

A working paper for the EVALOC project Addressing pockets of fuel poverty in Oxfordshire

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1 Introduction

1.1 Background

This report is one of a series of research briefing notes that shares 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 briefing notes 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 strand¹, including shared learning workshops and reports on Carbon Reduction in Communities of Disadvantage and on Partnership Working (<http://www.evaloc.org.uk/#!working-papers/c1xlh>).

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

¹ The EVALOC research programme also involves household level research with 88 households. This data was not fully analysed at the time of writing so no firm conclusions can be drawn at this stage about the effectiveness or impacts of the six LCC including LCWO on energy use, carbon emissions or wider socio-economic benefits arising.

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, in particular home energy efficiency improvement 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.

1.2 Fuel Poverty and climate change

Fuel Poverty is a complex problem with several components. It is about poverty and not having enough money to heat your home or afford energy efficient improvements to your home. It's also about housing conditions: a house that leaks heat, and guzzles energy, will cost more to keep warm. It's also about energy prices: high prices can mean people have to choose between keeping warm, and food.

Fuel Poverty affects health. Living in cold, damp conditions leads to several health problems. People with respiratory illnesses are more likely to have to go to the doctor, or to hospital, if they are unable to keep warm. Being cold most of the time is also linked to mental health problems.

Fuel poverty is linked to climate change policy objectives as they share a solution, which is to improve the energy efficiency of the housing stock.

1.3 Summary of findings

Although Oxfordshire is a relatively wealthy county it contains pockets of deprivation and fuel poverty. Improving household energy efficiency is the most sustainable way of tackling the problems caused by 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.

According to a freedom of information request there were 990 energy efficiency measures recommended² in Oxfordshire in 2013 under the new Energy Company Obligation (ECO)³. This represents a significant overall reduction compared to the 9,832

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

³ 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

households⁴ (EST HEED) which received energy efficiency improvements in 2012 under the final year of the previous energy obligation scheme, the Carbon Emissions Reduction Target (CERT). Some teething problems can be expected as this was the first year of the new policy, and government do statistics show an upward trend in installations over the year nationally (DECC, 2013). However, 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 gaps and barriers to improving the energy efficiency of low income fuel poor households in both lower and higher income areas of Oxfordshire.

In relation to **local infrastructure**:

- It is difficult for local organisations to access and obtain adequate ECO funding for household energy efficiency improvements including for low income fuel poor households (including owner occupiers and private tenants),
- There are not sustained sources of revenue funding for local organisations to provide (a) home visits (b) the area wide coordination and delivery of (free) energy efficiency measures to people's homes which has proven effective elsewhere such as in Kirklees (Butterworth et al 2011; Eldrich et al 2010; EST, 2005) or (c) the related behaviour change programmes needed to maximise energy and financial savings from technical energy efficiency measures.
- Linked to these two problems: (a) it is difficult for local organisations to provide a clear simple and understandable offer to residents, whether in lower or higher income areas, (b) energy efficiency and behaviour change services tend to be provided in a relatively piecemeal and fragmented way including to low income fuel poor (owner-occupiers and private tenants) and (c) local organisations rely quite heavily on signposting and phone advice, although it is known to be of limited efficacy in assisting people in fuel poverty.

These difficulties were seen as linked in part to limitations in the **policy framework and financial incentive structure**, namely:

- The lack of clear lines of responsibility or targets for fuel poverty reduction at both national and local level.

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.

⁴ The figures are for 8 months from April to December 2012.

- The 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 difficulties in accessing or obtaining the recently introduced Energy Company Obligation (ECO), which is now the main source of funding for energy efficiency measures but which does not provide full funding for all needed measures including those for the fuel poor.
- The lack of adequate or consistent sustained sources of revenue funding for local organisations to provide home visits, the area wide delivery of energy efficiency measures or to deliver behaviour change programmes.

A number of **recommendations** were made to address these issues including:

- 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 where funding permits the area wide delivery of free energy efficiency improvements to households in partnership with health agencies, other agencies and community groups.
- For **community groups** to take account of fuel poverty in designing and implementing their activities including helping link people to existing services; to hold local authorities and health agencies to account for addressing fuel poverty; and to provide complementary support to statutory agencies programmes where needed.

2 Context

2.1 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 (including in the residential sector), 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 poor⁵ 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 definition⁶, 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 improving energy efficiency

⁵ 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/fuel-poverty-statistics>.

⁶ Using the previous definition of fuel poverty.

provides the more sustainable 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).

2.2 Demographics and Fuel Poverty in Oxfordshire

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. Although it is a 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.

Twelve lower super output areas (LSOAs)⁷ 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 Annex 2).

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. In Oxford 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 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 deaths⁸ 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

⁷ LSOAs are geographical units used in the Census, each of which contains approximately the same number of households - about 400.

⁸ 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).

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).

3 What is being done to address fuel poverty

3.1 National policy framework and financial incentive structure

Under the Warm Homes and Energy Conservation Act 2000, which came into force in November 2001, the government published its Fuel Poverty Strategy. This set out an objective to eradicate fuel poverty as far as reasonably practical by 2016. Under the Act local authorities are required to report on progress on improving energy efficiency in their areas by March 2013. In 2012/13 the Department for Energy and Climate Change issued guidance⁹ for local authorities (Guidance to Energy Conservation Authorities¹⁰ issued pursuant to the Home Energy Conservation Act 1995) setting out how local authorities should comply with this requirement, and requiring them to have regard to measures that take advantage of financial assistance such as the Green Deal, ECO and the Renewable Heat Incentive. Under the Energy Act 2013, the government removed the previous target to eradicate fuel poverty by 2016, and replaced it with a duty to set a new target (through secondary legislation), and a requirement to put in place a new strategy for achieving the target. The target must be in place within 6 months of the commencement of the duty, and the strategy must be in place within 6 months of agreement of the regulations for the target.

At national level the government is also obliged under the 2008 Climate Change Act to reduce carbon (and other greenhouse gas) emissions by 80% by 2050 compared to 1990.

Below we briefly describe some of the current *energy efficiency* policies that have been put in place to address fuel poverty and carbon reduction 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

⁹ Published July 2012 and revised in March 2013

¹⁰ The Home Energy Conservation Act identifies local authorities as Energy Conservation Authorities.

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 has recently consulted 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.¹¹

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.

3.2 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 Annex 1) presented case studies about their fuel poverty (and carbon reduction) strategies. We provide a summary of these strategies below.

¹¹ 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 take-up 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).

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 part of local authorities' strategy to address 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) produces a range of relevant information (see case study).

Table 1. Summary of Affordable Warmth services provided by the Oxfordshire Affordable Warmth Network.¹²

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

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 additional fuel poverty services:

- 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

¹² This table does not cover affordable warmth services separately provided by the District Councils.

(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).¹³
- 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).

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 Annex 1 for example).

Table 2. Summary of Affordable Warmth services provided by Oxford City Council.¹⁴

Name of	Service offered	Service	Eligibility	Funding Source
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¹³ 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.

¹⁴ This table does not cover affordable warmth services separately provided by the District Councils.

Scheme		providers		
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).
Signposting 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 ¹⁵ , Affordable Warmth Network, Energy Saving Trust	Older people or people on benefits. Private tenants if eligible	ECO. Government.
Advice and enforcement 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?

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

¹⁵ 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

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.

3.3 Energy Efficiency outcomes

In 2012 a total of 9,832 households (of all tenures) in Oxfordshire received cavity wall and loft insulation (EST, HEED). This was the final year of the previous energy obligation scheme, CERT, which ran from April to December 2012. 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 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 (now the National Energy Foundation) 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*¹⁶ in Oxfordshire in 2013 under the new Energy Company Obligation (ECO). Of these, 257 were in Cherwell, 336 in Oxford (which may include the 25 measures recommended under the Warming Barton scheme described in the annex), 130 in South Oxfordshire, 167 in the Vale of the White Horse and 100 in West Oxfordshire.¹⁷

¹⁶ The figures are for 8 months from January 2013 (the start of ECO) until September 2013.

¹⁷ 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

These 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. This was the first year of the new policy so some teething problems were to be expected, and government statistics do show an upward trend in installation over the year nationally (DECC, 2013). However, 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.

4 Gaps, Barriers and Opportunities

The case studies and workshop participants identified a number of gaps, barriers and opportunities in the policy framework and financial incentive structure, and local infrastructure relating to residential energy efficiency services which are outlined below.

4.1 Local infrastructure

In relation to local infrastructure:

- It is difficult for local organisations to access and obtain adequate ECO funding for energy efficiency improvements including for low income fuel poor households (including owner occupiers and private tenants).
- There are not sustained sources of revenue funding for local organisations to provide (a) home visits (b) the area wide coordination and delivery¹⁸ of (free) energy efficiency measures to people's homes which has proven effective elsewhere such as in Kirklees (Butterworth et al 2011; Eldrich et al 2010; EST, 2005)¹⁹ or (c) the related behaviour change programmes needed to maximise energy and financial savings from technical measures (Janda, 2009).

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.

¹⁸ Local Authority delivery roles 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. (Mayne et al, 2013).

¹⁹ An initial investment of £20.9m was made in the Kirklees Warm Zone Programme, of which Kirklees provided £11.7m and Scottish Power the remainder. This resulted in a net social benefit of almost £250m from lifetime fuel savings, lifetime carbon emissions savings, job creation and economic impact, savings to the NHS, house value increases, and confirmed benefit claims. (Butterworth et al 2011; Energy Saving Trust 2005; Eldrich et al 2010). Local Authority delivery roles 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. (Mayne et al, 2013).

Linked to these two problems: (a) it is difficult for local organisations to provide a clear simple and understandable offer to residents, whether in lower or higher income areas, (b) energy efficiency and behaviour change services tend to be provided in a relatively piecemeal and fragmented way to low income fuel poor (owner-occupiers and private tenants) and (c) local organisations rely quite heavily on signposting and phone advice, although it is known to be of limited efficacy in assisting people in fuel poverty.

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)

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

4.2 National policy

The difficulties at local level were seen as linked to limitations in the government policy framework and financial incentive structure, namely:

- 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.
- Reduced funding for household energy efficiency improvements including for low income fuel poor households²⁰. (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.
- Difficulties in accessing ECO and obtaining full funding for household energy efficiency measures including those for the fuel poor.²¹ This is in part due to reduced funding, in part because ECO's eligibility criteria are complex and in part

²⁰ 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.

²¹ This contrasts with the previous energy supplier obligations (Carbon Emissions Reduction Targets) which subsidised large numbers of low cost energy efficiency measures.

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:

- 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).²²
- Energy suppliers or providers may charge low income householders contributions for boilers, and discriminate against smaller properties or those requiring additional work.
- 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).

- The lack of adequate and sustained sources of revenue funding for local organisations to provide (a) home visits (b) area wide delivery of energy efficiency measures to homes and (c) behaviour change programmes.
- The cost and length of energy assessments (2-3 hours): local evidence indicates that customers will not pay up-front for them. ECO and Green Deal Providers and other interested parties may provide them free but this jeopardises their impartiality (Ecomorph).

4.3 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.

²² 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 213)

- 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 Annex 1), although their uneven distribution, reach and capacity mean they cannot substitute for local authorities or other statutory bodies.

5 Conclusions and detailed recommendations

The case studies and workshop discussions illustrate some of the positive efforts by local organisations to address fuel poverty. However, it was felt that these efforts were constrained by limitations in 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 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.

5.1 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 NHS²³;

²³ 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

- 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 and support 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 socio-economic impacts of addressing fuel poverty e.g. green jobs, health benefits, financial savings, house values. (E.g see the BRE Housing calculator http://www.cieh.org/policy/good_housing_good_health.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.

5.2 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).

- 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;

‘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).

- 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)²⁴;
- 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.cheshire-lehmann.co.uk/>; <http://www.nea.org.uk/>; <http://www.ukace.org/>) to collectively review roles, outcomes and share learning from best practice.

5.3 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);
- To take account of fuel poverty in designing and implementing activities including helping identify the fuel poor, and linking them to existing affordable warmth services. This might include (a) signposting and delivering affordable warmth information through community centres, health centres, and shops, (b) hiring locally based outreach workers (see LCWO case study) to identify and visit

²⁴ 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.

vulnerable people or (c) identifying street champions, and encouraging neighbours, to look out for people who might benefit from 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;
- 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;

Acknowledgements

This report is written by Ruth Mayne²⁵ and Jo Hamilton from the Environmental Change Institute, 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.

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²⁵ Ruth Mayne is also a volunteer and committee member of Low Carbon West Oxford.

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ANNEX 1 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, hot-water 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 (Ref 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).

Case Study 3: Ecomorph: a green deal advice organisation

Ecomorph is a Green Deal advice organisation with three advisers. It has conducted around 100 grant-funded 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

LCWO runs various household energy saving projects and activities including the Low Carbon Living Programme (<http://www.lowcarbonhub.org/low-carbon-living->

[programme](#). As well as helping cut carbon emissions these initiatives also bring practical benefits to residents such as improved warmth and comfort and reduced fuel bills which may be particularly important for elderly, vulnerable and low income families. LCWO has tried to make this and other activities as inclusive as possible including by:

- Developing an engagement strategy to reach all different sections of community – including door knocking across the whole community.
- Tailoring information and advice to different household tenures e.g. owner occupiers and tenants.
- 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.
- Addressing barriers to participation e.g. through timing of meetings, and providing small grants for energy efficiency measures or babysitting.
- Signposting, badging and leafleting local residents about previous Government grants (Warm Front scheme) for household energy efficiency improvements.
- Meeting with the City Council and housing associations to encourage them to further improve the energy efficiency of their properties in West Oxford.
- Offering thermal imaging of residents' homes by appointment, with follow up energy advice for specific problems identified.

Outputs and outcomes include:

- Over 100 people completed the Low Carbon Living Programme between 2010-13, 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 resulted in seven qualified referrals to the scheme.
- 21 households received one-to-one energy advice with high satisfaction rating.
- 8 residents attended an energy-wise workshop.
- Thermal images were taken of 15 homes.

Community Connection and Winter Warmth grants

Despite these encouraging results LCWO recognised that its household energy saving initiatives were still only benefiting a fraction of the 1427 households in the community whether due to people's lack of motivation, agency, time, capability, resources, infrastructural gaps (e.g lack of accredited installers) and/or structural barriers. However, LCWO volunteers did not have the capacity to do the extensive outreach work and home visits needed to ensure that vulnerable and elderly groups benefit. Neither did local authority or Affordable Warmth network run any area based affordable warmth or energy efficiency services in West Oxford.

To help get round some of these problems, LCWO applied for and received a grant from Oxford City Council (in 2012 from the Community Connection scheme, and then in 2013 from the Winter Warmth Scheme). It used it to engage an experienced local community outreach worker to connect and engage with people who may need extra help at accessing energy efficiency and other affordable warmth advice and hence keep warm and save on rising energy bills through winter.

The outputs from this project for 2013/14 include:

- Liaison with local pharmacist, councillor, flood wardens, community organisations, community police, health workers.
- Information placed about the project in community newsletters and distributed to 1427 households.
- 112 households identified, visited and left a package of information.
- Follow up visits made to 29 households.
- Meetings held with elderly people with CAB benefits workers eg at Tumbling Bay court (a retirement development complex of 60 flats for people over 60).
- Joint training with the Affordable Warmth Network of other community groups across Oxfordshire.

Outcomes included:

- 29 identified households given a package of information with a further 21 taking up one or more of the following measures:
 - 8 people took up LCWO small grants for draught excluders
 - 1 person referred to OCC for small repairs to improve draught proof measure in the house.
 - 1 person referred to Oxford City Council for follow up with heating problems.
 - 1 person referred to Befriender service
 - 10 people engaged with Citizens Advice Bureau for benefit advice
- Foundations of trust and confidence laid with local residents which will increase the potential for uptake of measures in the future.
- Increased knowledge and understanding among older and vulnerable people about energy efficiency and affordable measures within the local community, and increased confidence in outreach worker and LCWO.
- Increased knowledge and understanding by local organisations about the situation of elderly and vulnerable people in West Oxford.
- Awareness raising and engagement of local community services and key workers through direct approach, community networking and through OCC project leads.

LCWO is applying for further funding this year and hopes:

- To repeat the same process as in the previous 2 years.
- Hold future community events with residents in West Oxford with the LCWO project worker, Affordable Warmth Network and CAB.

- Combined home visits to identified people by the LCWO outreach worker and the Affordable Warmth worker.
- Training with community groups across Oxford city and Oxfordshire.
- Sharing West Oxford experience with other communities, council, agencies and government.

However, achieving improvements in energy efficiency in the future will depend on improvements in the policy framework and financial incentive structure for energy efficiency measures, and funding for local delivery mechanisms. ECO was difficult to explain and sell as it requires further assessments and no guarantee of free measures. Plus few people had much faith in government or energy supplier schemes. Evidence suggests that local authority led area wide coordinated delivery of energy efficiency measures to people's households is efficient and effective. People were also sceptical of, and reluctant to, switch suppliers.

Case Study 5: Low Carbon East Oxford

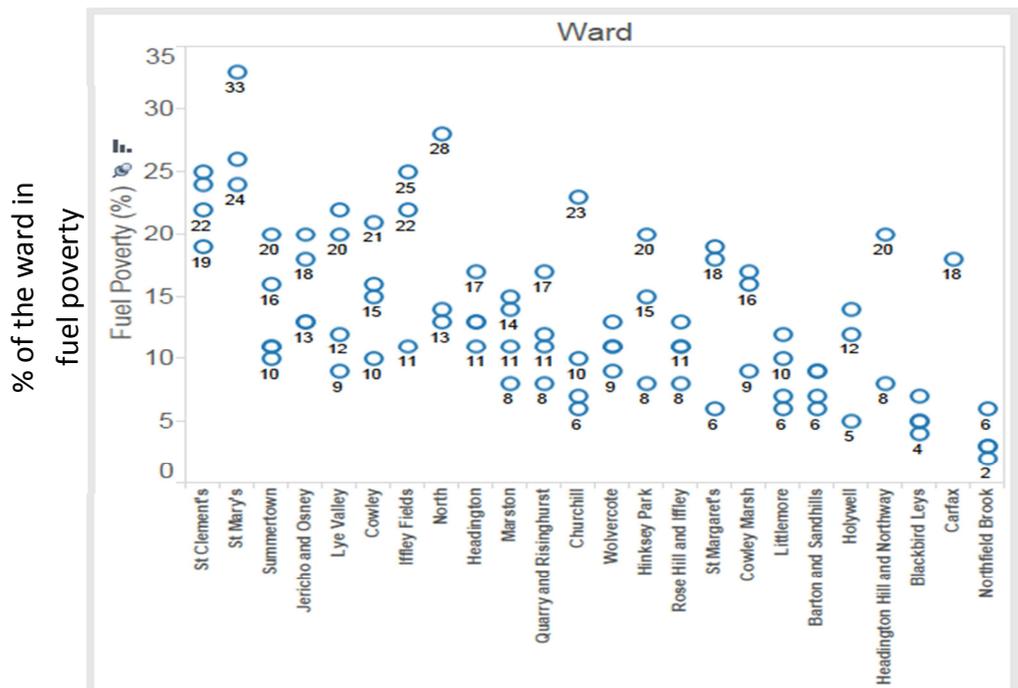
Background Information

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 (Ref [http://www.energysavingtrust.org.uk/content/download/5363/94051/version/1/file/Co py+of+CERT+Summary+Report+%28Q12%29+by+Constituency.xls](http://www.energysavingtrust.org.uk/content/download/5363/94051/version/1/file/Co%20py%20of%20CERT%20Summary%20Report%20-%20Q12%20-%20by%20Constituency.xls)).

Figure 1: Fuel poverty figures for all wards in Oxford.



(Notes: (a) Blue circles represent LSOA (b) the numbers represent percentages in fuel poverty based on the new 2011 'low income high cost' definition of fuel poverty)

Source:

http://public.tableausoftware.com/views/LCEOLIHCFP/WardRanks?:embed=y&:display_count=no

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, Gaiavada 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 were 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.

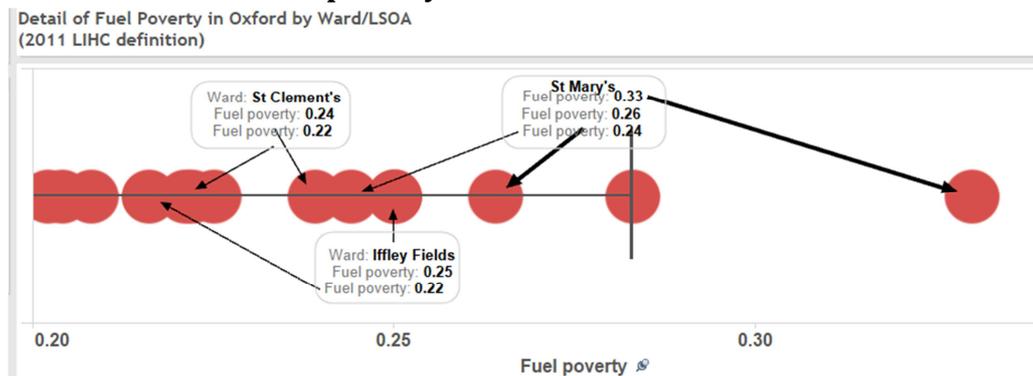
LCEO continues to work with the City Council and DECC to develop approaches by which housing data can be used effectively to help support outreach activities. It also plans to reach the vulnerable through groups like Donnington Doorstep toddler group, over 50s, Asian women's groups, the Ethnic Minority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

ANNEX 2: Deprivation and Fuel Poverty data for Oxfordshire

Index of Multiple Deprivation by districts in Oxfordshire²⁶ 2011

Deciles of Indices of Multiple Deprivation	Number of LSOAs (Lower layer Super Output Areas (LSOAs) per district				
	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

The LSOAs with worst fuel poverty in Oxford



Source: http://public.tableausoftware.com/views/LCEOLIHCFP/OxfordFP-detail?:embed=y&:display_count=no

Notes: based on new low income high cost definition of fuel poverty

²⁶ Source: Oxfordshire County Council Index of Multiple Deprivation Dashboard: <http://insight.oxfordshire.gov.uk/cms/index-multiple-deprivation-dashboard>

ANNEX 3 A framework to assess fuel poverty needs and services in local areas.

This report sets out the parameters for consideration of fuel poverty in Oxfordshire which could be considered a template for the assessment of fuel poverty needs and services in other local areas. The core components are:

1. A demographic profile of the area.
2. Deprivation and fuel poverty data about the area.
3. A mapping of the local delivery infrastructure: relevant agencies, departments, voluntary organisations, community groups etc.
4. A mapping of affordable warmth services in the area.
5. Assessment of gaps, barriers and opportunities
6. Assessment of energy efficiency outcomes.
7. Recommendations and development of strategy.

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