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OXFORD CITY COUNCIL

THE ENGLISH ENERGY CONSERVATION AUTHORITIES ISSUED PURSUANT TO THE HOME ENERGY CONSERVATION ACT 1995:

PROGRESS ON FURTHER REPORT for OXFORD CITY COUNCIL 31 MARCH 2015

Executive summary

Oxford
Whilst a generally healthy, relatively wealthy part of the country, this report illustrates the more localised issues and deprivation in Oxford as the city has 17 super output areas that are in the 25% most deprived in the country.

Key issues for the city include the high proportion of costly private rental properties and the resulting high frequency of poor energy efficient properties. Whilst Oxford is slightly on the higher side in terms of carbon emissions, electricity and gas use per household, it is also supporting the trend of ongoing emission reduction. Figures are likely to reflect the numbers of older, larger properties found across the city and are mapped in this report.

Figures for cavity wall insulation, loft insulation, Green Deal and ECO measures and solar Pv installs are low. However, these only include government funded measures and may be limited by a high number of loft conversions and conservation areas in the city.

Fuel poverty
The Council's fuel poverty work is summarised and managed under the Financial Inclusion Strategy, and the approach within Council housing is laid out in the Asset Management Strategy. Under the new Low Income High Cost definition, 2012 figures show around 7000 (12%) Oxford households to be in fuel poverty which is higher than the national and Southeast figure. Previous data investigations had raised concerns around the applicability of this and other government indicators to Oxford therefore Oxford has produced their own 'composite' fuel poverty indicator which is discussed here and, in more detail, in Appendix I.

The Council's own work
Planning
A 20% onsite renewables requirement under Planning has been met by four developments in 2012/2013 and continues to form a key part of long term energy efficiency measures.

Health and Private Sector Housing
Environmental health teams have run a number of promotions to landlords on legislation changes in 2016/2018 and energy efficiency, and set up the 'energy grants' webpage. This 'supportive' approach also includes vulnerable people grants for private rented and home owners, which as of 31 March 2015 had 14 homeowner and 16 private rented installations. A thermal imaging project has also been offered to landlords with 23 properties being imaged in 2014 and 36 properties in 2015. Reports produced offer advice and information.

From the enforcement side, the Council will shortly be utilising the new EPC data set in order to target poorer private rented properties. Alongside this, the new HMO (Houses of Multiple Occupation) licensing regime will include a 'new condition' requiring improvements to F or G EPC rated properties in an 18 month period.

The Council's own housing
Work has progressed in the last two years and project outputs include 50 external wall insulations (levering in £100,000 Green Deal Home Improvement Fund), 95 cavity wall insulations primarily using ECO funding and a gradual roll out of PV with 35 installs over the last two years including 30 in Rose Hill that also have battery installs as part of an innovative government funded research project. This work pre-empts a £4 million capital project on energy efficiency upgrades and solar PV installs over the next two years (and more beyond). This is in addition to a full upgrade of five tower blocks including external insulation.

Contents

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Introduction

Background

Under the Home Energy Conservation Act (HECA) 1995, local authorities are required to consider measures to improve the energy efficiency of all residential accommodation in their areas, although they are not required to implement any measures. The new reporting requirement in 2013, under the revived HECA, recognises local authorities' unique role and their ability to assess the needs of their areas and local residents. The resulting ability to instigate improvements in the energy efficiency of all residential accommodation is required to be summarised in a 'further report' which Oxford completed on 31 March 2013. This report is the first of the subsequent progress reports which are required at two yearly intervals

The nature of Oxford and how this focusses the Council's approach

Whilst Oxford can broadly be perceived as a healthy, relatively wealthy part of the country, this report will illustrate the issues and deprivation found at a more localised level. Oxford has 17 areas which are among the 25% most deprived areas in England. Seven of these areas are in the 15% most deprived and one area to the west of Greater Leys is among the 10% most deprived.[1] Aligned with this are geographical inequalities in life expectancy - men from the least deprived areas can expect to live 7.7 years longer than those in the most deprived areas, women 4.9 years longer (2012).

The high prevalence of a transient population means that Oxford has a very high proportion of private sector rented homes. In 2011, 30% of households privately rented their home in Oxford, which is much higher than the 17% national average and represents a nearly 50% increase from 2001[2].

Both deprivation and private sector rented housing are aligned with a high frequency of poor energy efficiency, fuel poverty and poor health outcomes, so they are therefore key targets of the Oxford HECA approach, amongst broader aims and projects.

Local energy efficiency priorities and ambitions

Oxford City has committed to Climate Local via the Oxfordshire Waste and Environment Partnership and has also signed up to the Local Authority Fuel Poverty Commitment. The End Fuel Poverty Coalition wants energy efficient homes, decent incomes and low cost fuel for low income households. Their target to eliminate fuel poverty by 2016 is one that the Council supports (see www.endfuelpoverty.org.uk/index.html).

1 http://www.oxford.gov.uk/PageRender/decC/Economic_statistics_occw.htm

2 www.oxford.gov.uk/oxfordstats

2 Background data analysis

2.1 CO_2 emissions

Taken as a whole, carbon dioxide emissions per capita are relatively high in Oxford compared toi ts comparator areas – due to the high per capita industrial and commercial emissions. Per capita emissions are equal to the national average.

Carbon emissions from domestic households in Oxford are lower per capita than the national average, and similar to its comparator areas. Per capita emissions across all areas have fallen.

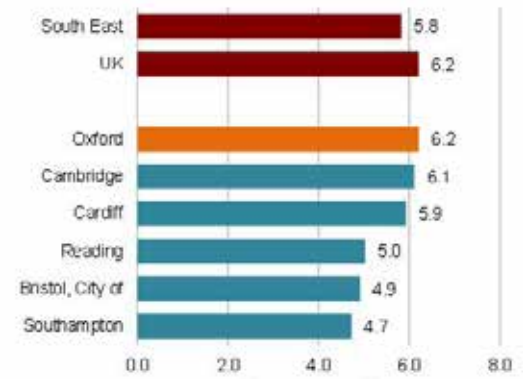


Fig 1: Total CO_2 emissions – tonnes per capita 2012

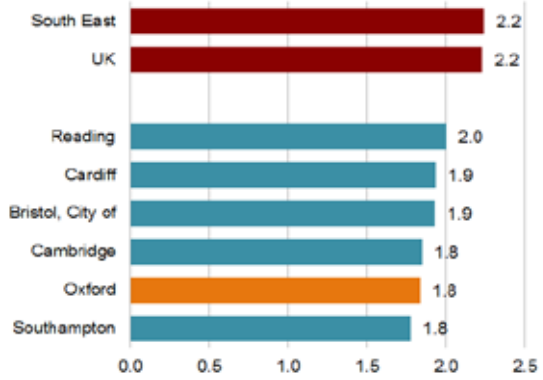


Fig 2: Domestic CO_2 emissions – tonnes per capita 2012

2.Energy use

Electricity

Domestic electricity consumption per consumer has declined in Oxford since 2005, as it has across Great Britain. For most of this period, domestic electricity consumption in Oxford has been below the national average, but in 2013 it was just above. Oxford is at the high end compared to other comparator areas, but the difference between the areas is relatively small.

Use (actual household meter readings) varies significantly across different areas of the city. In 2013 the highest average consumption was 5,858 kWh per meter in the St Margaret's area of North Oxford, compared to the lowest average consumption of 2,912 kWh kWh per meter in the St Clement's area of East Oxford. The highest consumption areas tend to be in the North of the city around the Banbury and Woodstock Roads. This is illustrated in Fig 4 overleaf.

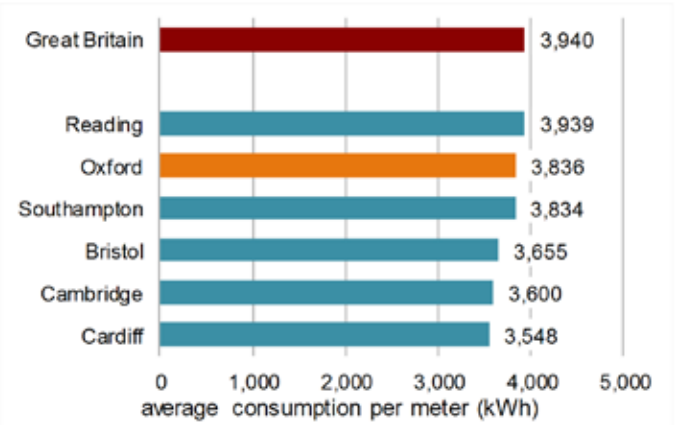


Fig 3: Domestic Electricity Sales per Consumer (KWh) 2013

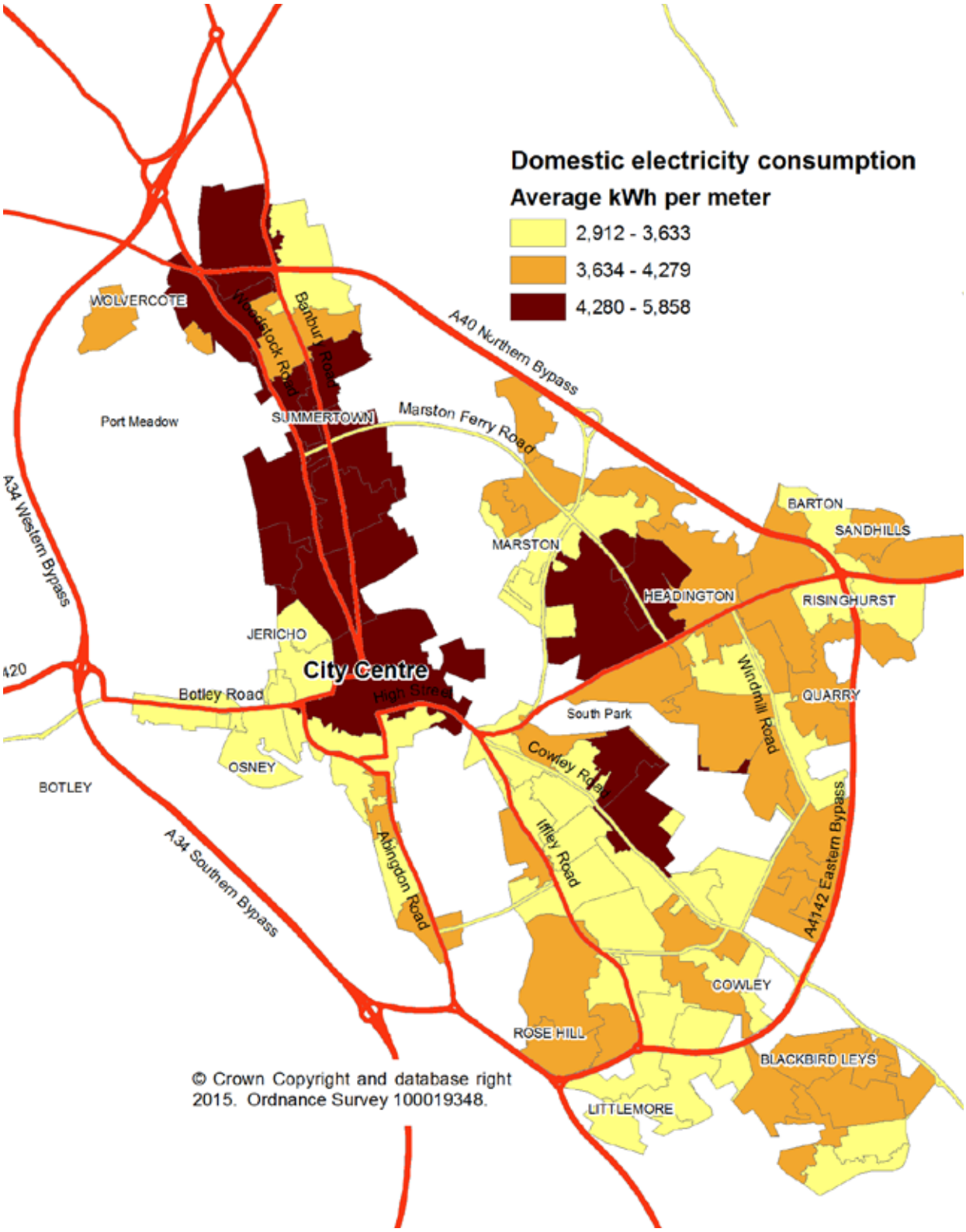


Fig 4: Mapped domestic electricity consumption – average kWh per meter

Gas

Domestic gas consumption is very similar to the national average, which has fallen over the period 2005-2013. However, sales per consumer in Oxford are higher than all other comparator areas which could be due to differences in household size and type.

Domestic gas consumption is also taken from actual meter readings and also varies significantly across different areas of the city with high and low areas being similar to those for electricity. In 2013 the highest average consumption was 25,402 KWh per meter in the same St Margaret's area of North Oxford, whereas the lowest average consumption was just 9,063 KWh per meter in the Greater Leys area of the city.

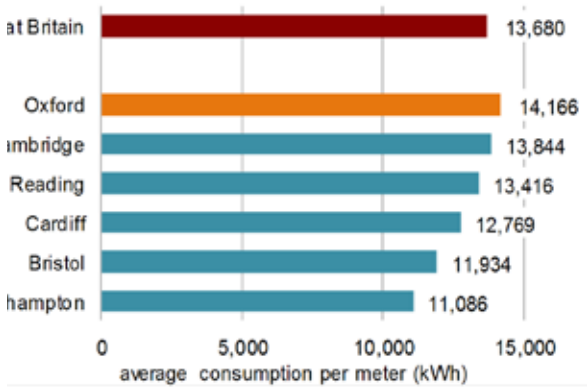


Fig 5: Domestic Gas Sales per Consumer (KWh) 2013

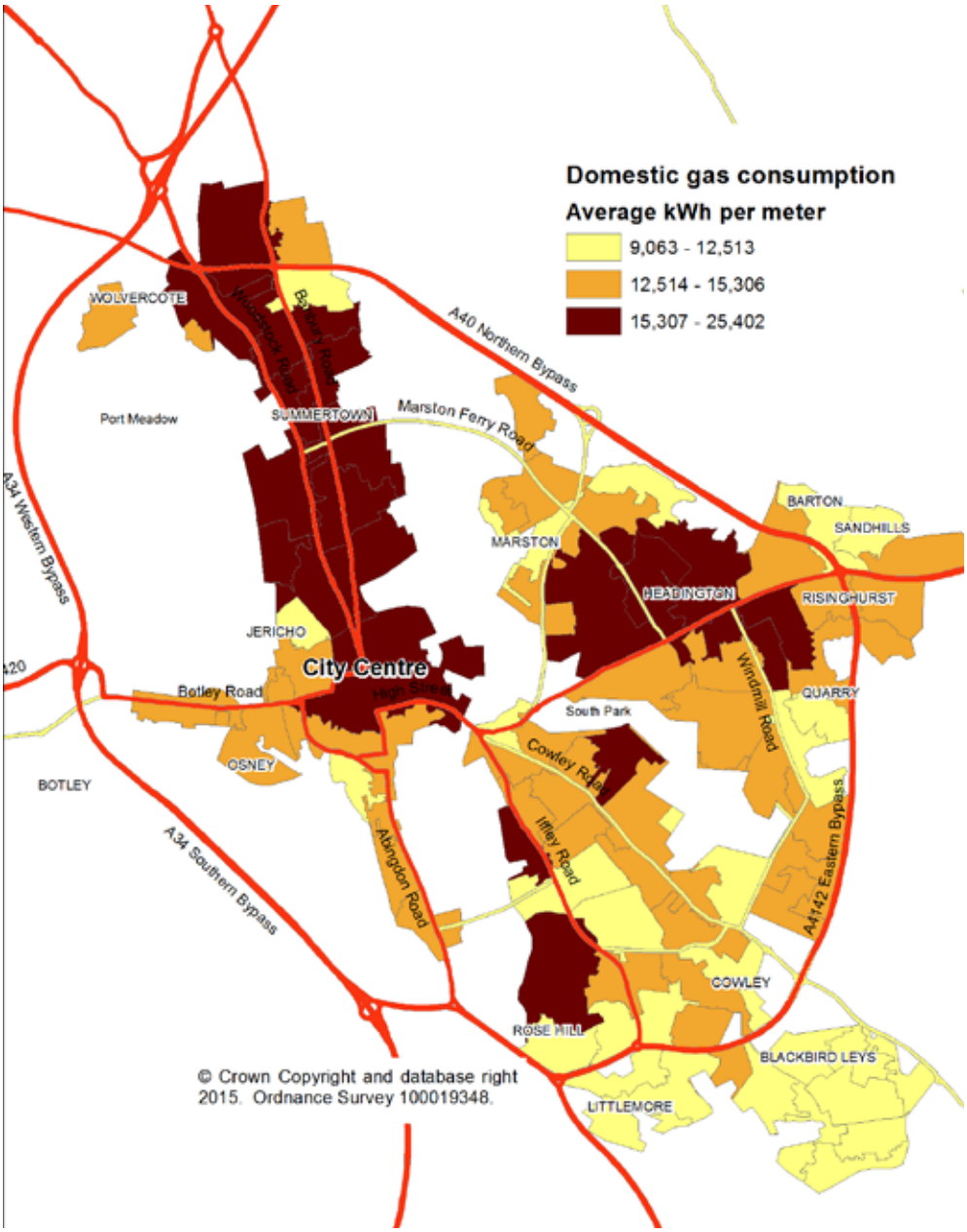


Fig 6: Mapped domestic gas consumption – average kWh per meter

2.3 Context of fuel poverty work

2.3.1 Pockets of deprivation and mortality

Deprivation in Oxford is lower than the UK average, but 5,500 children still live in poverty (2013). There are geographical inequalities in life expectancy; men from the least deprived areas can expect to live 7.7 years longer than those in the most deprived areas, women 4.9 years longer (2012). This highlights an issue for Oxford; whilst overall averages are often good, there are a number of severely deprived areas where the life and health outcomes are very different. The areas that are in the 25% most deprived areas in the country are mapped below:

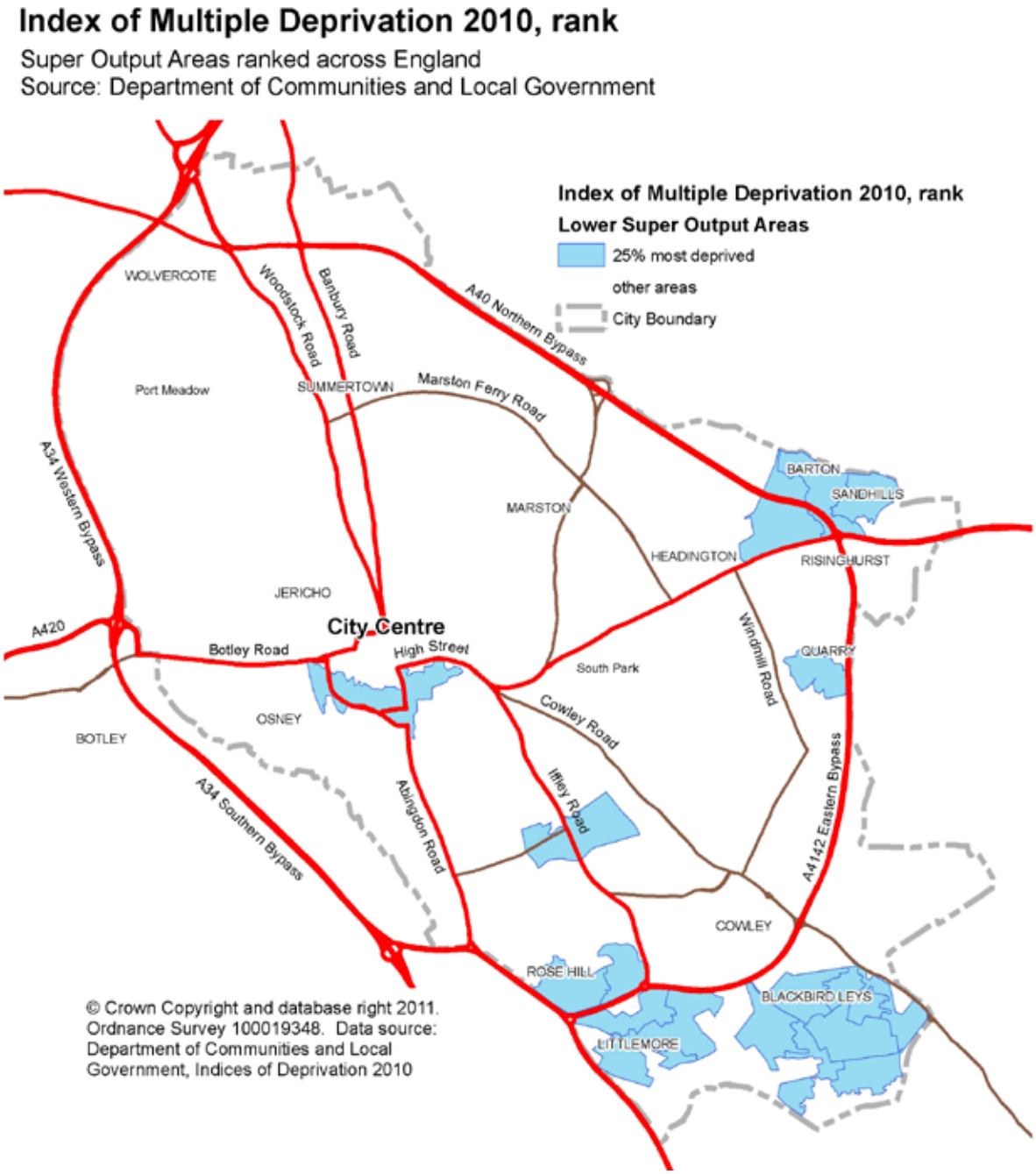


Fig 7: Top 25% Lower Super Output Areas in Oxford, Index of Multiple Deprivation 2010

LSOA	Ward name	%
E01028516	Barton and Sandhills	75.50%
E01028524	Churchill	75.80%
E01028546	Iffley Fields	76.80%
E01028519	Blackbird Leys	78.10%
E01028553	Littlemore	79.50%
E01028567	Northfield Brook	81.10%
E01028576	Rose Hill and Iffley	82.80%
E01028517	Blackbird Leys	83.70%
E01028522	Carfax	83.90%
E01028552	Littlemore	84.50%
E01028518	Blackbird Leys	86.30%
E01028513	Barton and Sandhills	87.40%
E01028514	Barton and Sandhills	87.60%
E01028569	Northfield Brook	88.20%
E01028520	Blackbird Leys	88.50%
E01028577	Rose Hill and Iffley	89.70%
E01028568	Northfield Brook	90.30%

Table 1: All Super output areas in Oxford that are in the IMD 25% most deprived

2.4 Past and current fuel poverty work

2.4.1 Fuel poverty data and indicators

Since our previous analysis of fuel poverty, a new definition of fuel poverty has been agreed by government. Under the Low Income High Costs (LIHC) definition, a household is considered to be fuel poor if:

- they have required fuel costs that are above the national median (high fuel costs), and
- were they to spend that amount, they would be left with a residual income below the official poverty line, equivalised and after housing costs (low income). This is broadly illustrated in Fig 8:

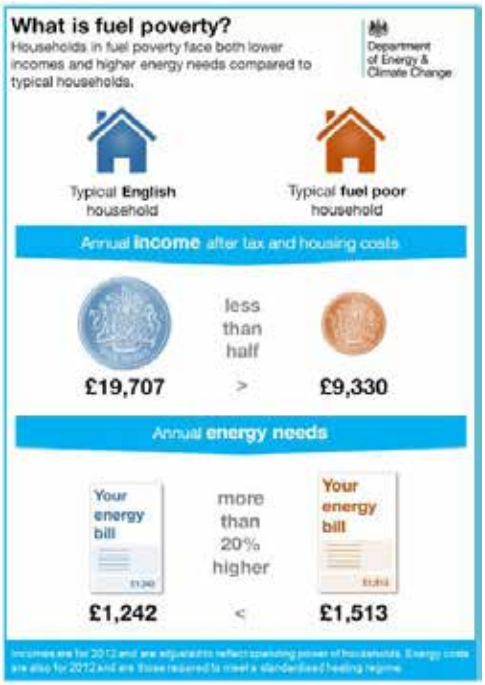


Fig 8: The Low Income High Costs indicator - what does it mean? Taken from 'Cutting the cost of keeping warm: A fuel poverty strategy for England' (HM Government 2015) www.gov.uk/government/uploads/system/uploads/attachment_data/file/408644/cutting_the_cost_of_keeping_warm.pdf

According to the latest 2012 estimates, around 7,000 Oxford households live in fuel poverty based on the newer, LIHC definition. This represents around 12% of households across Oxford, which is above the national average (10%) and the figure for the Southeast (8.9%). The proportion of households living in fuel poverty by the new LIHC definition fell slightly between 2011 and 2012 as shown in Table 2 below. Under the earlier definition which is also still reported on in the official statistics, a household is considered to be fuel poor if they were required to spend more than 10% of their income on fuel to maintain an adequate standard of warmth. Fewer households in Oxford are in fuel poverty in 2012 by the 10 percent definition – just over 5,000 households.

	Number of households in fuel poverty		Percentage of households in fuel poverty	
	2011	2012	2011	2012
Low income, high costs	7,616	6,851	13.3%	12.4%
Ten percent definition	6,351	5,273	11.1%	9.5%

Table 2: Oxford households living in fuel poverty under definitions, 2011 and 2012

The LIHC Fuel Poverty picture in Oxford reveals a wide variation in incidence at the Lower Super Output Area (LSOA) level, with a maximum of 29.1% (part of St Mary's) and minimum of 2.1%. (2012)

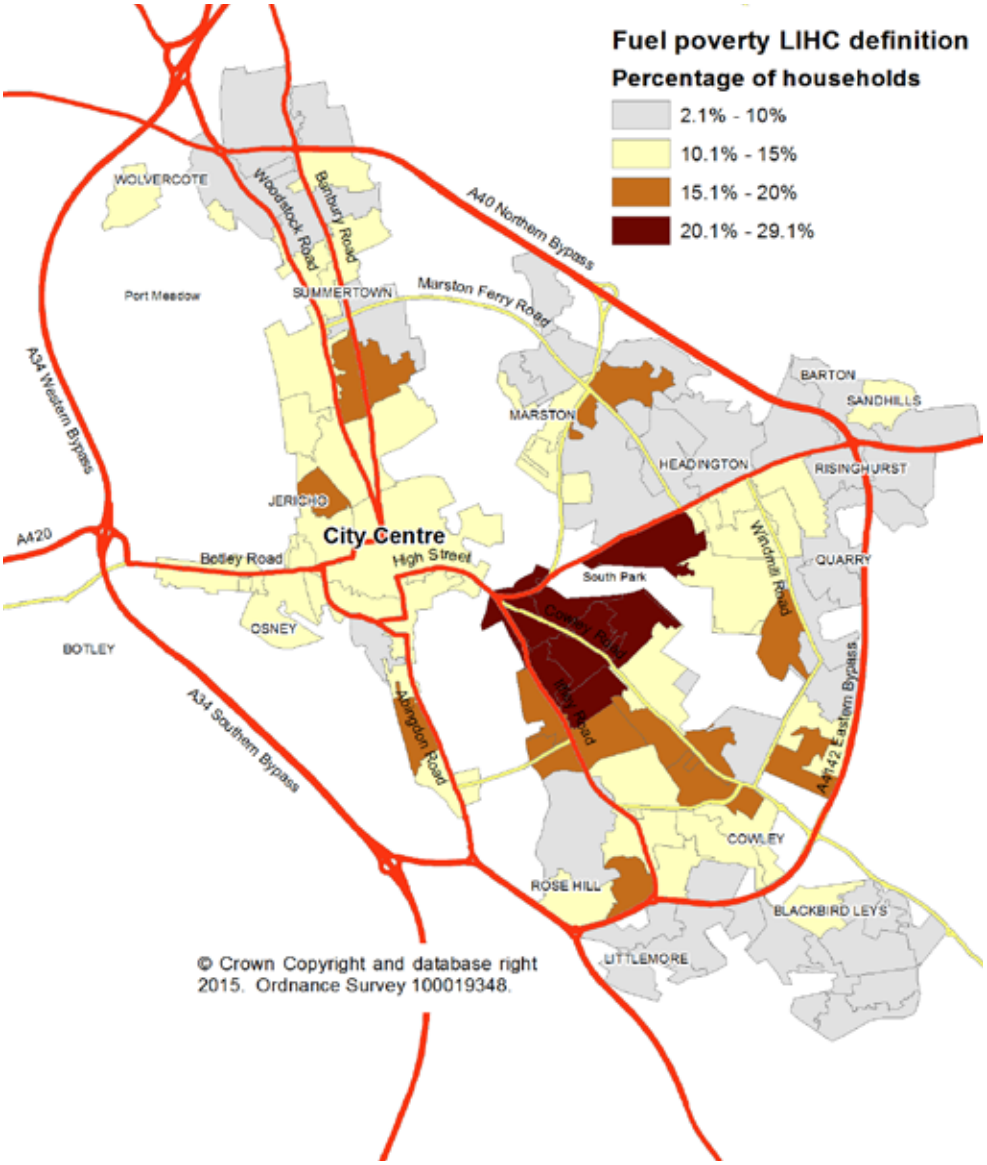


Fig 9: Proportion of households in fuel poverty by LIHC definition, Oxford 2012

Flats in the popular student area of Cowley Road in East Oxford

The Council's sheltered housing block at Cardinal House

The new indicator does take into account information on vulnerability, energy efficiency and exposure. We also welcome the realisation that the underlying factors may result in a very diverse picture between wards. Other commentators (Manchester University) put high confidence in the LIHC model at LSOA level. For Oxford we consider that the need for more detailed consideration of the private rented sector per se is necessary.

2.4.2 Oxford's composite fuel poverty indicator

For a number of years, DECC has published estimates of fuel poverty at LSOA level to support the targeting of area-based interventions. In previous years we have had concerns about these estimates, due firstly to the fact that the LSOA estimates have been published without any indicators of uncertainty such as confidence intervals.

We also had concerns that the modelling process was unable to adequately take account of the idiosyncratic nature of Oxford's population. One quarter of Oxford's adult population are students; the largest proportion of any local authority area. Whilst many of these students live in halls of residence a large proportion tend to live in private rented housing in the East Oxford area which consists mainly of 18th and 19th century terraced housing.

Phase one: drafting a new indicator

As a result of the above concerns, we have developed some additional draft indicators of fuel poverty in Oxford based upon Census and local administrative data which we hope can take account of some of these unique aspects of Oxford's population.

This meant evaluating a variety of different data sources including the Low Income High Cost indicator, census data and actual gas use data in determining the make up of the 'Oxford Fuel Poverty Composite indicator'. However, due to the imminent release of a more updated EPC data set and planned discussions with DECC, the Council has excluded energy efficiency, concentrating instead on energy (gas) use. The draft map for Phase 1, alongside which can be used by the local authority, community groups and other strategic partners, is shown below and alternative layers are also available which help to make sense of the locality.

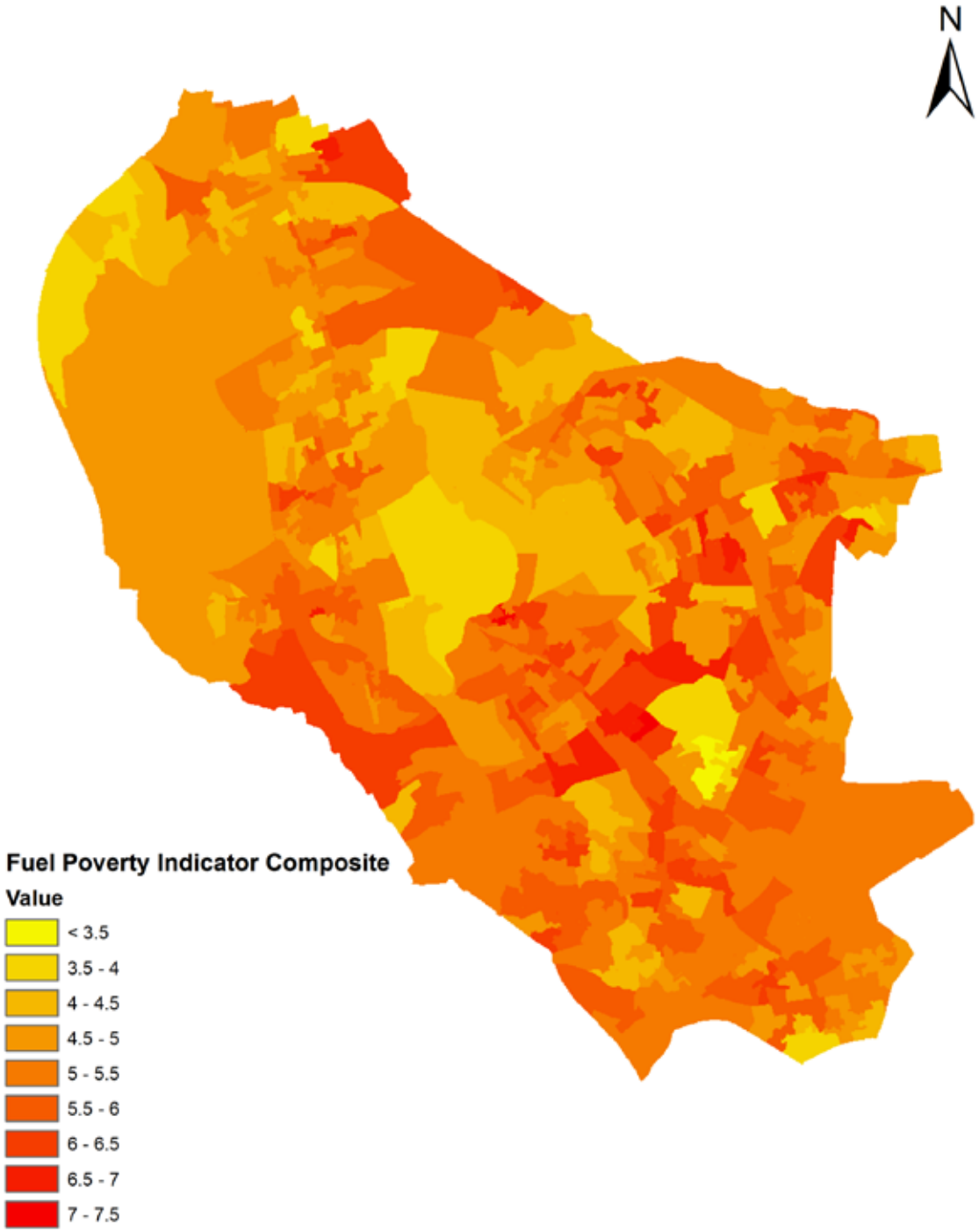


Fig10: Draft composite fuel poverty indicator for Oxford

Phase 2

Following updated EPC data purchase and discussions with DECC, Phase 2 will reassess the existing data sets and map, pulling out more detail using available energy efficiency data in the EPCs. This also enables us to re-evaluate following discussions with DECC.

A full explanation of the fuel poverty indicator, along with its underlying map layers, can be found in Appendix I. Council partners will be supported to understand the implications of the different maps in their locality and also how to use the different layers of maps to pull out particular issues in their areas.

Whilst a great starting point, some additional analysis and development is needed before we have firm indicators upon which we can base our fuel poverty work. Other work we might explore includes:

- A meeting is being arranged with DECC to work with them, utilising this work to inform and support the roll out of the fuel poverty work they are doing
- Using updated April 2015 Energy Performance Certificate data to incorporate a stronger element of energy data
- Developing a classification of areas according to these indicators e.g. high private rentals, low benefit claims vs. low private rentals, high benefit claims
- Using different weightings for the fuel poverty indicators in our composite indicator
- Validating the DECC LIHC data and our composite indicator by conducting visits to a sample of households and evaluating their actual risk of fuel poverty

Health data

Oxfordshire's Public Health Improvement Board have a new outcome measure looking at fuel poverty indicator but also a number of building based interventions which have positive impact on addressing fuel poverty, including boilers installed and insulation. The most recent data can be found here[3] and includes the work of the Private Sector Safety team and the Home improvement Agency.

Promotional banner for the Affordable Warmth Helpline

3 http://mycouncil.oxfordshire.gov.uk/documents/g4619/Public%20reports%20pack%20Monday%2002-Feb-2015%2013.00%20Health%20Improvement%20Partnership%20Board.pdf?T=10

2.4.2 Providing funding/signposting to funding for Oxford residents

The 2014/15 Oxford City Council £25K fuel poverty grant has been split in order to lever in funding by offering £500 for energy efficient boilers, £250 for cavity wall insulation and £200 for loft insulation for vulnerable persons (on benefits/over 60/ under 14) in the private sector:

Sector	Numbers of measures installed/ pending* (cavity wall/loft insulation, boilers/electric heating installs)	Council funding used (£)	Approximate funding levered in (£)
Homeowners	Approx 14	Approx. £7,000	Approx £20,000
Private rented tenants	6 installed; 10 pending	Approx. £6,000	TBC

**All statistics are subject to final confirmation due to the timing of this report/end of the financial year- we will update this report in May 2015 with final figures*

Table 3: OCC Fuel poverty grant measures installed and levered in funding for 2014/15

Funding via the Affordable Warmth Network

Along with all other Oxfordshire Councils, Oxford City Council funds the Affordable Warmth Network to tackle and reduce fuel poverty in the area. This service provides a central helpline, advice and referrals to funding, switching energy suppliers and energy saving advice. Additionally, two funding streams have been accessed via the Affordable Warmth Network. These are detailed below with numbers of referrals

Funding streams	Measures installed/pending*	Funding criteria	Numbers installed/pending*	Rolse of Council
Everwarm cavity and loft insulation	Cavity wall/loft	CSCO areas	4	Promotion
Boilers via British Gas	Free energy efficient boiler	Certain benefits and criteria as per HHCRO	5 pending	Promotion

**All statistics are subject to final confirmation due to the timing of this report/end of the financial year- we will update this report in May 2015 with final figures*

Table 4: Funding for energy efficiency measures accessed via Affordable Warmth Network

A number of other financial incentives and grants, including all tranches of the Green Deal Home Improvement Fund, have been promoted to residents and landlords. Information is promoted to community groups and residents and kept current at www.oxford.gov.uk/energygrants.

The Environmental Development department has also purchased the Health Costs Calculator to build on existing work quantifying the savings to the NHS made from HHSRS inspections and enforcement.

Referred	InstaGroup Ltd	
	Everwarm	3
	Home Health Assessments	
	Warm Home Discount	
	Age UK	
Signpost-ed	CAB	1
	CHEEP	
	Oxford Essential Repairs Grant	3
	Warm Home Discount	2
	Essental repairs/unfit housing grant	
	Oxfordshire buy with confidence	1
	Flexilbe Home Improvement Loan	
	Mears	
	Energy saving tips	3
Advised	Fuel debt	1
	Heating	6
	Insulation	2
	Switching energy supplier	2

Table 5: Overall outputs from Affordable Warmth Network calls in first three quarters of 2014-15. Full year data will be updated in an update report.

2.4.4 A strategic approach to Fuel Poverty

Rather than having a fuel poverty strategy, the Council has incorporated its approach to fuel poverty into the Financial Inclusion Strategy to bring together building based actions with those that maximise income. The actions outlined in this HECA report are primarily reported and included in this document which is available online at www.oxford.gov.uk/PageRender/decCD/Policies_and_Plans_occw.htm

Fuel poverty is also the key driver in the Council's draft Asset Management Strategy, which is under consultation. This incorporates the Council's own housing stock and states:

"Fuel poverty is the ability of residents to afford to heat their homes. Three major things have an impact on this: energy prices, the income of tenants and the energy efficiency of the home. In this strategy, the Council is prioritising the energy efficiency of its properties in order to increase resilience of tenants against the other two factors."

Under this there will be an Energy Strategy and programme of works for the Council's housing stock. More detail is in the Council Housing Stock section of this report.

3 Utilising government funding

3.1 Green Deal and ECO

3.1.1 Background

The Council has worked to understand and access funding under Green Deal and ECO. For the CSCO element of ECO funding, there were changes for eligibility from only the lowest 15% of areas ranked in the IMD to the lowest 25% of areas and some elements of adjoining areas. Oxford therefore assessed and mapped their seventeen Lower Super Output Areas in this 25% most deprived and these are detailed in Fig 11 to the right. These areas do not overlap with the regions identified as having highest prevalence of fuel poverty, according to the DECC LIHC indicator.

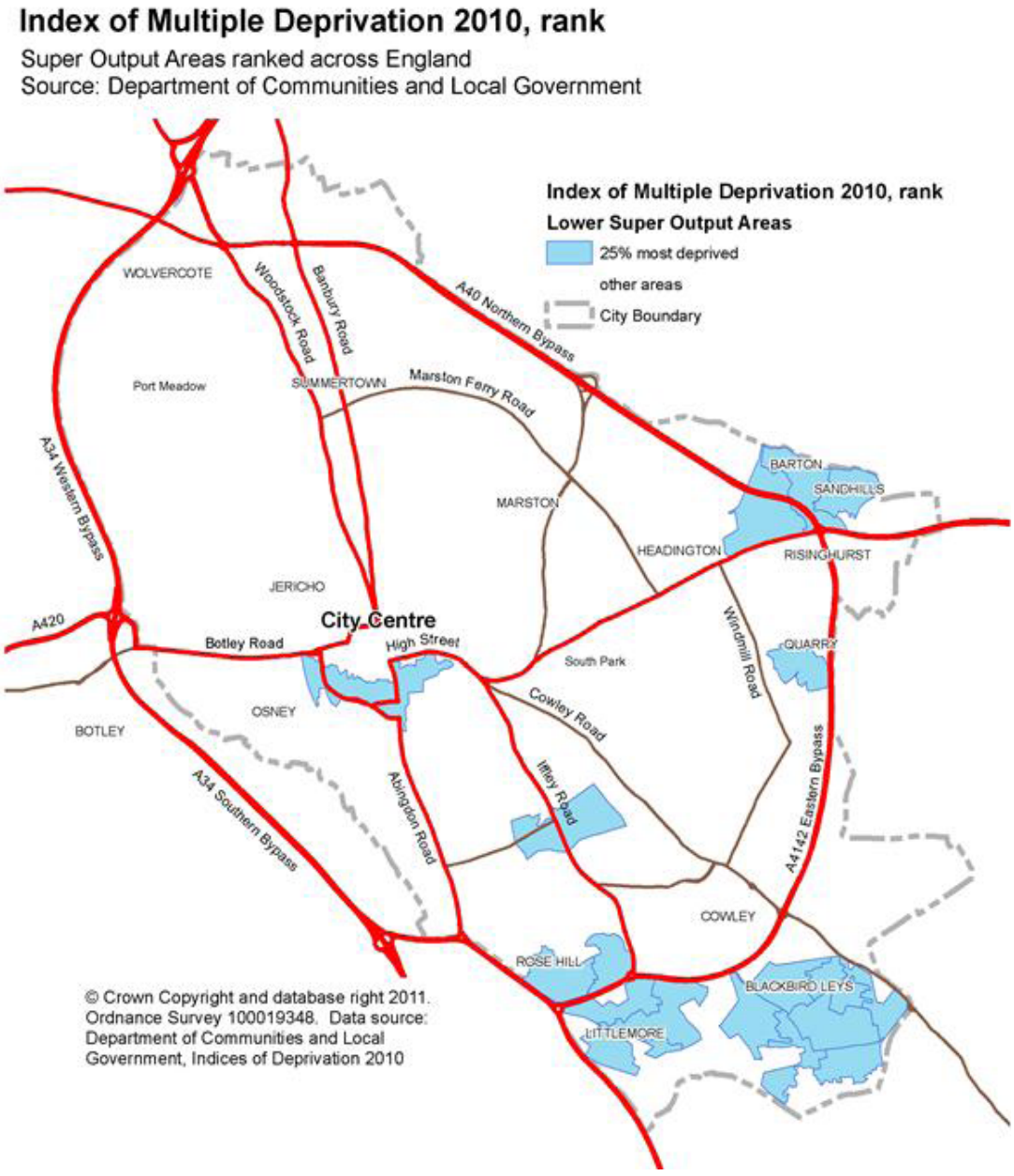


Fig 11: UK's 25% most deprived Super Output Areas in Oxford

3.1.3. Green Deal and ECO in Oxford and related work

The Warming Barton project trialled a community model for carrying out external wall insulation on a number of difficult system build properties in a deprived area: Barton. 18 properties have been insulated in this project. The overall project cost was £129,530, with £57,918 being accessed via ECO funding and £12,000 via the Green Deal Home Improvement Fund in addition to significant investment from Oxford City Council and the Low Carbon Hub. A lower number of properties were insulated than planned due to changes in the ECO funding half way through the project which had a devastating effect on project funding

The OxFutures project has leveraged in £850,000 of European grant funding for a £1.2m programme to develop a financial infrastructure that is leveraging in high levels of private sector funding for local renewable energy and energy efficiency projects. So far the following has been achieved:

- 920kW PV installed
- 0.05 kW hydro installed
- £2.5m investment into projects with signed contracts

The Council and Low Carbon Hub are currently scoping the roll out of this model to domestic housing, potentially within the Council's own housing stock.

Before and after external wall insulation installation as part of the Warming Barton project

3.2 Insulation schemes across Oxford

3.2.1 Cavity wall insulations

The total number of cavity wall insulations per household in Oxford is less than half the national average, and has grown at a slower rate. The number is also low compared to its comparator local authority areas, but similar to Cambridge. This is likely to be due to a high percentage of solid walls and system builds in Oxford. It is also worth noting that this measure only picks up CERT installs, so a number of private installations, not reliant on funding, will have been missed.

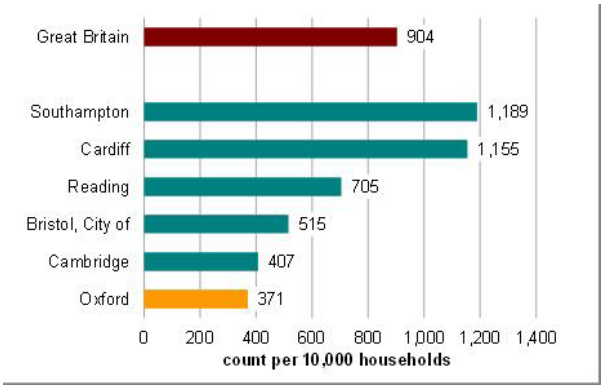


Fig 12: Professional cavity wall insulations under CERT, cumulative count 2012/13 by local authority

3.2.2 Loft insulation installations

The number of loft insulations shows a very similar pattern to the number of cavity wall insulations – less than a quarter of the national average, and lower than its comparator areas, although very similar to Cambridge. There may be similar reasons for this as for the cavity wall shortfall, as well as a high number of loft conversions - 316 of which have been found via a Building Control search since 2008.

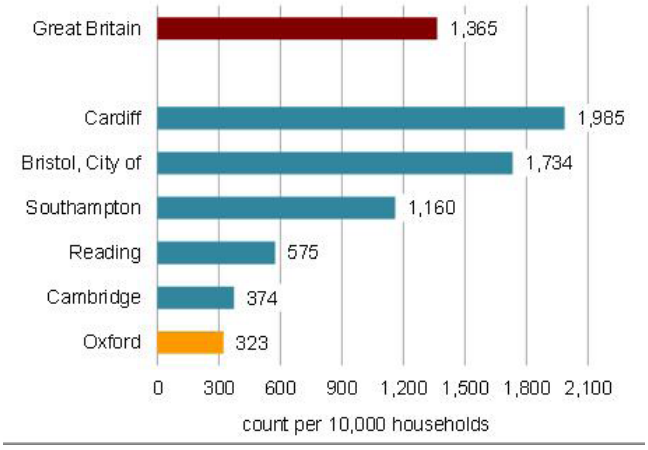


Fig 13: Professional loft insulations under CERT, cumulative count 2012/13 by local authority

3.2.3 Green Deal and ECO related measures

Up to the end of September 2014 there were 524 Oxford households that had had Green Deal assessments. This amounts to 10 assessments per 1,000 households, which is towards the lower end of its comparator local authority areas. The number of Green Deal vouchers issued to date is very small in Oxford; by the end of September 2014, 12 Cash back vouchers and 5 Home Improvement Vouchers. had been paid. The payment of vouchers has been somewhat higher in comparator local authorities, but the number of vouchers paid is less than 100 in all areas.

At the end of September 2014, there were 865 households in Oxford in receipt of a total of 992 measures under ECO obligations. This is similar to Reading and Bristol per 1,000 households, but significantly fewer than Cardiff and Southampton.

One of many steel framed, hard-to-treat houses found in the neighbourhood of Barton

Comment on figures

Since the cut off dates for these statistics, the Council has increased promotion of Green Deal and ECO funded measures and it is likely that this will be reflected in future figures for all insulation installations. To set this in context, a summary of Council and Council supported current projects and funding levered in for ECO, Green Deal and Feed in Tariffs is tabled below:

Work and no. of properties	Full cost	Funding brought in	Funding Stream
External Wall insulation – 50 properties	£450,000	£100,000 £15,000	Green Deal HIF (capped) ECO
Cavity Wall insulation CSCO – 95 properties	£35,000	£32,500	ECO CSCO
Cavity Wall insulation	Contract to be procured shortly		ECO CERO
Solar PV installs – 30 Rose Hill	£150,000	£229,979	Feed in tariff
Moixa battery and LED lighting - 30	Est. £75,000	Approx. £60,000	Innovate UK
Warming Barton (18 External Wall insulations)	£129,530	£57,918	ECO Green Deal HIF

Table 6: Energy efficiency measures accessing funding with full cost details

3.3 Feed in Tariff (FiTs) scheme

Solar panels on new council housing on Lambourne Road

FIT data relates to domestic solar photovoltaic installations which come under the Feed in Tariff Scheme which was introduced in April 2010. The cumulative number of installations per thousand households is 118, and the total installed capacity of 346 kW per 10,000 households (how much electricity is being generated) in December 2014 is below the national average and many of Oxford's comparator areas, albeit similar to Reading

It is worth noting that a high number of conservation areas in Oxford does limit the potential for solar PV installation. The Council has recently installed solar PV on 30 of its own properties and so has a local housing association since this date. The Council is also currently working on a three year programme for a larger solar PV roll out which will influence these figures in future years.

3.4 Renewable Heat Incentive (RHI) payments

There were 28 accredited installations under the domestic RHI between April 2014 and January 2015.

3.5 Zero carbon homes

The Natural Resources Impact Analysis Supplementary Planning Document (SPD) requires that a minimum of 20% of the energy requirement of new developments should be produced by on-site renewable or low carbon energy. The SPD applies to larger developments of 10 or more dwellings, or 2000m2 or more non-residential floorspace. Fig 14 lists the developments that qualify for submitting an NRIA, and the renewable energy technologies that will be installed on each development. The table only shows those developments where planning permission was granted.

Application no. Decision Date	Type of Development	% energy generated from renewables	NRIA requirements met? Reasons and notes
11/02881/FUL 13 August 2012	312 post-graduate student rooms at Castle Mill Stream	20% of total from Combined Heat and Power and Solar PV	Yes. 20% of total met from renewable and low carbon technologies in line with the requirements of the NRIA SPD.
12/00371/FUL	Erection of office building on 3 floors plus basement, linked to existing buildings fronting Walton Street	20% through Ground Source Heat Pumps and Solar PV	Yes. 20% of total met from renewable and low-carbon technologies in line with the requirements of the NRIA SPD.
12/01369/FUL 06 March 2013	140 student study bedrooms at St. Clements Car Park	Over 40% of total energy from Air Source Heat Pumps	Yes. Over 40% of the total on-site energy provided from low carbon technologies in line with the requirements of the NRIA SPD.
12/01388/RES 23 August 2012	190 student study rooms at Chapel Street, East Oxford	20% of energy from micro-CHP and Solar PV	Energy percentage was calculated as a percentage of regulated energy (i.e. those associated with Building Regulations) rather than total energy.

Fig 14: 2012/2013 developments meeting 20% energy from onsite renewables requirement

For residential homes, the NRIA requirement is no longer required, however there is still a 20% onsite renewables/low carbon sources requirement. It is to this that Planners and developers currently work.

4 Energy Performance Certificates (EPCs) and minimum standards in the private rented sector

4.1 Background

Oxford has a high proportion of private rented properties

As Oxford has a high proportion of renters and the private rented sector is proven to be poorer performing for energy, the Council has prioritised working with the private rented sector since the last HECA report.

The Council has a number of statutory services that deal with the private sector including enforcement against Category 1 Excess Cold under the Housing Health and Safety Rating System (HHSRS) within the private rented sector and licensing of Houses of Multiple Occupancy

4.2 Work with Environmental Health

4.2.1 Private sector safety and Houses in Multiple Occupation (HMOs)

As the average condition of housing stock in the private rented sector is generally poorer, the Council's proactive Private Sector Safety team has taken a double faceted approach:

1. Supportive

Running four events for landlords highlighting the 2016/2018 Energy Act requirements, the impact of fuel poverty on life and health and available funding. This has been supported by newsletters, flyers and information on the website.

A thermal image taken of an OCC council house

The team also runs a yearly project offering thermal imaging of rental properties to help landlords understand the need to improve their homes, piloted in 2013/14 with successful thermal imaging of x properties. The thermal imaging involved both the going out to take the photos and the production of useful reports for landlords highlighting issues with heat loss from their properties. The second year has just been completed to incorporate HMOs and achieved the following outputs:

- 2014 = 23 properties (no HMOs)
- 2015 = 36 properties (13 of which HMOs).

2. Enforcement

The Council previously utilised the Energy Performance Certificate (EPC) spread sheet data from Landmark to try to target private rented homes for Excess Cold but this work is on hold while updated versions are purchased. EPC data will be used in order to target all known private rented residences that have F or G rated EPCs or no EPCs for assessment in accordance with the Housing Health & Safety Rating System, (HHSRS), Operating Guidance for Excess Cold. This will be rolled out as a programme of 'whole house' inspections by the Private Sector Safety Team, whereby following a survey, an assessment in accordance with the HHSRS is carried out and where excess cold is identified as a deficiency, works requiring the owner/landlord to improve energy efficiency through means of either working by agreement or through enforcement measures under Part 1 of the Housing Act 2004.

The Council runs a Houses of Multiple Occupancy (HMO) licensing scheme which is delivered and implemented by the HMO Licensing and Enforcement Teams in Environmental Health. The production of Energy Performance Certificates is a licensing requirement. The Council has mapped the poorer performing HMOs by their EPC ratings as detailed below:

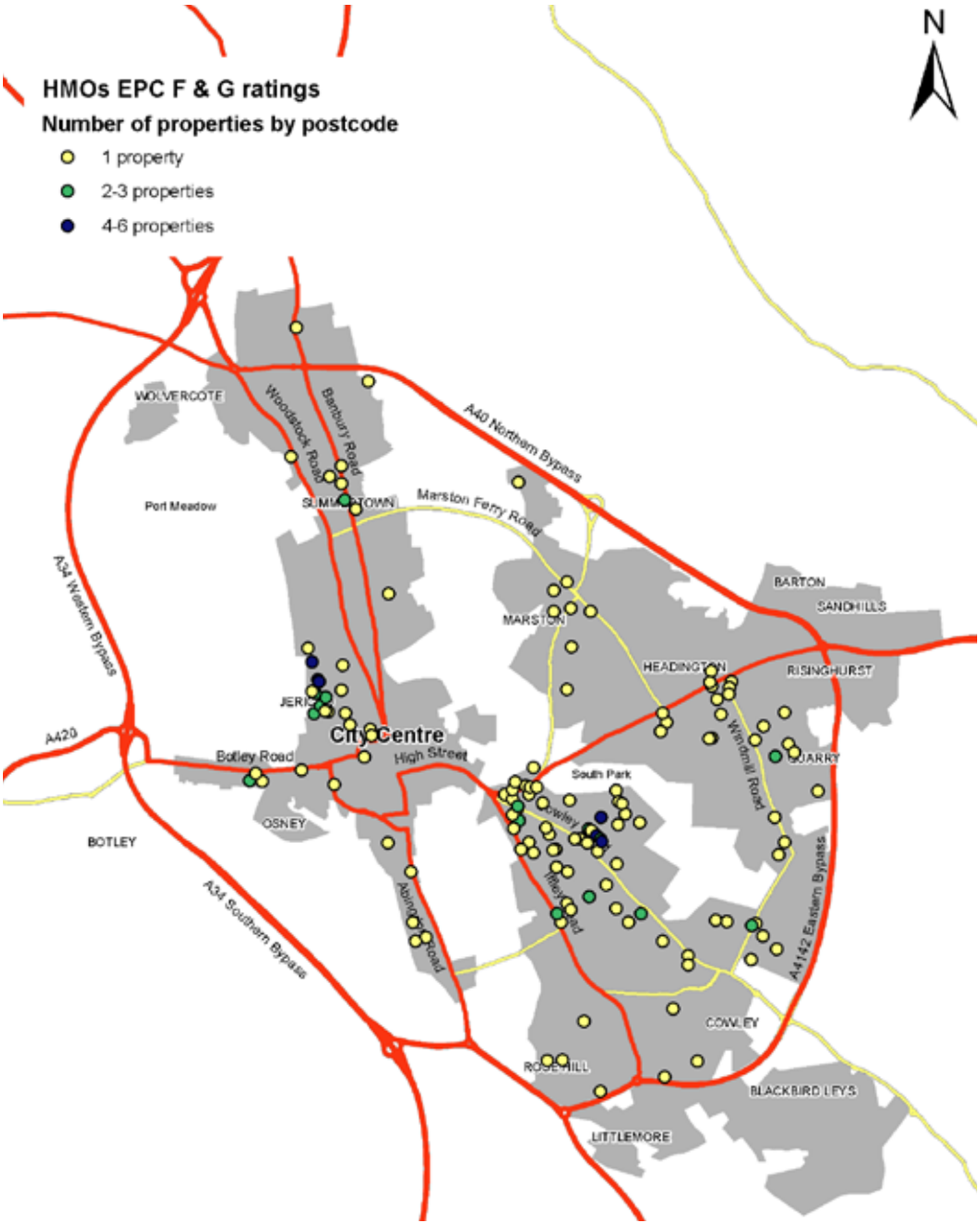


Fig 15: Number of licensed HMOs with F and G EPC rating, April 2014

As part of this work, the Council is proposing to require landlords to make improvements through a 'new condition' that will be attached to all licences with the aim of recommending changes within the EPC ratings where they have scored F or G. The condition will require improvements to improve this rating to be carried out over a period of approx. 18 months from the date when a new licence is issued with this condition. If these improvements are not implemented within the 18 month timescale, or a new EPC is not provided to show an improvement in the rating, then the Council may refuse to renew any future licences and/or pursue legal action for failure to comply with licence conditions.

This should assist to improve EPC ratings in HMOs and the Council is currently assessing how HMO Officers can be alerted to poorer performing properties, to enable them to be targeted for energy efficiency information.

More widely, a small fund has been used to leverage in funding from landlords for basic energy efficiency measures such as cavity wall insulation, loft insulation and energy efficient boilers. Uptake of this has been good so far.

4.2.2 Using data to target poor private rented properties

The Housing Stock Modelling carried out included relevant hazards and indicators under the Housing Health & Safety Rating System (HHSRS) including 'excess cold', but also included EPC data, simple SAP, fuel poverty and low income households.

Utilising census data, HMO registrations, the housing stock modelling, EPC lodged certificates (states tenure), housing benefit data by tenure (council data) and excluding university halls, the Council aimed to determine locations of private rented sector properties excluding large student dwellings. They also looked into the construction of the private rented properties using modelled data.

An analysis of the EPC data shows that it isn't accurate therefore the Council needs to find a way to get better data on this. This can be supported by more information on property condition as a useful indicator of energy performance, in the absence of reliable EPC data. Therefore the Council will roll out visual assessments of basic building condition and construction to improve data, using local community groups and officers as relevant. These will support sampling using a walk-by tool (from previous DECC LEAF project with Low Carbon East Oxford) and training will be provided to capture information on property type and condition. This will focus on areas with indicated high incidence of fuel poverty related to built environment.

Referral networks will be set up and agreed subject to information availability/resource, based on the model below:

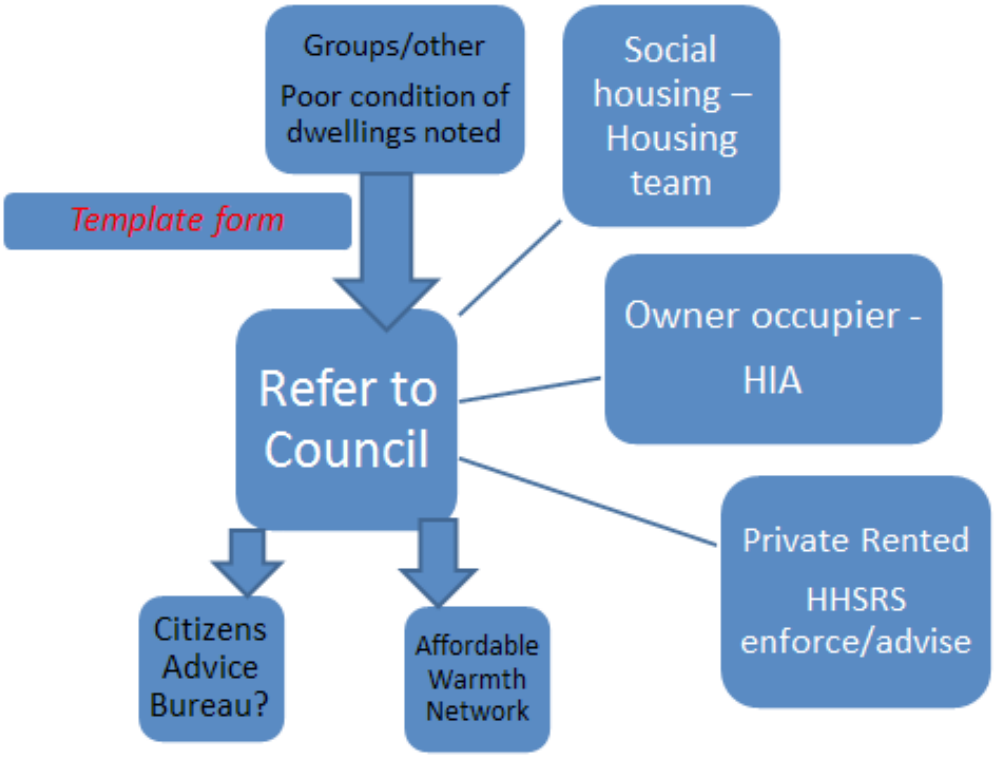


Fig 16: Suggested approach for future energy efficiency work from private rented targetting

4.2.3 Working with the Home Improvement Agency (HIA)

The Council's HIA works with some of the most vulnerable residents in the city. They provide energy efficiency funding or loans under the subsidised Small Repairs Service (draught proofing, thermostatic radiator valves and hot water cylinder lagging etc), Essential Repair Grants and Flexible Home Improvement Loans schemes. They recently also started to administer a small Council-funded fuel poverty grant - checking eligibility and aligning with other available funds where possible for additional support on basic insulation and boiler replacement measures. The aim is for the additional funding to help those struggling to stay warm get the measures in that will help them.

Building on this work, the Council's HIA is currently awaiting the results of a bid to broaden out the current energy efficiency services to incorporate a small repairs service into the fuel poverty grant approach and also incorporate residents on low incomes as well as those on benefits.

Both fuel poverty grants for vulnerable private rented and owner occupier tenants will continue into the new financial year and a review of the scheme's impact and outcomes will be carried out. The outputs are summarised in Table 3 (see page 11).

5 Smart Meters

The Council would be keen to work with energy providers on installing SMART meters in Oxford over the next two years. In particular, the Council is keen to support installations that move Council tenants and Oxford residents away from the disadvantages of pre-payment meters.

6 The council's own housing stock

Recent achievements

Since the last HECA report, Oxford City Council has worked hard to update its stock data. A Stock Conditions Survey was carried out with broad targets and aspirations set out in a draft Asset Management Strategy.

Outputs achieved in the last 24 months include:

- Initial negotiations with funders for ECO funding for external wall insulation which were unfortunately unsuccessful due to changes in ECO funding regime. However the Council levered in £100K Green Deal Home Improvement Fund funding for external wall insulation programme of 50 properties. We are also on track to get £15K ECO funding for this project.

- Utilised £32.5k of ECO funding for cavity wall insulation in Carbon Savings Communities Obligation (CSCO - 25% most deprived) areas for 95 properties, and currently procuring cavity wall insulation in the Carbon Emissions Reduction Obligation (CERO - non deprived) areas

- Trial pilot of five domestic solar PV installations; two with battery backup as part of a research project.

- Solar PV and battery installs (and 6 LED lighting installs) were carried out in an innovative community energy research project 'ERIC', supported by Innovate UK and in partnership with Moixa and Bioregional – 30 domestic homes in Rose Hill, one of the 25% most deprived areas in the UK. More details are at www.localisedenergy-eric.org.uk.

- A tower blocks refurbishment programme, due to commence later in 2015, has reducing fuel poverty as a Key Performance Indicator and has specified high insulation levels for the external wall insulation and innovative solar PV on one façade of one of the blocks.

Council tenants the Parrots with their PV installation which was part of the five house pilot

Mr Parrott demonstrates the inverter in his loft

One of the OCC tower blocks due for refurbishment

The coming years

Under its Energy Strategy, over the next two years the Council's Housing department has committed to a £4,026,915 budget for solar PV and energy efficiency measures on its domestic housing stock for this period. The programme of works will be set by analysis of existing SAP ratings and modelling the energy data to maximise the impact of the Council's budget. This will set a target average SAP and also consider the poorly performing properties – those with SAP ratings lower than E - so the Council can ensure no properties fall below a defined minimum energy efficiency standard.

A team of building surveyors, a data analyst, an energy efficiency projects officer and a housing manager are in place to build on recent experience and roll out projects on a larger scale. Additionally, budget is provided for energy conservation visits to be carried out to all properties, prioritising vulnerable people at risk of health issues and fuel poverty and the homes that are harder to treat. A training programme will be rolled out to housing staff on fuel poverty and energy efficiency as appropriate to job roles.

This work will also enable the Council maximum access to external funding such as ECO and Feed in Tariffs, as projects will be prepared. Voids, reactive and planned maintenance and other ways of maximising energy and financial efficiency will also be considered.

The Project ERIC team with a tenant in Rose Hill and their new solar PV installation

Final summary

Whilst a generally healthy, relatively wealthy part of the country, this report illustrates the more localised issues and deprivation in Oxford as the city has 17 super output areas that are in the 25% most deprived in the country. Other key issues for the city include the high proportion of costly private rental properties and the resulting high frequency of poor energy efficient properties.

Fuel poverty is a driving focus for the Council with around 7000 (12%) Oxford households (Low Income High Cost) estimated to be fuel poor. However, due to particular concerns, Oxford has produced their own 'composite' fuel poverty indicator. This will be used (and adapted) for targetting areas over the next two years.

Key work for the Council includes the 20% onsite renewables requirement under Planning, work with the private rented sector and with its own housing stock.

Private sector work for the future includes targetting poor properties via EPCs and a new HMO licensing condition. Building on existing work, a £4 million capital project on energy efficiency upgrades and solar PV installs over the next two years commences in the new financial year for the Council's own housing.

Appendix I - Oxford composite fuel poverty indicator

Oxford Draft Composite Fuel Poverty Indicator: Underlying data sets and approach

Oxford City Council commissioned some work to look at other indicators of fuel poverty risk in Oxford. The project initially looked at a wide range of possible indicators which might be related to increased risk of fuel poverty - from DECC, 2011 Census, benefit claims (DWP), Indices of Deprivation, the Clinical Commissioning Group (health needs), and internal City Council data (HMO licenses, benefit claims, student households). The final set of data chosen reflects income, tenure (private rentals), poor energy efficiency and time spent in the home.
Each of the underlying datasets were calculated as a proportion of residents or households for Output Areas within Oxford, then ranked across the city and allocated to a local decile category. This ranking and allocation to deciles was done in order to create a composite indicator across the four different measures. The results of this mapping are shown below. This final result is tabled below along with its composite data sets:

Dataset mapped/spreadsheet	Underlying data	Why this dataset chosen
Oxford fuel poverty composite indicator	Income: Benefits claim (DWP, 2014) Tenure: Census, 2011 Exposure: Likely time in home (Census, 2011) Energy use: LSOA domestic gas consumption (DECC, 2012).	This is relatively up to date and utilises public data
Income: Benefits claim (DWP, 2014)	Income: Benefits claim (DWP, 2014)	This accounts for people with low incomes, including through disabilities.
Tenure: (Census, 2011)	Private rented (Census, 2011)	
Exposure: Likely time in home	Dependent child 0-4, Adult, age 65-74, Adult ,age 74+, Very bad health, Bad health, Long term mobility limited a lot, Economically active – reverse decile weighting, i.e. highest rating indicating census output area with least economic activity. (Census, 2011)	This picks up on older people and households with young children. We preferred the Census data on health for mapping because it gives a useful snapshot at much finer level of detail (census output area rather than Ward level).
Deprivation: IMD	IMD (2010, Department of Communities and Local Government)	
Energy use	LSOA domestic gas consumption (DECC, 2012	

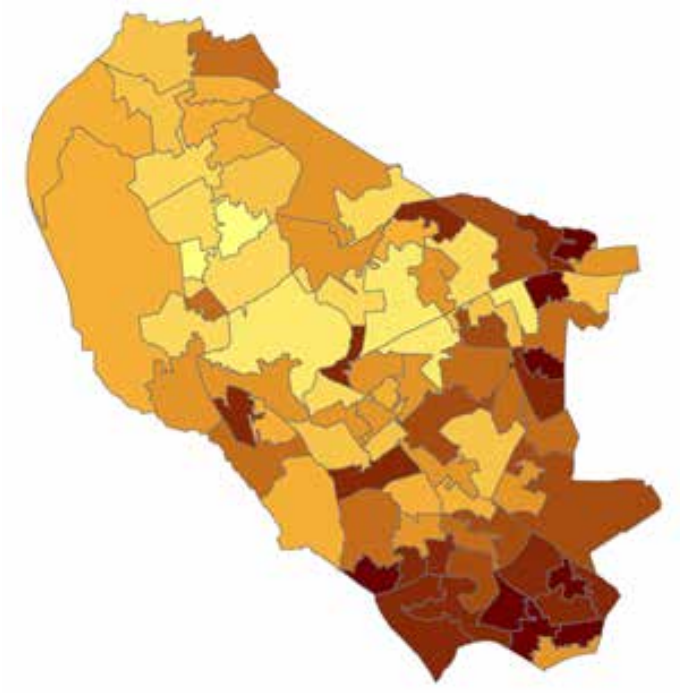
Additional mapped layers are detailed below and can be compared with the Composite indicator and its underlying datasets to provide additional information.

Data set mapped/spreadsheet	Underlying data
Fuel poverty indicator – Low Income High Cost (LIHC)	Fuel poverty indicator – LIHC (DECC, 2011 and 2012) data sets
Vulnerability; Ill Health	Incidence per 1,000 of Asthma, Coronary Heart Disease, Chronic Obstructive Pulmonary Disease (COPD), Peripheral Artery Disease (PAD) and Stroke (Oxford Clinical Commissioning Group, 2015)

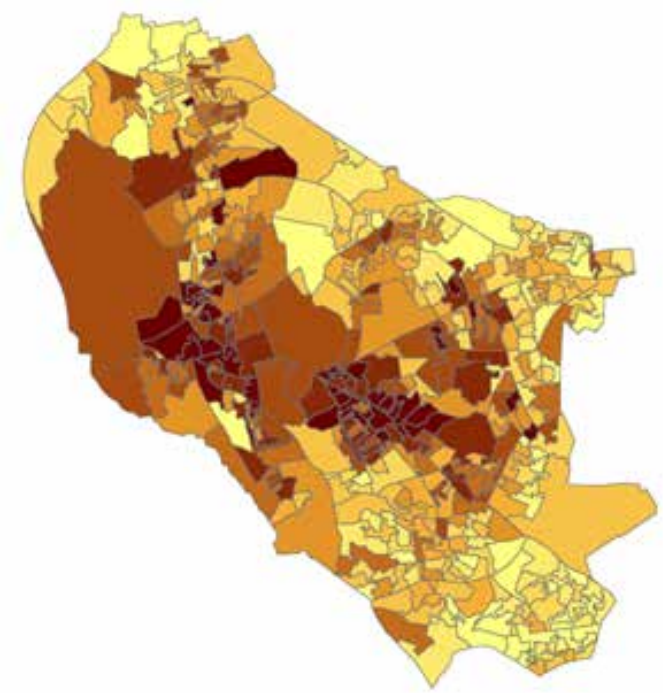
Local indicators of fuel poverty for Oxford

Maps

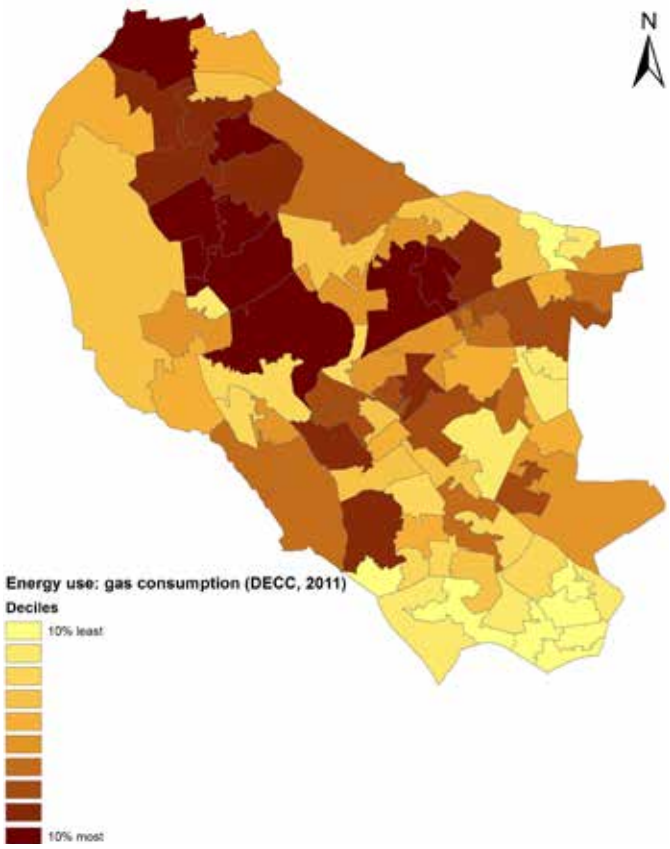
Proportion of residents with benefit claim
(darker areas = higher proportions)
DWP, 2014 at Lower Super Output Area



Proportion of private renting households
(darker areas = higher proportions)
BRE, 2013 at Output Area

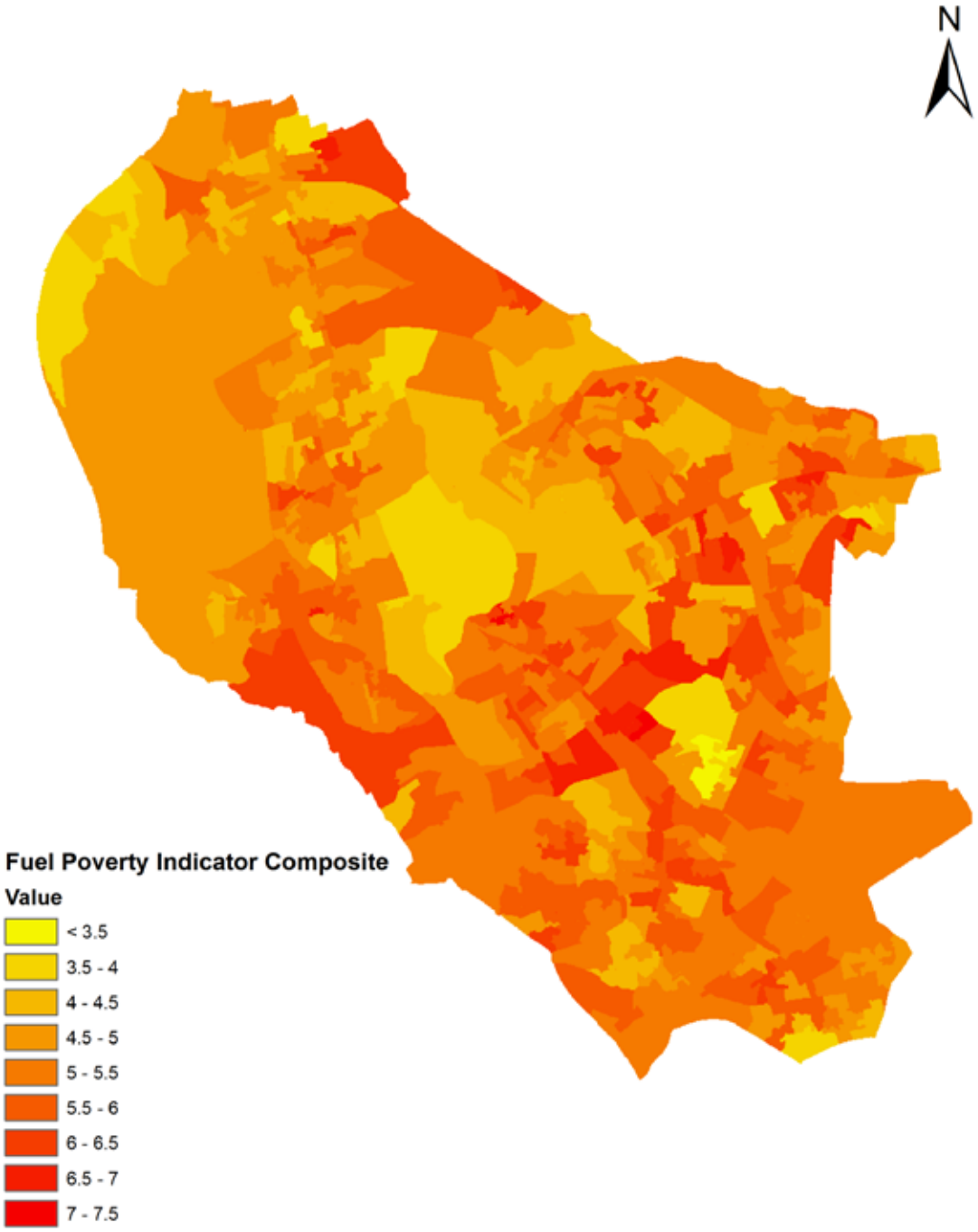


Gas usage
(darker areas = higher usage)
DECC, 2011



Time spent at home indicator
(darker areas = higher proportions)
Census 2011, ONS at Output Area

The four indicators have also been combined into a single composite indicator at output area level. This has been done by simply summing the ranking of each area, expressed as a percentage of all areas, using equal weighting for each of the indicators. The resultant map is shown below.



Some additional analysis and development is needed before we have some firm indicators upon which we can base our fuel poverty work. Other work we might explore include:

- Using household level data to understand the concentration of risk factors within households, not just within areas: data sources could include housing benefit data and/or the 2011 Census
- Further utilising updated Energy Performance Certificate data to concentrate further on energy efficiency of the stock
- Developing a classification of areas according to these indicators e.g. high private rentals, low benefit claims vs. low private rentals, high benefit claims
- Using different weightings for the fuel poverty indicators in our composite indicator
- Validating the DECC LIHC data and our composite indicator by conducting visits to a sample of households and evaluating their actual risk of fuel poverty