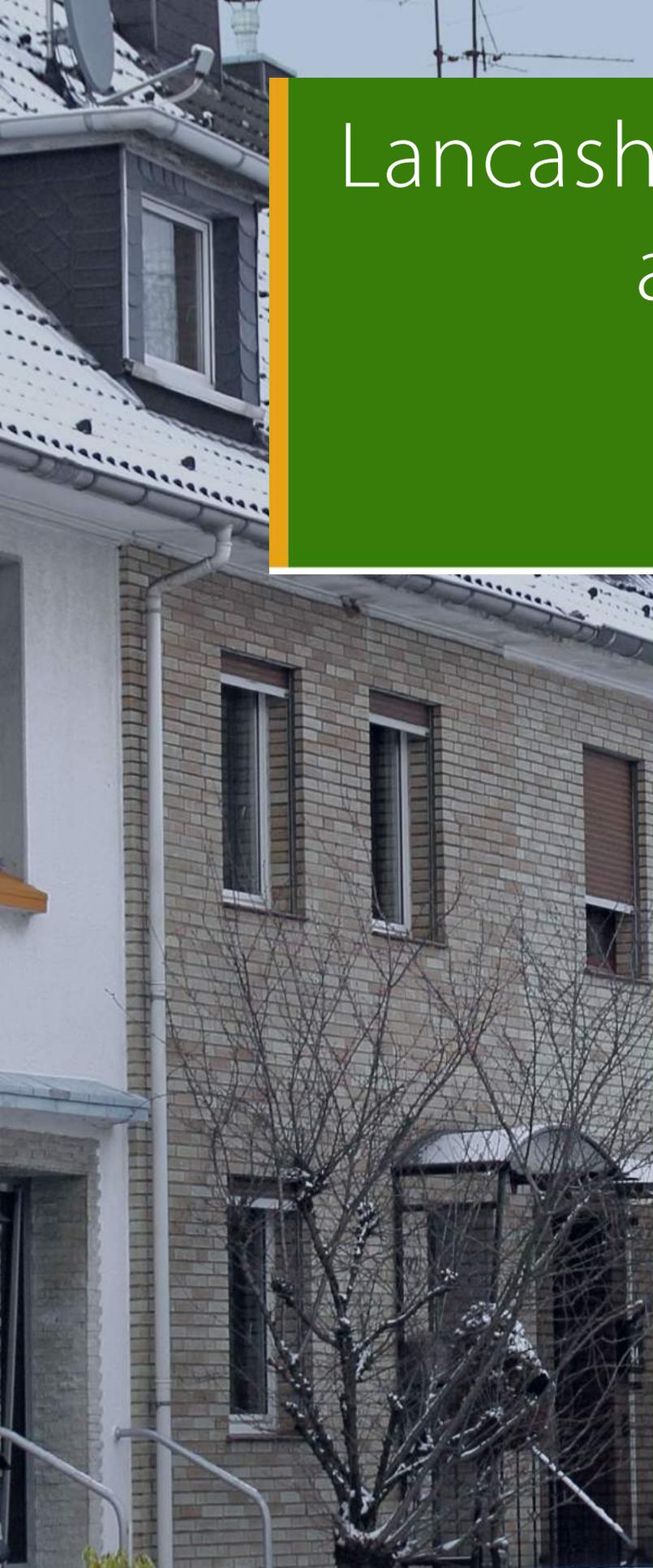


Lancashire Green Deal and ECO Study



Executive Summary

Introduction

This report has been commissioned by the Directors of Public Health for Lancashire, Blackpool and Blackburn with Darwen, together with the Lancashire Energy Officers Group. It has been produced by LESS, a Community Interest Company that delivers sustainability projects across Lancashire, along with partners AECOM and Firefly Energi.

Its purpose is to recommend how local authorities in Lancashire can best take advantage of the opportunities presented by the government's flagship Green Deal and ECO energy efficiency schemes, which both launched in 2013.

During the period from January to May 2014 the report team conducted desktop research and interviews with key personnel, from Lancashire authorities and energy efficiency schemes, around the country. This work gathered the necessary data to provide:

- A summary of the national picture in regards to energy efficiency
- An analysis of the energy efficiency improvements that could be made to local housing stock
- An indication of which areas could attract the most ECO funding and which might be most receptive to an 'able to pay' approach to fitting insulation and other measures
- The main issues affecting Lancashire that Green Deal and ECO may help solve
- The background and status of energy efficiency work within each local authority area and any issues particular to it
- A overview of available health data and discussion of the link between wellbeing and warm homes
- Recommendations on what action to take and what structures to put in place to achieve results

The results of our work can be summarised as follows:

Green Deal and ECO

The Green Deal offers long-term loans to households to pay for energy efficiency measures, whilst ECO is a grant scheme for low income households, paid for through a levy on electricity bills. Both of these flagship government schemes have suffered since their launch from flaws in their design and implementation.

Despite efforts by the government to simplify and promote the Green Deal, the Finance Plan at the heart of the original concept is widely considered to be poor value for money, and only a few thousand of these plans have been agreed against a six figure target.

Yet an increasing number of households are having a Green Deal Assessment to understand what measures could be of benefit, indicating an interest by households in improving the energy efficiency of their properties.

This interest will be supported by the recently launched Green Deal Home Improvement Fund (HIF), which subsidises improvement work but does not require a Green Deal Finance Plan to be signed. There is £120 million in the HIF pot for 2014/15 and it offers up to 75% off the cost of solid wall insulation (up to a maximum of £6000) and up to £1000 off other measures if at least 2 are installed. A recent solid wall insulation scheme in Preston showed that residents are willing to commit to the cost of improvement works if they are clear on the benefits. Therefore, the potential for 'able to pay' schemes to succeed appears to be greater than before the HIF was announced.

ECO is administered by the large energy companies and in contrast to Green Deal has led to a significant number of measures being installed. Unfortunately the targets for companies rely on the predicted carbon savings that the measure will deliver and this does not always correlate with providing fuel poor households with the full suite of measures that will reduce their bills and increase their thermal comfort. In response, local authorities and other organisations in Lancashire have made some progress in coordinating the investment of ECO funding to make holistic improvements to social and private rented housing.

Since we were invited to tender for this study the government has announced and then consulted on changes to ECO that have severely reduced the potential funding available to Lancashire. Initially it was calculated that sufficient funding could be drawn upon to both pay for the setup and development of a pan Lancashire energy efficiency scheme delivering funded energy efficiency works and to pool excess funding to 'cross-subsidise' more expensive measures. This would further the 'whole house' approach to supporting those in fuel poverty.

With the changes to ECO this is no longer the case and both pump priming and ongoing match funding will need to be found, either from the public purse or from individual homeowners and tenants themselves, to deliver such a scheme.

Choice of data to report the condition of Lancashire's Housing Stock

AECOM carried out the data collection and (Geographical Information System) GIS mapping to identify and prioritise areas of Lancashire with an above average need for the improvement of the energy efficiency of the housing stock.

AECOM collected data on the condition of the Lancashire housing stock from a request for information issued to the 14 local authorities supported by data from a range of online sources. With this data the team developed a collection of GIS maps that illustrate local areas of opportunity for realising energy and carbon savings and helping to alleviate fuel poverty.

There are however a number of limitations to the data presented in this study caused by variations in the level of detail, age, format and comprehensiveness.

The Homes Energy Efficiency Database (HEED) was chosen as the basis of AECOM's survey of stock as, within the timeframe of the study it was the most accessible of the stock datasets. Containing around 67% Lancashire homes the HEED is also one of the more comprehensive data sets for the county as a whole. Unfortunately the HEED includes some data bias, within a prevalence of homes where efficiency works have been undertaken and a proportion of data points listed as 'unknown'. In the medium to long term the EPC database, currently available for only part of the county, will offer a better reflection of the state of the Lancashire stock. One of our recommendations is that in due course the EPC data be purchased for every local authority area.

Data mapping and targeting areas for action

Through GIS mapping we were able to display information for each local authority area covering:

- What and where the physical constraints to energy efficiency work in Lancashire are
- The locations of the people who most need help to improve the energy efficiency of their homes
- The most likely location of 'Able to Pay' households
- The location of properties that have the greatest opportunity for carbon and financial savings

The physical constraints to energy efficiency works

One map represents the likely physical and geographical constraints on the delivery of energy efficiency works including: Elevation; Orientation; Areas of Outstanding Natural Beauty (AONB), and Conservation Areas (CAs).

The location of the people who most need help

Those most in need of energy efficiency improvement include: those living in fuel poverty; those living in areas with an above average incidence of cold related ill health and; those living in the most deprived urban and rural areas of Lancashire (and therefore qualifying for ECO funding).

The location of the 'Able to Pay' demographic?

One sample group that was of interest to the study team was those homes that were located in the wealthiest areas of Lancashire but due to poor insulation, and perhaps being located off the gas grid, were subject to high fuel bills resulting in their spending over 10% of their income on fuel. These households were considered most likely to be receptive to carrying out energy efficiency works to reduce their fuel costs.

The location of properties that require works and the required measures

Key property characteristics offering a potential opportunity for energy efficiency works were identified. These included the number of homes with: electricity or solid fuel for their main heating fuel; easy to treat cavities; unfilled cavities; single glazing; less than 150mm of loft insulation and un-insulated solid walls.

The number of incidences of these opportunities was combined in a Multi-Criteria Analysis (MCA) where all of the measures were weighted according to the carbon saving from the measure divided by the cost of the energy efficiency works. Whilst it was originally intended that the MCA would include the impact of funding available, the changes in the ECO funding regime over the time of this study indicated that including funding in the weighting could lead the output from this report becoming obsolete if further funding changes were announced.

It is recommended that after an appropriate period, say in 12 months when the funding for ECO and the Green Deal should have stabilised, that this analysis is re-explored to allow further targeted identification of opportunity areas.

The main issues affecting Lancashire

We identified some of the issues affecting Lancashire as a whole that energy efficiency schemes, including Green Deal and ECO, may help to solve:

- **A high rate of fuel poverty.** The countywide proportion of households classified by the UK government as fuel poor is 13.7%, compared to the England average of 10.9%. Many Local Authorities have a much higher incidence, including Blackpool (18%, the highest in England) and Lancaster District (16.3%, the third highest). Even Chorley, which has the lowest proportion of homes in fuel poverty in the county, has a rate of 10%.
- **A large number of hard to treat properties.** Large swathes of the county, both rural and urban, contain properties with solid walls or narrow/random stone cavities that make the cost of insulation prohibitive without significant grant assistance. We propose that due to the level of exposure to wind and rain in Lancashire many properties with 'easy to treat' cavities should be classed as 'hard to treat' unless a local survey indicates a sheltered aspect.
- **An inadequate private rented sector.** Areas of Lancashire have a large number of poor quality private rented homes, often with absentee landlords. This makes improvements in the property difficult to finance and to arrange.

Issues affecting local authority areas

In the report we provide a visual summary of every area, broken down to local super output area (LSOA) level that comprises four maps showing:

- Constraints – aspect, elevation AONB and Conservation areas
- Incidence of households in fuel poverty
- The opportunities within the 25% most deprived wards, where ECO funding is available
- The opportunities within the 25% least deprived wards, where an 'able to pay' scheme may work

We also provide a written summary of research and discussions that covers:

- Identified issues specific to each Local Authority
- Historic work on Affordable Warmth initiatives
- What the priorities are for the area and the relevant local authority

Health and Wellbeing

There is strong link between increasing the energy efficiency of properties and improved health outcomes for the residents of the improved properties. Research by Marmot, Hills, the World Health Organisation and others directly links cold homes with excess winter deaths and a wide variety of disease and illness. In 2012/13 alone, we estimate 225 people in Lancashire died because their home was not adequately heated.

Local authorities and other health commissioners have been investing significant amounts in affordable warmth initiatives to address these issues. We recommend integrating this investment with a countywide energy efficiency scheme, and potentially seeking health funding to help set up and maintain the required structure and potentially 'topping up' ECO-funded measures to make them free for those in poverty.

We also propose closer integration with clinical Commissioning Groups (CCGs) as they develop their plans and highlight a good example from Sunderland where GPs have a clear referral pathway to 'prescribe' energy efficiency improvements.

Options for Lancashire

We have offered a number of potential options for Lancashire authorities going forward.

The first is to leave implementing Green Deal and ECO to the market. However, we are clear that the market has not delivered over the last 18 months and that intervention by local authorities and other trusted partners will significantly increase the number of households willing to take part.

The second is for individual local authorities to continue to try and set up their own schemes. Whilst many have achieved some success, capacity issues mean that other areas, especially with smaller populations, will not be able to do so.

We have also explored the potential for Lancashire to strike a deal with a big energy company to fund and implement an energy efficiency scheme work in return for exclusive endorsement of the scheme by local authorities and assistance in research and marketing.

There is merit in having a joined-up approach that provides a straightforward scheme for local people and which delivers economies of scale. Yet we show that other schemes where local authorities cede control

have not worked as well as hoped – in part due to the government's changes to ECO – and the authorities are then limited in their ability to respond. Further changes to Green Deal and ECO (for example, with a change of government) are entirely possible and locking Lancashire into a long-term deal could lead to disappointment if that company decides to change its targets and approach.

It is clear that any deal where the energy company or installer keeps the ECO income means the profits from the most 'carbon rich' properties are lost to the area. The potential to involve local installers and other local organisations in the supply chain will be limited as the company will have its own established supply chain.

We look briefly at whether a sub-regional or regional scheme (like 'Warm Up North' in the North East of England) could work but argue that it is unlikely to be effective. Greater Manchester, Yorkshire and Cumbria all have Green Deal and ECO schemes in place and Lancashire's ability to join them or influence its terms of membership would be limited.

We propose that the complexity of working across county lines where there are no existing structures in place would make setting up and managing such a regional scheme extremely difficult. Lancashire has sufficient homes to develop its own scheme that would benefit from economies of scale and negotiate ECO funding at the best price per tonne available.

Recommendations

Our final option and our recommendation is therefore:

- 1) For Lancashire local authorities and potentially other partners to setup up a not-for-profit vehicle (e.g. a Community Interest Company) to expand the existing 'Cosy Homes in Lancashire' scheme to benefit a far greater number of households, and retain control of the profits and the supply chain for the benefit of the scheme and the local economy.

This approach would protect the scheme from suppliers or installers getting cold feet about dropping out, and would ensure that all profit was reinvested locally into further measures. Decisions could also be made to ensure local companies were given the chance to be involved.

We further recommend action to:

- 2) investigate alternative sources of loan finance for households to fund Green Deal improvements – for example, through a credit union
- 3) support local businesses in the supply chain, and maximise training and employment opportunities for local people.
- 4) integrate the Cosy Homes in Lancashire scheme with initiatives that promote micro renewable energy generation and positive behaviour change to maximise warmth and savings.

Partnership Working

- 5) To invest further in developing and publicising referral pathways for frontline staff and volunteers to use to support their clients
- 6) To work with and influence health commissioners to help local authorities and CCGs both meet their statutory targets
- 7) To integrate the recommendations of this study with the work on affordable warmth projects for winter 2014/15 to avoid duplication
- 8) To work with private landlords to improve their properties to an acceptable standard
- 9) To work with partners in the Green Open Homes Network to develop a countywide 'portfolio' of retrofitted properties and local champions who can promote energy efficiency

Data and Reporting

- 10) In time for a follow on update to this report - to purchase the EPC data for authorities within the Lancashire County Council area to provide a better understanding of the quality of housing stock
- 11) To update this report and the data on which it's based when there are significant shifts in policy development, the availability of funding, etc.
- 12) To review the potential to expand the scheme to cover non-domestic premises

Appendices

The appendices to this report contain a wealth of supporting information including further maps and Lancashire data.



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