

Basingstoke and Deane Borough Council

Home Energy Conservation Act Report 2014 – March 2014

Introduction

The Home Energy Conservation Act (HECA) 1995 acknowledges that local authorities are in a good position to work to improve the energy efficiency of all residential accommodation in their area. The Secretary of State for Energy and Climate Change requires that all English local authorities prepare reports setting out the energy conservation measures they will undertake that are practical, cost effective and likely to result in significant improvement in the energy efficiency of residential accommodation.

Basingstoke and Deane Borough Council's Ambitions and Priorities

The Borough Council has a range of corporate documents and strategies that set out our approach to improving the efficiency of homes in the borough and, more generally, on climate change. This includes:

- Our Council Plan 2013 – 2017 – highlights the ambition to ‘take action to reduce energy use and introduce renewable energy, both for our own premises and the borough’;
- Our Carbon Management Strategy – to set out how the Borough Council will reduce its carbon footprint, including a commitment to a 15% reduction in carbon emissions in the council's own buildings and operations by 15% by 2016;
- Our Climate Change Strategy – which is currently being reviewed, to set out how the Council will work towards the delivery of our shared Vision and the Council Plan in respect of climate change;
- Our emerging Local Plan – which allocates land for development in the borough up to 2029 and provides a framework within which to determine planning applications;
- Our Sustainability Policy – which sets out the steps that the Borough Council is undertaking to encourage sustainable development, including using resources carefully and minimising waste; and
- Sustainable Community Strategy – which establishes a joint vision for the future of Borough, including the improvement of homes, reductions in waste and careful use of resources.

Our HECA Report builds upon the framework provided by these documents and sets out the strategic and partnership context for our energy conservation and fuel poverty work. It contains:

1. Understanding our Borough, including its housing stock, energy consumption characteristics and carbon emissions;
2. Overall aims and objectives; and
3. Actions to deliver our aims and objectives

The Government requires that we publish a HECA report every two years. However, given that this is an area that is rapidly evolving, with new initiatives and schemes, we will update this on an annual basis. This helps to ensure that the document and actions contained within it remain relevant to tackle this issues.

1. Understanding our Borough

The Borough and its Housing Stock

The Borough of Basingstoke and Deane covers an area of over 245 square miles within northern Hampshire, over 75% of which is agricultural or land in other non-wooded greenfield use. A further 15% of the borough is covered by woodland or forest. Less than 8% of the borough is built up, supporting the majority of the borough's population of approximately 168,000 people with a focus of residents living in Basingstoke. It is expected that the population and the dwelling stock of the borough will continue to increase in the future, a theme which is common across the rest of the South East of England.

There are around 72,000 dwellings in the borough at present, which provides a mixture of house types, with the greatest proportion built between 1930-1982, reflecting the expansion of the town in the 1960s and 1970s. Data collated on behalf of the Borough Council using Energy Performance Certificate¹ data on a sample of 6,931 residential units, show the average SAP² rating at 64.4 is slightly higher than the national average of 60. This information also highlights that a concentration of homes in the borough have a SAP of around 82. SAP is graded so that the higher the score, the better the energy efficiency of the property. This is likely to reflect the relative age of the housing stock, and shows that overall energy efficiency in dwellings across the borough is generally good, particularly for homes completed more recently, which produced a higher SAP level. The data also highlights that a typical dwelling in the borough has an annual carbon footprint of 3.4 tonnes of CO₂, which compares to a UK average of 4.1 tonnes. Despite this, there is still much work to do to improve the performance of the borough's housing stock, including addressing the barriers linked to:

- Rural locations that do not have access to a mains gas supply,
- Properties currently with electric heating; and
- Areas where residents living on low incomes fall into the fuel poor category.

Locations with the greatest scope to improve home energy consumption

Data has been compiled on behalf of the Borough Council in relation to the types of fuel used to heat homes in the Borough, this is a useful guide to where there is the greatest scope to concentrate efforts through this HECA report. The following

¹ Energy Performance Certificates give home buyers and sellers A to G ratings for their home's energy efficiency and carbon emissions

² Standard Assessment Procedure; methodology used by The Department of Energy and Climate Change to assess and compare the energy and environmental performance of dwellings

information highlights such areas to provide a baseline position, which goes on to identify which actions should be taken forward to address these issues.

Figure 1, below, shows the areas in the Borough where domestic heating is by fuels other than gas or electricity, and which fall predominantly within rural locations, which do not tend to be connected to the mains gas supply.

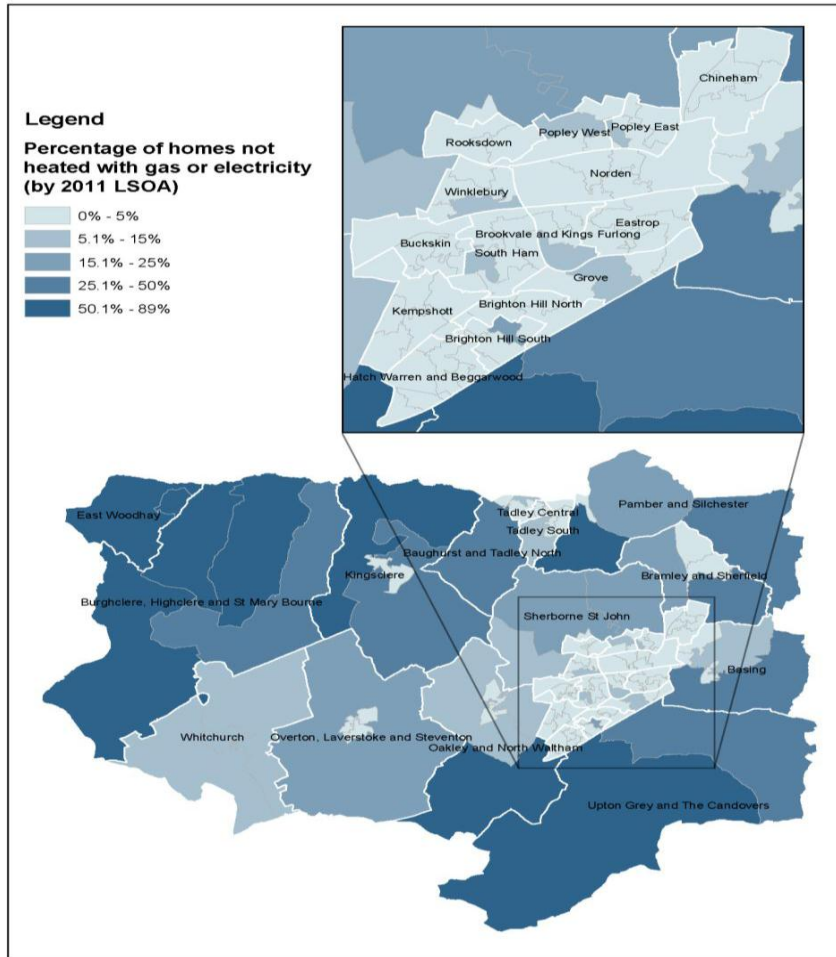
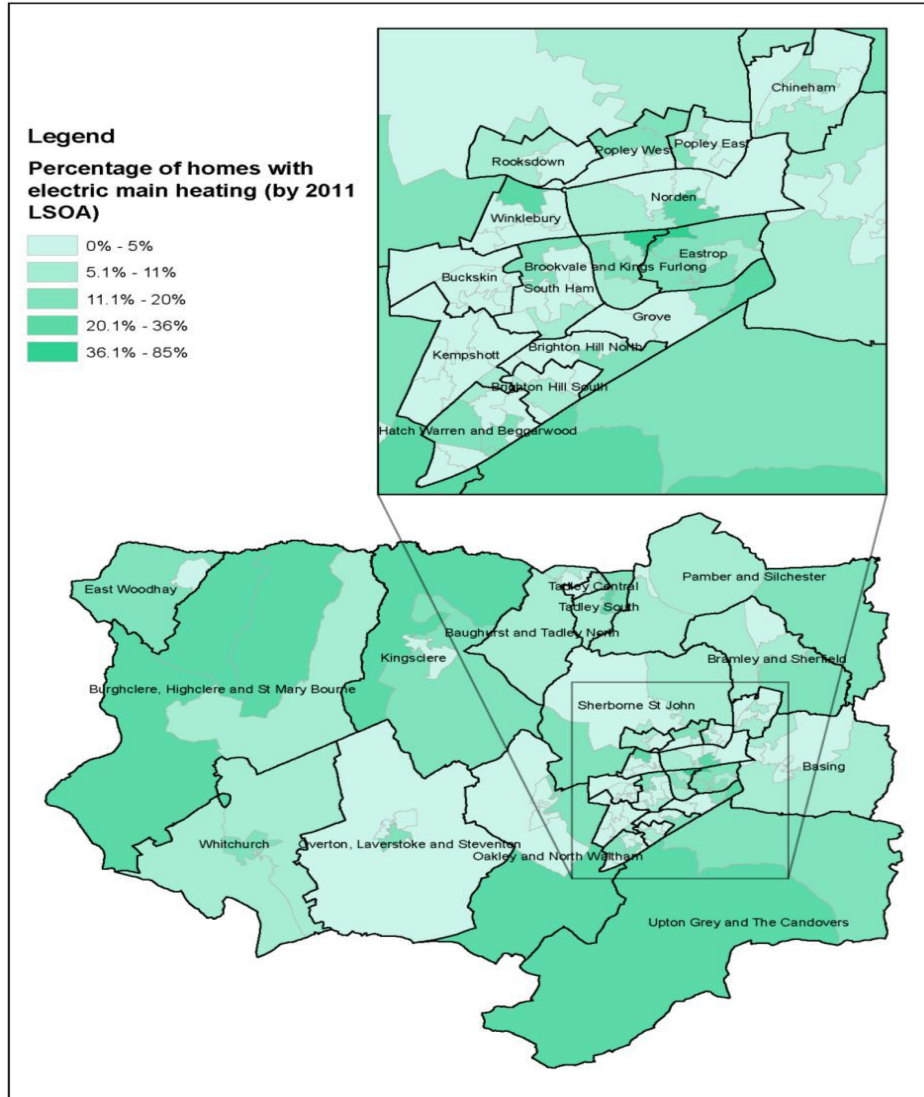


Figure 2, below, shows the areas of the borough where domestic heating is provided solely by electricity. As might be expected, electric heating is generally concentrated in rural areas of the borough, with large rural wards typically having a high proportion of this type of heating. Although a few notable exceptions exist such as Overton and Laverstoke ward, where there are low levels of electric heating in addition to pockets with high proportions of electric heating within the more urban areas.



These areas with the greatest level of homes heated by electricity are of particular concern in respect of home energy, given the findings of Government research. This highlights that Government and energy company initiatives to fund home energy improvements are paid for mainly through electricity bills, including those households that primarily use electric heating, but do not benefit from the various schemes will bear a greater share of these overall costs.

Further information from research undertaken indicates that:

- There are around 2,100 un-insulated lofts in the borough;
- Around 24,000 homes have loft insulation of less than 100mm and would benefit from additional insulation; and
- Around 13,000 homes have cavity walls that are not insulated.

In light of the locations identified and characteristics of the dwelling stock, the Borough Council will focus on these areas in respect of the Energy Company Obligation funding (ECO). It will also provide information and advice in terms of:

- Community energy projects and The Rural Community Energy Fund³,
- The Renewable Heat Incentive⁴; and
- Other schemes and funding sources as they arise.

It is intended that actions arising from this Home Energy Conservation Act report will focus predominantly on low income households and properties that are not on the mains gas network. Further detail on these actions is set out in the Action Plan at the back of this document.

Fuel Poverty

Until recently fuel poverty was defined as a household that spends more than 10% of its income to maintain a satisfactory heating regime. However, Central Government has announced that The Department of Energy and Climate Change will be adopting a new indicator that will define a household as fuel poor if:

- Their income is below the poverty line (taking into account energy costs)
- Their energy costs are higher than is typical for the household type

Over the past few years, fuel poverty levels have increased in Basingstoke and Deane from 7.8% of households in 2006 to 8.4% of households in 2010. This represents over 5,700 households in the Borough, as assessed under the '10% of income' criteria (note that information is not currently available under the new definition). While this is below the Hampshire county average, which is currently at 10.7%⁵ of households, it is still a significant figure which requires action to improve the situation. It should be noted that the borough has no areas which would qualify for the Carbon Saving Communities Obligation funding stream (CSCO).

Our Energy Consumption

Understanding average household energy consumption is useful in order to highlight any relationship with the age or condition of the housing stock, in addition to the availability of gas as a means of heating. It can also be useful to compare this to local or regional data sets to consider if there are any specific local issues. Set out

³ <https://www.gov.uk/browse/business/generating-energy>

⁴ <https://energysavingtrust.org.uk/grants-and-loans/renewable-heat-incentive/>

⁵ <https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/fuel-poverty-statistics>

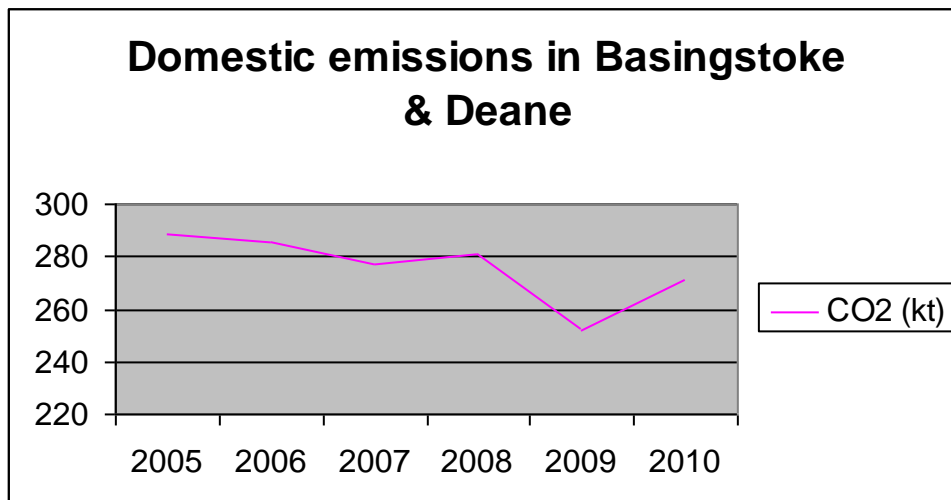
below are details of energy consumption by energy type, with local or regional comparisons where these are available:

- Average domestic electricity usage in the borough in 2011 stood at 4,586 kWh per household compared to the South East England average of 4,413 kWh per household.
- Average domestic gas consumption in the borough in 2011 stood at 13,519 kWh per consumer which is less than the Hampshire average of 13,792KWh and the national average of 14,206KWh.⁶

Whilst the specific reasons for these levels of energy consumption are not known, possible explanations include:

- Households in the Borough benefit from the generally milder temperatures experienced in the South of England and therefore consume less gas than the national average; and
- In general terms, household incomes are higher in the Borough, than many other parts of the region, which may mean that there is less concern around household income being used to pay for electricity consumption.

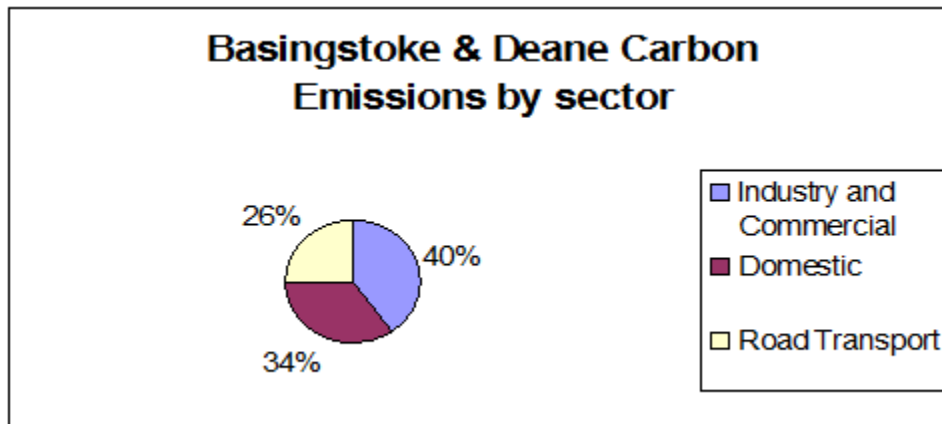
In respect of energy emissions arising from households in the Borough, the graph overleaf shows that carbon emissions generally decreased in the period 2005 to 2010, with a specific fall in emissions during 2009. This reflects, global carbon emission trends during this period, which also correspond with a global economic recession. During 2010, levels again increased, but these continue to show a gradual decline overtime and it is likely that there are links with specific periods of cold weather, which result in increased consumption of energy for heating.



⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49416/3955-subnat-gas-cons-statistics-2009.xls

In a general sense, overall reductions in energy use locally are also likely to be a response to rising energy prices, greater awareness of energy efficiency and improved efficiency of household appliances.

It should be noted that domestic energy consumption represents 34% of the borough's carbon footprint, with the remaining industrial and commercial operations making up 40%, and road transport (26%) as set out below.



2. Overall, Aims, Objectives and Targets

The Climate Change Act 2008 sets out a legal requirement for the UK to reduce carbon emissions and this is backed up by the government's Carbon Plan (2011). Reduction targets related to the housing sector are:

- To reduce CO₂ emissions by 29% by 2017, 35% by 2022 and 50% by 2027 from a 1990 baseline.
- To insulate all cavities and lofts, where practical, by 2020
- By 2050 emissions from UK buildings to be 'close to zero'

Whilst there is no carbon reduction target for Basingstoke and Deane Borough, the council currently monitors progress across the domestic, transport and commercial and industrial sectors and is pleased to note a downward trend over the past five years. Through the actions in our Climate Change Strategy, which is currently being updated, we aim to continue this decrease in the future.

The council works hard to reduce emissions in areas that are within its scope of influence and the Carbon Management Study sets out the council's actions to reduce carbon emissions in its own buildings, services and operations. A target of a 15% reduction (from a 2011/12 baseline) has been agreed and progress will be published annually. To date, this has achieved a reduction of 11%.

In terms of home energy, Basingstoke and Deane Borough Council is committed through its Climate Change Strategy and The Home Energy Conservation Act to

work across the borough to help improve the energy efficiency of residents dwellings in order to:

- Reduce residents' energy bills
- Reduce fuel poverty levels
- Help residents avoid conditions that create health risks in cold weather
- Promote the use of renewable energy systems for long term sustainable energy solutions

3. Actions to Date

To date, the Council has been successful in promoting a number of initiatives to improve energy efficiency and insulation for individual householders and through helping and supporting community groups to improve insulation and promote energy efficiency measures in the borough's housing stock. This has included:

- Financially supporting and promoting the Insulate Hampshire scheme to provide free insulation to nearly 1,750 households in the borough;
- Supporting and assisting the actions of the Greening Campaigns for Chineham and Sherborne St John and working with the Overton Sustainability Forum, Basingstoke Transition Network and Smart Future Centre;
- Making available a thermal imaging camera for community groups in the borough to detect heat loss from homes;
- Providing energy efficiency information on the council's website
- Providing 50 free Green Deal Assessments to residents
- Supporting the Switch Hampshire collective energy switching scheme to identify potential savings, both for residents and business. In Basingstoke and Deane, this resulted in just under 500 households registering, with 10% of these actively switching suppliers.

4. Actions to Deliver our Aims and Objectives

The following tables detail the main actions that we are taking to improve domestic energy efficiency and reduce fuel poverty. A key component of this work is based on an assessment of the relevant characteristics of the borough, as shown in figures 1 and 2 above, including the type of domestic heating and levels of insulation. This assists in identifying that are most likely to be in need within the borough. This has allowed us to establish a targeted approach to improving the energy efficiency of these properties and supporting vulnerable residents.

From this data, working with Hart District Council and Climate Energy, we are taking advantage of Energy Company Obligation funding to improve the insulation and heating of resident's homes. This launched in February 2014 and will provide a good opportunity to gain support and interest at a time of the year when winter fuel

costs will be of concern for many residents. A detailed action plan has been developed to progress this area of work, which includes:

- Projects targeted on particular areas (linked to the background information contained in this report) to engage local people and improve awareness of the scheme;
- General awareness raising through the local press on the council website and Twitter, in addition to other local magazines / newsletters.
- Project developed with Hart District Council and Climate Energy to access ECO funding for low income households to make energy efficiency improvements.
- Projects planned on area-based and street-by-street basis to include coffee mornings (or similar) to engage local people and provide an opportunity for questions.
- Working with the Council's Benefits team to find pathways to inform residents in receipt of benefits, Community Development Officers for access to community centres and by providing information through the Citizen's Advice Bureau
- Support for vulnerable residents throughout the process
- Throughout the programme, officers will continue to assess and develop projects to find new ways to access funds to help residents become more energy efficient.

**The Council does not own any local housing stock the focus will be on owner-occupied homes as well private rentals and social housing.

Actions

Objective	Actions	Outcome	Timescale
STRATEGIC COMMITMENT			
Demonstrate the council's commitment to reducing carbon emissions across the borough and setting a good example by its own actions	<p>Sign up to Climate Local Commitment</p> <p>To be signed and published in Spring 2014 as first action following adoption of the revised Climate Change strategy</p>	To obtain a high-level commitment within the Council to consider climate change. To set out a Climate Local Commitment and Climate Local Framework to deliver actions addressing climate change across the borough and to assist in guiding the Council's on-going work on climate change	Spring 2014
Demonstrate continuing commitment to reducing emissions in the council's buildings, services and operations and to work with the local community to support actions to reduce emissions across the borough.	Review the Climate Change Strategy	To set out the Council's commitment to addressing climate change, including the actions of the Council, its partners and the community	<p>First consultation with local groups and councillors completed Feb.2013.</p> <p>Further consultation took place Dec 2013 / Jan 2014 . The updated strategy will be considered by the Borough Council in Spring 2014.</p>

HOUSING

Provide information on the Green Deal	Continue to raise awareness and understanding of the Green Deal, based on experience from a trial of 50 households in the Borough.	To ensure that residents are aware of the initiative and understand what it consists of and how it can benefit them	On-going
Utilise ECO funding to improve the homes of those in fuel poverty	Work with Climate Energy to target specific areas and communities to identify and implement specific measures to improve home efficiency.	Overall improvements in home insulation (increased SAP ratings) and reductions in households in fuel poverty	Projects launched in Feb 2014 and is expected to continue while funding is available and further homes need improvement.
Deliver, with Hart District Council and Climate Energy a range of awareness and promotional events to engage residents from low income households. Provide access to ECO funding for free energy efficiency improvements for	Launch the initiative on 15 February 2014 and plan a programme of area based events across the borough for as long as ECO funding is available. Raise awareness of the Climate Energy call centre number for direct referrals	Deliver focussed and area-based projects to tackle fuel poverty and improve energy efficiency of households Reduce levels of fuel poverty in vulnerable households in rural areas and any pockets of non-gas heating in urban areas. To provide more sustainable options	Meeting with Yorkshire Energy Services and Southern Gas Networks during August. Mapping provided by Southern Gas Networks showing mains gas pipelines in the Basingstoke Borough. These results will be considered alongside the Parity report data to identify

these households. Advise landlords of eligibility for this scheme and identify areas in off mains gas areas and explore possible free connection		for heating for those who are not connected to the mains gas network.	areas of the borough for early focus for ECO projects.
Submit bid for government funding to insulate mobile homes.	Joint work with Hart District Council	To provide improved insulation for residents of mobile homes.	Work lead by Hart District Council to be delivered alongside the ECO actions as above
Consider the scope for specific policies in the emerging Local Plan in respect of Home Energy.	Work to be delivered by the Planning Policy Team	To ensure that new residential development responds to the need to consider home energy consumption and energy efficiency.	Document due to be consulted upon in September / October 2013. Anticipated adoption 2014.
Local housing providers to assess and improve the energy efficiency of their housing stock, taking advantage of the Green Deal	Provide information and support if relevant	To work in partnership with registered social landlords and ensure that they have a greater understanding of the Green Deal initiative and the benefits that it can provide, and ultimately leading to improved energy efficiency for tenants.	To be informed by outcomes of Green Deal trial and approach to be discussed with housing officers on commencement of the ECO project.in Jan 2014