined up working and cross referral services between local councils, statutory agencies including health agencies, and community groups about energy efficiency, benefits, fuel tariffs, and health and safety issues.

3.3 Opportunities

- Fuel Poverty is a priority in the Oxfordshire Health and Wellbeing Strategy as well as for the Health Improvement Board. The board is currently reviewing what outcome measure could be used to drive fuel poverty work and any necessary funding of that work.
- Public Health Oxfordshire are considering funding the AWN as it provides a county wide preventative service reducing the incidence of illnesses related to cold homes and hence NHS costs.
- Community groups can play valuable complementary roles in helping address fuel poverty (see case studies in Appendix A), although their uneven distribution, reach and capacity mean they cannot substitute for local authorities or other statutory bodies.

measures to residents. Delivery roles may include resident engagement through door knocking, home visits, tendering for providers, coordinating the area wide delivery of measures to households on, negotiating with landlords, providing complementary advice on energy behaviours, benefits, health and safety etc . Private Green Deal providers are not as trusted as local government and are unlikely to have the competency to provide many of these services (Mayne et al, 2013).

Chapter 4 Conclusions and recommendations

The case studies and workshop discussions illustrated some of the important efforts by local organisations to address fuel poverty. However, it was felt that these efforts were constrained by the weakness of the current policy and financial incentive framework. A year after the ECO and Green Deal were launched only around a fraction of the 26,088 households (of all tenures) living in fuel poverty in Oxfordshire had received free energy efficiency measures under ECO. In the meantime rising fuel prices are likely to deepen poverty and exacerbate the already deep health and income inequalities in the county.

Workshop participants expressed a strong sense of frustration at the systemic failure to adequately address fuel poverty across Oxfordshire.

"It's become harder and way more complex to deliver effective action on Fuel Poverty locally." (Workshop participant)

The following recommendations for government, local authorities and community groups were identified.

Recommendations for Government

- Clear responsibilities and targets for national government, local authorities and other statutory agencies to address fuel poverty;
- Simplification and reform of ECO to provide clear and easily accessible free energy efficiency measures for the low income fuel poor; or its replacement with easy to access publically funded grants funded by taxation;
- Increase funding/subsidies for energy efficiency improvements particularly for low income fuel poor households via ECO or grants, and via the NHS¹⁷;

- Extend the Pioneers Places scheme to provide free energy assessments to all households;
- Provision of revenue funding for trained local actors to provide home visits and coordinate the area-wide delivery of energy efficiency measures to households (starting with the most deprived areas) and energy behavioural advice;
- Strengthen the training of energy assessors for assigning Energy Performance Certificate standards and provide Local Authorities the powers to request a fresh assessment if needed;
- Require data collection and reporting by local authorities and relevant agencies about the installation of energy efficiency measures by tenure and income group aligned with existing fuel poverty data;
- Develop and disseminate simple cost-benefit impact tools which measure the broader socioeconomic impacts of addressing fuel poverty e.g. green jobs, health benefits, financial savings, house values. (E.g. the BRE Housing calculator http://www.cieh.org/policy/good_housing_good_h ealth.html);
- Ensure a joined up approach to funding and supporting local fuel poverty action by Government departments – DEFRA, DECC, OFGEM, DCLG, DOH, and DWP –and integrate learning from the, previous Home Energy Conservation Act (HECA) action schemes that supported local authority fuel poverty work.

Recommendations for Local Authorities and local agencies

 Launch a public fuel poverty campaign to galvanise and support fuel poverty action including communicating the multiple benefits of addressing fuel poverty e.g. health, financial savings, jobs, indirect economic benefits, climate change mitigation;

"Announcing a fuel poverty campaign would make it official." (Workshop participant)

¹⁷ GPs in north-eastern England have been asked to identify patients to receive NHS funded prescribed energy efficiency improvements to their houses, to test whether a warmer home helps them to better manage their symptoms and reduce their need for medical attention (Godsen, E,

May 19th 2014, GPs to 'prescribe a boiler' to patients living in cold homes, Daily Telegraph

- Lead the development of a joined up county-wide strategy to address fuel poverty co-designed with relevant Health, and other statutory agencies, Affordable Warmth Network, and community groups, to address fuel poverty including:
 - Clarification and delineation of the duties, responsibilities and roles of local organisations in addressing fuel poverty (including AWN; different tiers of local government; statutory agencies);
 - A clear offer to residents for energy efficiency services including, where funding permits, home visits and the coordinated delivery of free energy efficiency measures to homes;
 - Clear and timely information to local organisations and residents about affordable warmth services (integrating energy efficiency, income maximisation, debt and tariff advice) including a clear narrative about why and how people can benefit from them;
 - A clear cross referral system between different local organisations (including AWN; different tiers of local government; health, fire service and other relevant statutory agencies; and community groups)¹⁸;
 - Training of front line workers who visit peoples' homes to provide basic energy advice and link them to services;
 - Reporting on the installation of energy efficiency measures by tenure and income group aligned to fuel poverty data.
- Hold an annual county-wide forum, with the AWN, relevant agencies and community groups, and relevant national organisations such as the Chesshire-Lehmann fund, National Energy Action, and Association for the Conservation of Energy (http://www.chesshire-lehmann.co.uk/; http://www.nea.org.uk/; http://www.ukace.org/) to collectively review roles, outcomes and share learning from best practice.

"The information should be provided in a simple way with a description of available services who delivers them, who is eligible, funding source and a glossary." (Workshop participant)

Recommendations for Community Groups

- Hold local authorities and the Health Improvement Board to account for addressing fuel poverty in Oxfordshire (within the constraints of national policy framework and financial incentive structure);
- Help identify the fuel poor, and link them to existing affordable warmth services (Note; this may require funding and training of community groups by local authorities);
- Provide no or low cost measures to residents such as thermometers, simple energy saving tips (if trained to do so) and help facilitate simple low measures such as draught proofing, insulating curtains etc;
- Raise awareness among residents about their 'right to health' and also the limits of current affordable warmth services and reasons for this;
- Signpost and deliver affordable warmth information through community centres, health centres, and shops;
- Alert tenants to the fact they can encourage or require landlords to upgrade their properties, and get advice and enforcement services from the local authority;
- Engage street champions, and encourage neighbours, to look out for people who might benefit from affordable warmth services.

¹⁸ It would be helpful if this could include the development of guidelines that facilitate the sharing information between local front line workers (councillors, community support policy officer, ministers, health workers) and community groups to enable the latter to identify vulnerable fuel poor households and link them to affordable warmth services and set standards for energy efficiency measures that affect the fabric of households.

References

Affordable Warmth Network. (2013) Oxfordshire Affordable Warmth Network: 2013, End of Year Report .

Association for the Conservation of Energy, 2013, Energy Efficiency: fighting to keep bills down permanently, Briefing pack, (http://ukace.org/wpcontent/uploads/2013/11/ACE-November-2013-Energy-efficiency-fighting-to-keep-bills-downpermanently.pdf).

Boardman, B. (2009) Fixing Fuel Poverty: Challenges and Solutions. London, Earthscan.

Butterworth, N., Southernwood, J. and Dunham, C. (2011) Kirklees Warm Zone Economic Impact Assessment, Carbon Descent,

http://www.kirklees.gov.uk/community/environment/e nergyconservation/warmzone/Kirklees_Economic_E valution.pdf

DECC, 2013, Domestic Green Deal and Energy Company Obligation in Great Britain, monthly report, https://www.gov.uk/government/uploads/system/uplo ads/attachment_data/file/244349/statistical_release_ green_deal_eco_great_britain.pdf

Ecomorph. (2013a) Green Deal Information Sheet: Version 2. (www.ecomorph.org)

Ecomorph. (2013b) Fundamental Problems with the Green Deal (www.ecomorph.org)

Eldrich, B., Beagley ,K. and Webber, P.(2010) Kirklees Warm Zone Final Report 2007-2010,

Energy Saving Trust (2005) Warm Zones External Evaluation, Final Report. http://www.kirklees.gov.uk/community/environment/e

 $nergy conservation/warm {\tt zone} {\tt Warm {\tt Zone} {\tt Report.pdf}$

Eyre, N. and Rosenow, J. (2012) Green Deal and the Energy Company Obligation - will it work? In: Proceedings of British Institute of Energy Economics 9th Academic Conference.

European Energy in a Challenging World: The impact of emerging markets. St Johns College, Oxford, 19-20 September 2012.

Guertler, P. (2014) Fuel Poverty update: 2014, http://www.e3g.org/docs/ACE_and_EBR_fact_file_(2 014-02).pdf HEED (Home Energy Efficiency Database) http://www.energysavingtrust.org.uk/Publications2/H ousing-professionals/HEED-PDFs/HEEDpublications-for-UK/CERT-Summary-Report-Q19-by-Local-Authority

HM Government (2011a) The Carbon Plan: Delivering our low carbon future. https://www.gov.uk/government/uploads/system/uplo ads/attachment_data/file/47613/3702-the-carbonplan-delivering-our-low-carbon-future.pdf

HM Government (2011b) 2011 sub-regional fuel poverty data, https://www.gov.uk/government/publications/2011sub-regional-fuel-poverty-data

Jansz, A. and Guertler, P, (2012) The impact on the fuel poor of the reduction in fuel poverty budgets in England, Association for the Conservation of Energy for Energy Bill Revolution http://www.ukace.org/wpcontent/uploads/2012/12/ACE-and-EBR-2012-11-Reduced-fuel-poverty-budgets-in-Englandbriefing.pdf

Low Carbon Hub (2013) Warming Barton Evaluation Report.

Mayne, R, Hamilton, J and Lucas K. (2013) Roles and change strategies of low carbon communities, A working paper for the EVALOC project

Oxford City Council (2013) The English Energy Conservation Authorities issued pursuant to the Home Energy Conservation Act 1995: further report for Oxford City Council.

Oxfordshire County Council Index of Multiple Deprivation Dashboard: http://insight.oxfordshire.gov.uk/cms/index-multipledeprivation-dashboard

Public Health England. (2013) Oxfordshire Health Profile 2013, http://www.apho.org.uk/resource/view.aspx?QN=HP

Rosenow, J and Eyre, N. (2013) The Green Deal and the Energy Company Obligation.

_RESULTS&GEOGRAPHY=38).

Energy: 66 Issues EN3 Proceedings of the Institute of Civil Engineers

Wookey, L. (2014) personal communication, Public Health England at CAN Training Day Conference, London 5th February 2014.

Appendices

Appendix A: Case studies

Case Study 1: Oxford City Council

General Fuel Poverty Services

Oxford City Council (OCC) signposts residents to information about available affordable warmth services through its web site and leaflets including to the Oxfordshire Affordable Warmth Network (AWN) which it now funds. The information is tailored to different socio-economic group and tenures, and the AWN also trains Council staff about what help is available and what to do about it.

The City Council also actively promotes energy efficiency information (legislative changes and available finance) to private sector landlords via forums, web, and newsletters, and is trying to build up knowledge on how it can use EPCs and thermal imaging to enforce energy efficiency standards in single occupancy and Houses of Multiple Occupants.

It offers its own small repairs service which is available to owner/occupiers and tenants aged 60 and over, or suffering from a long term health condition or who are registered disabled. This covers small plumbing, electrical and basic house hold repairs e.g. small heating works such as thermostatic radiator valves, lagging pipework, hotwater cylinder insulation, draught exclusion work etc. The labour charge is £18 plus the cost of any materials used. These charges may be waived for someone in receipt of a means-tested benefit.

It is also running a Winter Warmth project which provides small grants to community groups in Oxford and advice centres/CAB to promote affordable warmth information and services to vulnerable older people. The Council also provides the community groups with promotional information and training.

Warming Barton

The City Council's current major fuel poverty programme is a scheme called Warming Barton which it implements in partnership with the Low Carbon Hub and local community organisations. The scheme, which is funded by DECC's Pioneer Places programme, aims to improve the energy efficiency of hard to treat homes in Barton which is among the most deprived 10% of neighbourhoods in the UK (measured in terms of the extent to which residents experience multiple aspects of deprivation including low skills, low incomes and high levels of crime). Many of Barton's homes are steel-frame prefabricated buildings which are poorly insulated and 'hard to treat'. (Ref Warming Barton Evaluation report).

The scheme involved coordinating the delivery of free energy assessments (by local Green Deal energy assessors) and Green Deal Advice Reports to households. A total of 119 assessments were delivered throughout the project and local domestic energy assessors of which 61 include full Green Deal Advice Reports (an Energy Performance Certificate (EPC) and Occupancy Assessment). This resulted in a total of 579 recommended actions, 206 tCO2 potential annual savings and the potential for each household to save an average of £450 on their bills (Warming Barton Evaluation report).

However, as outlined above it proved difficult to obtain ECO funding to cover the full costs of providing external wall insulation to the 25 households identified for ECO funding. It was therefore planned that on the back of this scheme pilot, the Low Carbon Hub and Oxford City Council would develop a partnership with an ECO provider, Insulation North East (INE), in order to create a blended portfolio of property types across Oxford which would enable energy saving measures to be fully funded by ECO for homes in fuel poverty. In the first instance it was planned that this would involve extending the Warming Barton programme to neighbouring deprived parts of the city in Cowley, Littlemore, Iffley and Headington.

However, the proposed extension was not possible due to the recent revision to ECO which extended its implementation period and reduced the targets for external wall insulation (from 300,000 to 100,000) .This has reduced the price suppliers are willing to pay per tonne of carbon saving and hence increased the difficulty of accessing ECO for relatively expensive measures such as external wall insulations. These same difficulties have made it difficult for INE to provide an installation service in Oxford.

Case Study 2: Oxfordshire Affordable Warmth Network (AWN)

Both tiers of Local Government in Oxfordshire fund The Oxfordshire Affordable Warmth Network, operated by the National Energy Foundation (previously United Sustainable Energy Agency), which accesses and delivers funding for energy improvements. It also provides:

• A free phone helpline with no eligibility criteria which provides impartial advice on reducing energy bills, energy efficiency/saving and behaviour tips, and switching energy suppliers

- Home Visits: For residents identified as needing insulation or heating, the AWN may suggest a referral for a free home energy survey to identify energy efficiency improvements and access funding. The home visit will be conducted by a local Green Deal provider. Financial assistance may come from ECO, energy supplier trust funds, benevolent trust, flexible home improvement loans and/or small fuel poverty grants held on behalf of local councils
- Outreach: AWN staff are available to deliver talks about how to keep warm and well to all kinds of groups and events.
- *Training:* The network provides training to front line local authority staff, community groups and volunteers about affordable warmth, the dangers of living in a cold home, signs to look out for, and help available to alleviate underlying problems. All outreach and training sessions are free of charge.
- Information: The network also produces a range of literature, including a 28 page 'Easy Save' booklet packed full of tips to keep in control of energy bills, thermometer cards, posters and flyers.

In 2012/13, 502 people accessed its free help line and installed 509 heating and insulation measures in 417 households across Oxfordshire (AFN Eval Report).

Difficulties in accessing ECO contributed to the bankruptcy of the AWN's initial delivery partner, the Energy Saving Cooperative, although AWN has subsequently re-tendered and are now sending referrals through to two organisations InstaGroup and EverWarm (previously known as the Cocoon Your Home insulation scheme) (AWN).

Case Study 3: Ecomorph: a green deal advice organisation

Ecomorph is a Green Deal advice organisation with three advisers. It has conducted around 100 grantfunded Green Deal Assessments and provides advice on immediate low- or no-cost energy efficiency measures. It also refers people to Green Deal Providers who will access ECO and/or Green Deal loans arranged through a Green Deal Installer. It has encountered a number of problems in relation to ECO. First, in practice the ECO will not fully fund solid wall insulation, nor Affordable Warmth measures. For the excess cost, the householder could look to the Green Deal, but in practice it is unlikely, even after the grant, that they could borrow the whole remaining sum in this way, as there is no guarantee that the carbon savings would be sufficient to meet the Golden Rule. Green Deal loans are very expensive with 7% interest. The costs of Green Deal installations are also very high; the bureaucracy may inflate the price of an installation 2.5-fold. Customers could do better borrowing elsewhere and hiring workers directly. It is not possible therefore, for a Green Deal Advisor (GDA) to advise a person on pension credit to enable home improvement with no up-front costs. Second, as noted above, energy assessments take a long time (2-3 hours), and are costly. Customers will not pay up-front for them. Green Deal Providers and other interested parties selling products may provide them free but this jeopardises the impartiality of their advice.

Case Study 4: Low Carbon West Oxford

Background

Low Carbon West Oxford (LCWO) is a mainly voluntarily run charity which runs a range of projects to reduce individuals and community's carbon footprint. It is based in West Oxford which is an area of medium deprivation. According to the 2001 census 84% of households are owner occupiers with the rest made up of private rented and social rented accommodation.

LCWO household carbon/energy reduction programmes

As the Local Authority was not running any residential carbon reduction, energy efficiency or fuel poverty programmes in the community Low Carbon West Oxford developed the Low Carbon Living Programme to motivate and enable local residents to reduce their personal and household carbon emissions. The programme does this: through (a) measurement and feedback including personal carbon foot printing, loan of an energy display monitor and regular meter readings; (b) advice, support and opportunities for peer learning in six group sessions backed up by information sheets; and (c) goal setting in six group workshops over a 6 month period.

The LCWO team were aware that energy efficiency improvements bring important practical benefits for people - savings on fuel bills, warmer homes, improved health - so have tried to be as inclusive as possible including:

- Developing an engagement strategy to reach all different sections of community – including door knocking across whole community;
- Providing tailored information and advice for tenants;

- Addressing barriers to participation e.g. timing of meetings, small grants for EE measures or baby sitting;
- Signposting, badging and leafleting residents about Warm Front and other grants for household energy efficiency improvements.

Over 100 people have completed the programme since it was established in 2010, and participants reduced their personal carbon footprint by an average of 10% in the first year. 20% of participants (from two of the cohorts) had below average incomes which roughly reflect the demography of the area. The 'badging' of the previous Warm Front grant scheme via leafleting to eligible households resulted in seven qualified referrals.

Despite these encouraging results, LCWO recognised that LCLP was not reaching everyone in the community. Some people lack the motivation, agency or time to attend group meetings in the first place. If they do attend and want to make energy efficiency improvements to their homes, infrastructural gaps (e.g. in low energy renovation skills and materials) means participants who attend the programme still have to organise finance and energy efficiency which is a big ask even for 'able to pay', let alone for low income fuel poor. However, it did not have capacity or resources to do home visits or access and coordinate the installation of free energy efficiency measures to low income and vulnerable households itself (and as a charity LCWO is not able to recommend particular energy suppliers or installers to people).

As a result it developed a number of complementary measures including:

- Meeting with the City Council and housing associations to encourage them to further improve the energy efficiency of their properties in West Oxford.
- Contracting an experienced energy assessor to provide free one-to-one energy saving advice and affordable warmth surgeries at twice-yearly Bring and Take sessions, and subsequently to provide tailored assessments and advice in people's homes.
- Thermal imaging of residents' homes by appointment, with follow up energy advice for specific problems identified.

In 2013, thermal images were taken of 15 homes, one-to-one energy advice provided to 21 households, an energy-wise workshop attended by 8 residents, 90 households were contacted with advice on staying warm (through the City Council funded Winter Warmth project). Winter Warmth project: In 2013, in response to community groups' concerns that the pockets of low income fuel poor in their areas were not accessing affordable warmth services, the City Council used funds from the Department of Health for a 'Community Connection Scheme', now called the Winter Warm project. The scheme provides community groups with grants to identify local vulnerable and elderly people, and link them to affordable warmth services.

LCWO received a grant which enabled it to hire a local person who had prior experience of working with vulnerable people to do the needed outreach and home visit. The link with the council also helped ensure that LCWO were informed about what services they and other agencies provided.

The project worker identified 90 vulnerable people. There was a very low uptake of affordable warmth services on offer, in part due to people's reluctance to report need or to suffer the disruption of further visits or assessments. But this also reflected the relatively paltry nature of the available local or national Affordable Warmth services at that time which mainly provide a phone help line,

However, the identification of and links made with the vulnerable households was in itself a valuable outcome, as was the networking with the chemist, community police, the church and health care staff, to raise awareness of issues of cold homes, fuel poverty and services. The Council has found further funding for the project to continue this year, and is hiring the LCWO project worker to provide mentoring and training for other communities.

Case Study 5: Low Carbon East Oxford

Background Information

Low Carbon East Oxford (LCEO) is a community group running initiatives to reduce the carbon footprint of East Oxford. The area of East Oxford covered by LCEO covers three Wards which have disproportionately high private rented accommodation and houses in multiple occupation. The 2001 Census showed that more than one third of properties in east Oxford were private rented (more than 2,000 households). This is much higher than the average figure across south east England and is particularly pertinent to policy making as the proportion of privately-rented homes in England rising.

The relevant Lower Super Output Areas (LSOAs) have Indices of Multiple Deprivation of around 25-35%, and the same areas represent the worst fuel poverty across the city. According to the 2011 new definition of fuel poverty (Low Income, High Cost)

IHC, seven of the ten worst LSOAs in Oxford are in the three Wards covered by LCEO, St Mary's, St Clement's and Iffley Fields.

Despite the high levels of fuel poverty the parliamentary constituency of Oxford East had received relatively little help from interventions under the previous supplier obligation scheme, CERT. By quarter 12 of the CERT scheme in March 2011, only 4% of properties had benefitted from any treatment, leaving the constituency ranked 595th out of 635 constituencies

(http://www.energysavingtrust.org.uk/content/downlo ad/5363/94051/version/1/file/Copy+of+CERT+Summ ary+Report+%28Q12%29+by+Constituency.xls).

LCEO work with tenants in the private sector

An important element of LCEO's work has been helping improve energy efficiency in the private sector, given that a large proportion of private rented properties have low energy efficiency and very high rents. Its 'Landlord Energy Saving Scheme' business plan won a solar PV system in a national competition in 2011. The system was installed on the roof of local charity Restore. The charity's café and offices make use of the generated electricity while the feed-in tariff income is used to support LCEO's work.

In early 2012, LCEO also won and ran a £38,000 DECC-funded LEAF project. LCEO worked with People and Planet, Gaiaveda and local specialists to train volunteers to survey 200 private rented properties. Just over half of the properties surveyed were terraced houses and nearly one third was flats. As this was a self-selecting group many of the properties in the worst conditions were not assessed. The average EPC rating was 51 and two thirds of the properties were in Band E. Only one quarter of households reported having seen the EPC for their property, and only one tenant knew of any of the EPC recommendations being followed. The team worked with tenants, students, letting agents and landlords to offer advice, tailored around CERT and tax-supported measures. There were constraints on access to EPCs, and engagement with both private landlords and letting agents proved difficult.

Following the surveys, LCEO managed to help roughly 50 properties. It helped them negotiate support from power suppliers (SSE and British Gas), who provided radiator reflector panels and energy display meters. LCEO also promoted free water





saving devices, including tap inserts and efficient shower heads. Since residents had to obtain these direct from the water utility, there is no firm information on take-up beyond a handful of properties.

The loan library of energy display meters has enabled reduction of standby losses in around 10 homes so far. Householders were encouraged to go 'vampire hunting', discovering and controlling 'always on' loads of up to 40 watts.

LCEO installed radiator reflector panels in around thirty properties. It is planning to use the remaining materials to treat a further 25 properties, which were identified in the 2014 thermal imaging campaign.

Another engagement campaign has been the thermal imaging project. The 2012/13 effort trained around 10 volunteers and made use of a camera loan from CAG Oxfordshire. The project provided basic survey of more than 200 properties. Residents have installed new windows and simpler measures such as secondary glazing, draught-proofing and door curtains as a result of the project.

For 2014, Oxford City Council kindly lent LCEO a thermal imaging camera and there has been joint training. Initially, it had been hoped to survey around 20 streets. However, the unusual weather conditions have so far restricted the ambitions for the 2014 project, as there have been few periods of cool weather suitable for evening surveys. Images have been taken for approximately 300 properties up to the beginning of February. Information sharing activities are planned to coincide with the upcoming Oxfordshire Green Open Doors events.

One of the areas of focus for the DECC Local Energy Assessment Fund (LEAF) funded project

was external wall insulation (EWI). This is particularly relevant to the prevalent solid walled properties in east Oxford, given that internal insulation is particularly difficult to implement in the private rented sector. It also has problems with interstitial condensation and is not an appropriate adaptation to climate change, with potential for overheating. EWI is expensive but there are potential benefits of cost reduction through area-based approaches. However, there is a strong resistance from the perspective of heritage and street scene. One demonstration property has been treated in the area covered by LCEO. The revisions to planning constraints for EWI were not sufficient to enable presumed consent. LCEO has engaged with planning officials to try to develop a supportive regime.

LCEO also has promoted information about affordable warmth services in its area by preparing display posters and leaflets for the local Churches and Friends' Meeting House and through its own newsletter and the Quaker newsletter.

It has asked 'street champions' to help identify people in their streets to see if they would benefit from fuel poverty advice, and has also asked local Councillors to help with follow-up. The volunteer resources are limited and LCEO has not been able to take up offers of training this year. Their approach is to work with people who are long-term residents and hence know the area well.

LCEO continues to work with the City Council and DECC to develop approaches by which housing data can be used effectively to help support outreach activities. It also plans to reach the vulnerable through groups like Donnington Doorstep toddler group, over 50s, Asian women's groups, the Ethnic Minority Business service and church networks.

Appendix B: Deprivation and fuel poverty data

	Number of LSOAs (Lower layer Super Output Areas (LSOAs) per district				
Deciles of Indices of Multiple Deprivation	Cherwell	Oxford	South Oxfordshire	Vale	West Oxfordshire
0-10 (most deprived)	0	1	0	0	0
10-20	5	11	0	1	0
20-30	4	9	3	0	2
30-40	5	12	3	0	2
40-50	4	16	4	1	2
50-60	11	13	6	11	3
60-70	15	9	8	5	7
70-80	10	9	14	14	6
80-90	23	5	28	15	19
90-100 (least deprived)	14	0	35	28	25

Index of Multiple Deprivation by districts in Oxfordshire¹⁹ 2011

¹⁹ Source: Oxfordshire County Council Index of Multiple Deprivation Dashboard: <u>http://insight.oxfordshire.gov.uk/cms/index-multiple-deprivation-dashboard</u>

The LSOAs with worst fuel poverty in Oxford



Source: <u>http://public.tableausoftware.com/views/LCEOLIHCFP/OxfordFP-detail?:embed=y&:display_count=no</u> Notes: based on new low income high cost definition of fuel poverty