

Harborough District
Home Energy Conservation Act (HECA)
Report

May 2019

Introduction

The Home Energy Conservation Act 1995 recognises that local authorities are well placed to assess the needs of the area and the area's residents, and to use this position positively. This should include using the position to drive change to improve efficiency of all residential accommodation with the local authority boundary. The Department for Energy and Climate Change (DECC) published a requirement in July 2012 under HECA for all local authorities to report on the measures taken to achieve improved energy efficiency, and to submit this report to DECC. The first HECA report was published in 2013 and there is a requirement to review actions and publish further reports every two years.

The responsibility for HECA has now passed to the Department of Business, Energy and Industry and they have requested that the updates continue, but have revised the guidelines for reporting, including other areas, such as smart meters. The guidance can be found at:

This report sets out current trends in domestic energy use together with Harborough District Council's strategic objectives in improving energy efficiency in homes and the actions it will take to achieve these objectives.

Council Priorities

The Corporate Delivery Plan is structured around our 3 priorities:

- **The Place:** An enterprising, vibrant place
- **The People:** A healthy, inclusive and engaged community
- **Your Council:** Innovative, proactive and efficient

Where are we now?

Energy use and CO₂ emissions

The emissions data for Harborough District for 2016 (published 2018) is the most recent data available for monitoring emissions¹.

¹ <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2016> published June 2018.

Harborough District Carbon Emission 2016

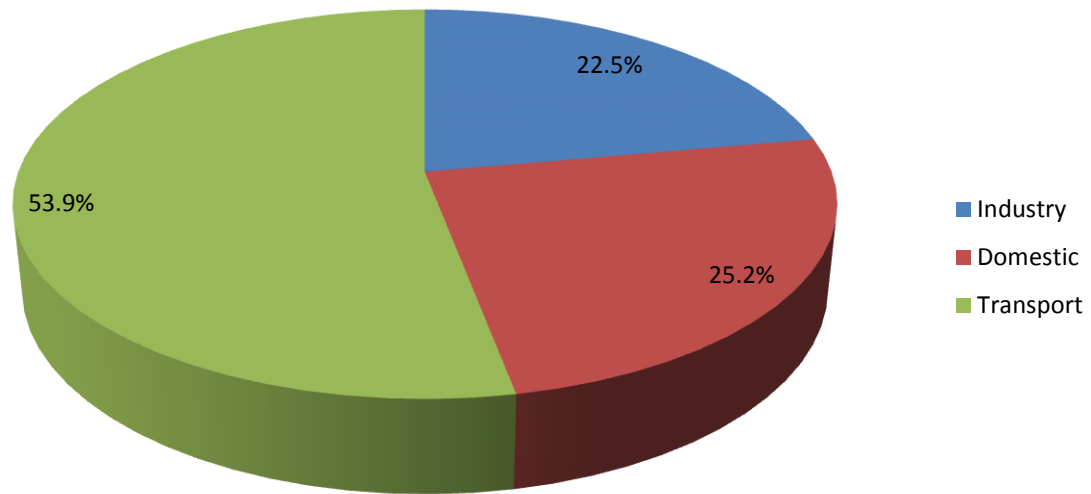


Figure 1 Harborough District Emissions by Sector 2016

Harborough, with per capita emissions of 6.9 tonnes, ranks second highest in Leicestershire. The Leicestershire average per capita measurement is significantly lower at 6.6 tonnes and the average for England is lower again at 5.3 tonnes, with UK average at 5.4 tonnes. Harborough District's emissions have also reduced at a slower rate (31.7%) than for Leicestershire (32.2%), England (37.5%) and the UK (37.2%).

The table below shows the emissions per capita for each of the sectors, from 2005 to 2016 (the latest date for which figures are available). Emissions from all sectors have fallen since 2005. However, emissions from transport have largely stayed the same for the last 5 years. Transport is now responsible for more than half of all emission in the district.

Year	Industrial and Commercial	Domestic	Transport	LULUC	Total
2005	2.9	2.7	4.5	0.0	10.1
2006	2.8	2.7	4.3	0.0	9.8
2007	2.6	2.6	4.3	0.0	9.5
2008	2.6	2.6	4.0	0.0	9.2
2009	2.4	2.4	3.8	0.0	8.5
2010	2.4	2.5	3.8	0.0	8.7
2011	2.1	2.2	3.7	-0.1	7.9
2012	2.3	2.3	3.6	-0.1	8.1
2013	2.2	2.3	3.7	-0.1	8.0
2014	2.1	1.9	3.7	-0.1	7.7
2015	1.8	1.8	3.7	-0.1	7.2
2016	1.6	1.7	3.7	-0.1	6.9

Table 1: Harborough District CO2 emission per capita by sector 2005 to 2016

Comparison of per capita emissions for Harborough District, Leicestershire, England and UK 2005 to 2016

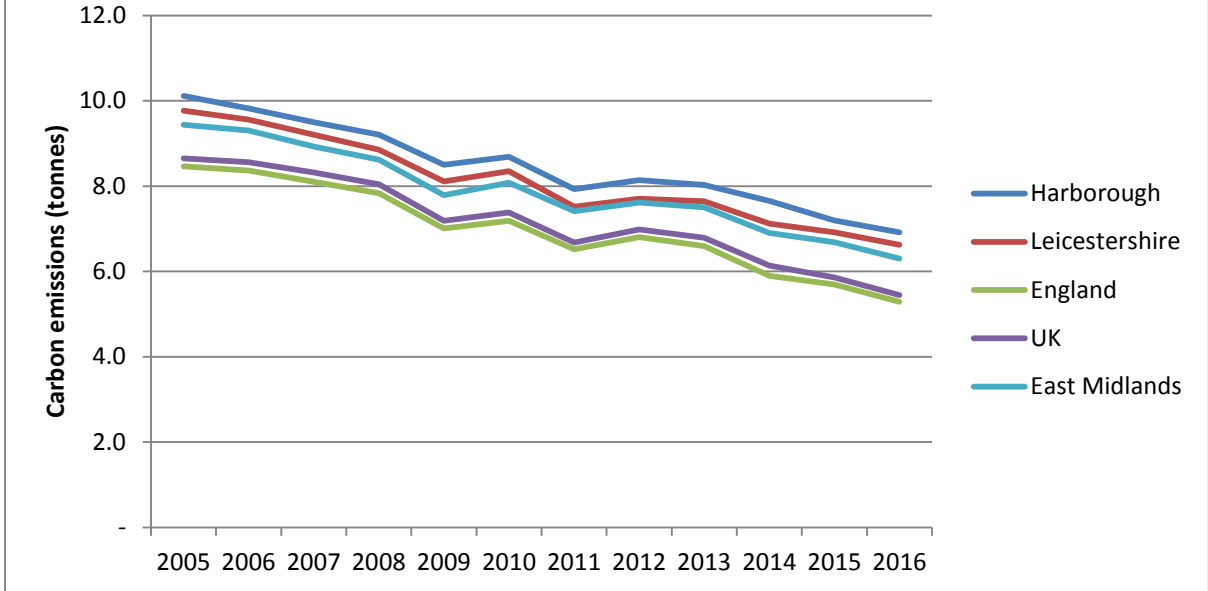


Figure 2 Harborough District Per Capita total emissions 2005 to 2016

Domestic Energy Consumption

Based on data from Department of Energy and Climate Change the average domestic energy consumption across the district has reduced year on year. This trend is shown both for electricity consumption and gas consumption.

Year	Average domestic electricity consumption per consumer (kWh)
2005	5,223
2006	5,087
2007	5,029
2008	4,804
2009	4,707
2010	4,716
2011	4,660
2012	4,612
2013	4,495
2014	4,465
2015	4,400
2016	4,317

Table 2: Harborough District Domestic Electricity Consumption Per Consumer (Source: <https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics-2005-to-2011>)

Year	Mean domestic gas consumption (kWh)
2005	21,513
2006	20,524
2007	19,866
2008	19,170
2009	17,590
2010	17,468
2011	16,447
2012	16,425
2013	16,001
2014	15,546
2015	15,379
2016	15,309

Table 3: Harborough District Domestic Gas Consumption Per Consumer
 (Source <https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority>)

This data is per consumer, so it does identify an improvement in energy efficiency across the housing stock, which is reflected in the carbon emissions data. The use of other energy sources is not monitored in the same way, but data from 2011 Census indicates that there are significant numbers of households using oil, LPG or some other fuel for heating (see figure 4).

Fuel Poverty

Fuel poverty exists where families have to pay a significant proportion of their income in order to keep warm. Under the **Low Income High Cost (LIHC)** definition a household is considered to be fuel poor where:

- they have required fuel costs that are above average (the national median level)
- if they were to spend that amount, they would be left with a residual income below the official poverty line.

The new indicator is less sensitive to changes in the winter temperature and also excludes those with large houses that are hard to heat, but have high incomes, so are able to afford the fuel bills.

Government data for 2016 indicates that the number of households in fuel poverty has dropped from 11.5% to 8.8% (over 3,100) households. Harborough District has lowest percentage of households in fuel poverty in Leicestershire and compares favourably with the England average 11.1%, which has remained broadly static since 2011. Harborough figures dropped significantly in 2013. This appears to correspond to the very successful Leicestershire wide “Four ways to warmth” programme, which targeted nearly 400 homes between December 2012 and April 2014. The same drop in fuel poverty is apparent in Leicestershire figures

Year	Number of Harborough Households in fuel poverty	Harborough Fuel Poverty %	Leicestershire Fuel Poverty %	England Fuel Poverty %
2011	4,046	11.5	13.6	11.1
2012	3,794	10.6	11.3	10.7
2013	2,799	7.9	8.9	10.5
2014	2,993	8.4	8.8	10.5
2015	3,546	9.9	11.4	11.0
2016	3,176	8.8	10.1	11.1

Table 4: Harborough District Fuel Poverty Statistics (Source <https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics>)

Although Harborough District has a lower percentage of homes in fuel poverty than neighbouring authorities, the number is still around 1 in 10 of all households and affects over 3,000 homes. Harborough is a very rural district and there are many homes off the gas grid, which has been identified as a major contributor to the risk of fuel poverty. In addition many rural homes are both harder to heat and harder to treat for energy efficiency improvements.

Housing

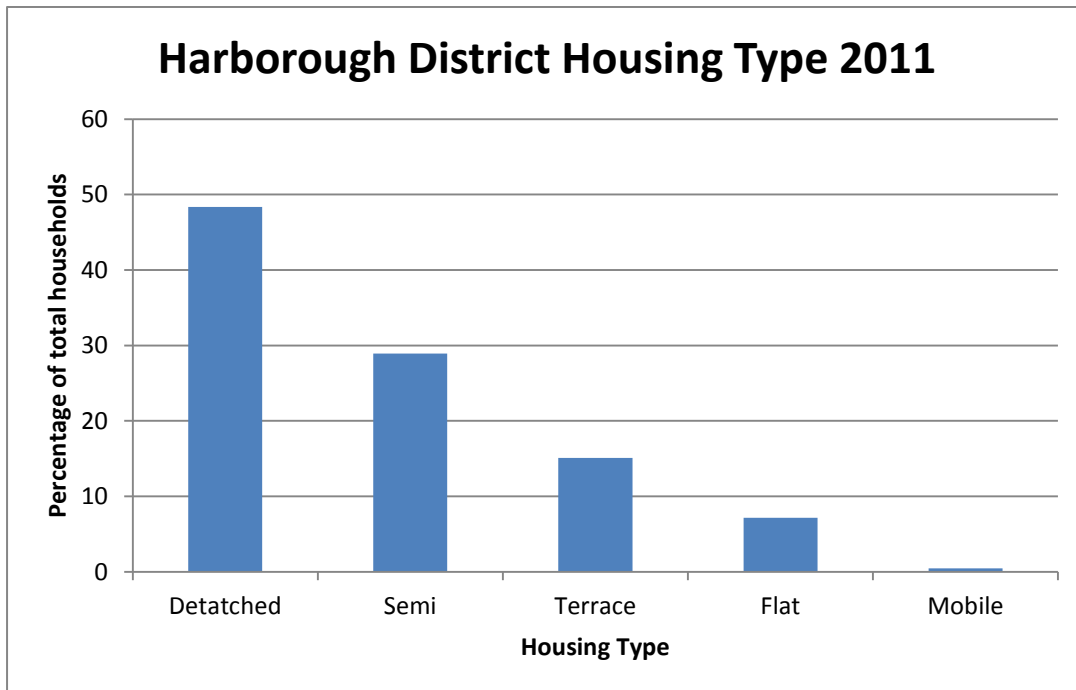


Figure 3: Distribution of housing types across Harborough District 2011 (Source Census 2011)

Harborough District has a very high proportion of detached homes, almost 50%. Many of the homes are also of older construction, as identified in the Housing Survey completed in 2010.

In addition there are a large number of homes that rely on oil or electricity for their heating needs. Over 20% of homes have no gas central heating. This is due to the rural nature of the district, with many villages having little or no access to the national gas grid.

Gas remains the cheapest fuel for heating homes and lack of access to gas can increase the risk of fuel poverty.

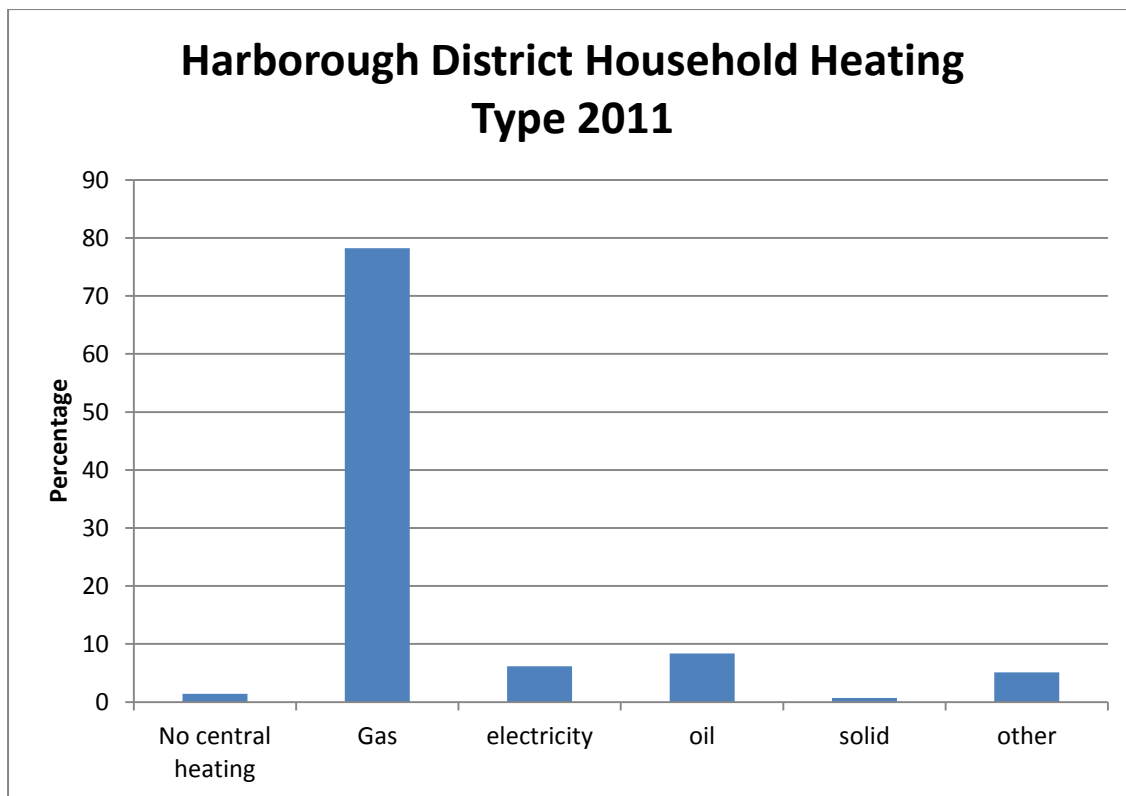


Figure 4: Household Heating Systems across Harborough District 2011 (Source Census 2011)

Since the introduction of the requirement for homes to have an energy performance certificate (EPC) when being sold or rented, the Government have collected this data. Between 2,000 and 3,000 EPCs (around 7% of the total number of homes) are issued each year in Harborough District. The majority of homes are assessed as reaching B, C or D grade. The data shows a downward trend in the number of homes falling in the worst energy categories F and G. There has also been a small increase in homes rated A, but this still accounts for a very small number of homes per year, usually less than 10.

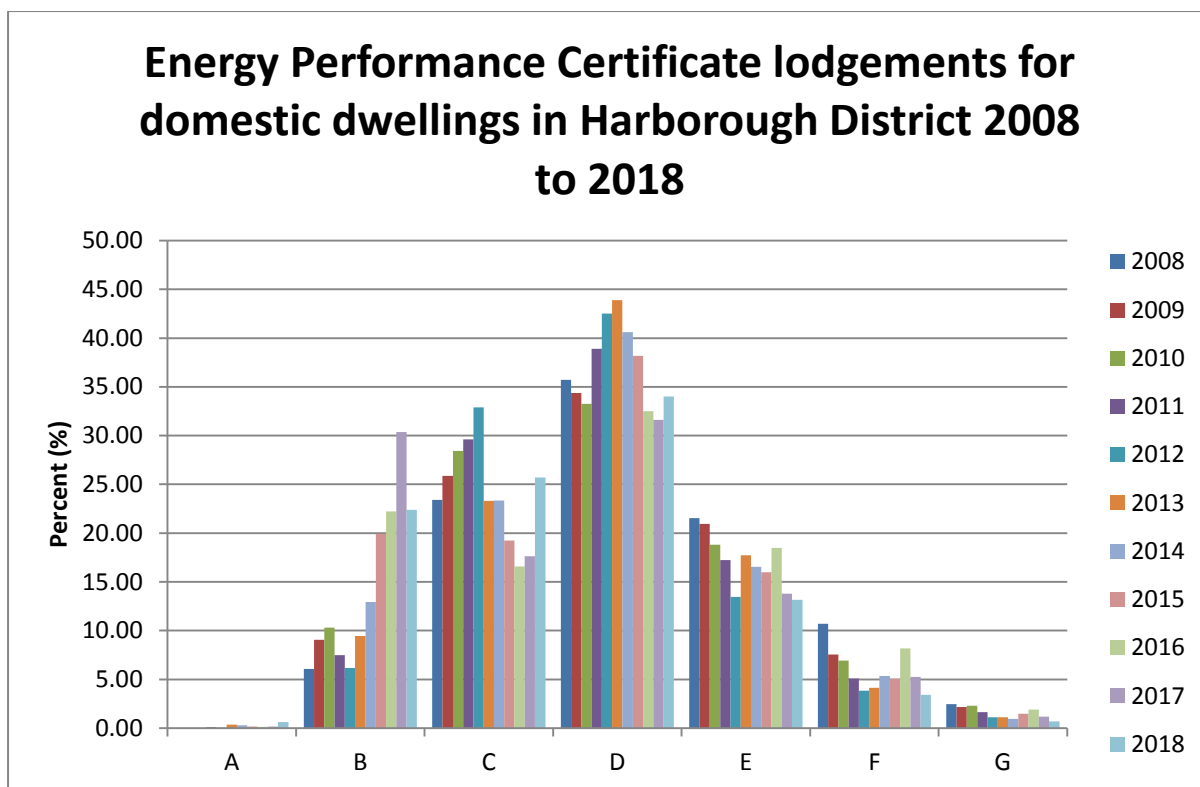


Figure 5: Energy Rating Certificates issued by year 2008 – 2018 Harborough District (Source: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates>)

There is some 6,105kW of domestic solar PV installed on homes in the district and claiming the Feed In Tarriff (FIT); there is 132kW of domestic wind (data to 2018, <https://www.gov.uk/government/statistical-data-sets/sub-regional-feed-in-tariffs-confirmed-on-the-cfr-statistics>). There have been 244 domestic heating installations that have been eligible for Renewable Heat Initiative (RHI) payments from 2011 to 2018 (<https://www.gov.uk/government/statistics/rhi-monthly-deployment-data-december-2018>).

Health

Increasingly the issue of cold homes is being seen as a matter for health and social care sectors. In addition to excess winter deaths (which have averaged 34 over the measurement period since 1991/92), there is also a significant additional risk of falls, pulmonary illness, and heart attacks that are exacerbated by cold.

Cold and poorly heated homes are also an issue when discharging from hospital. This can lead to prolonged hospital stays, whilst more appropriate accommodation is sought or early readmissions after discharge. This can lead to significant cost for the Health service and poor outcomes for patients, who are often elderly or frail.

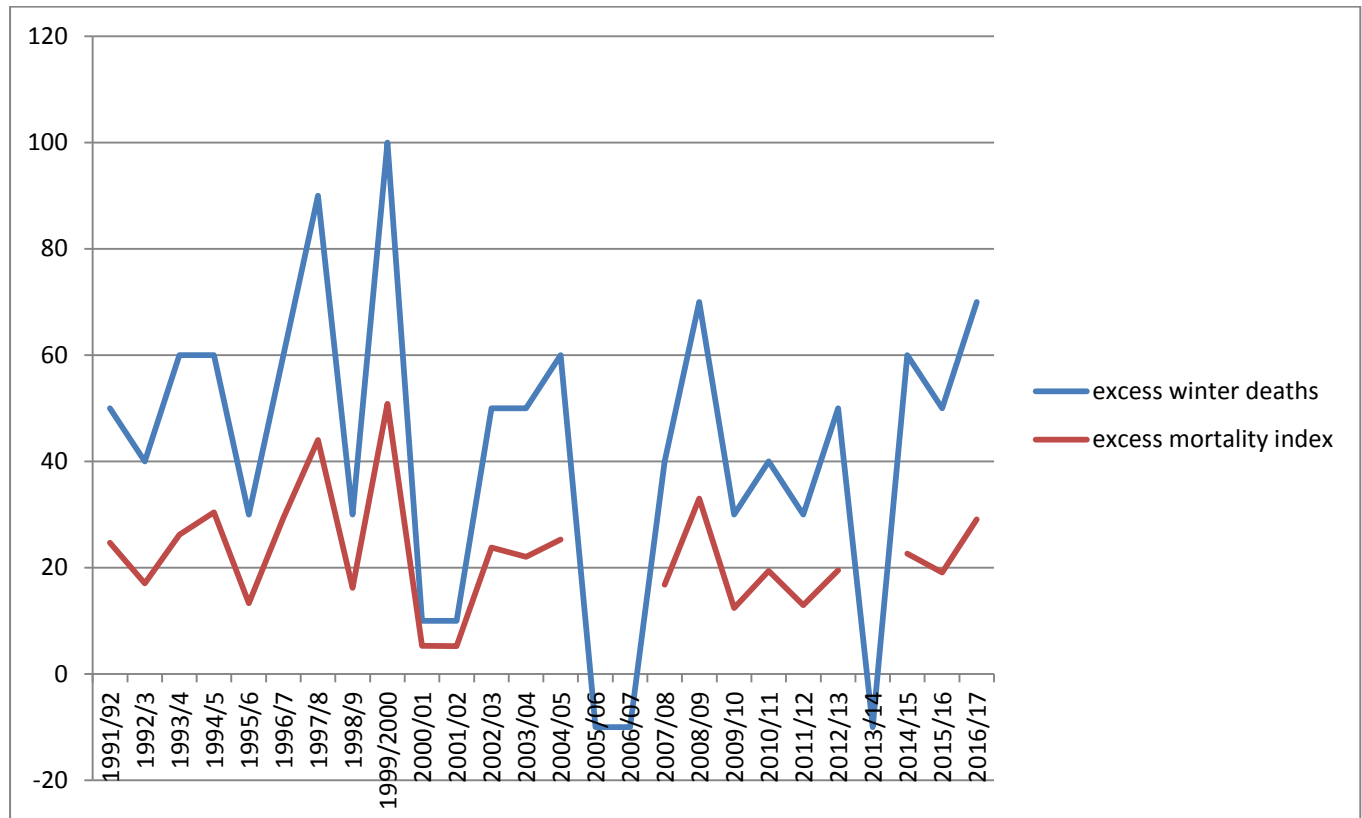


Figure 6: Excess Winter Mortality for Harborough District. (Source: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/excesswintermortalityinenglandandwalesreferencetables>)

National Context

The Climate Change Act (2008) and the Carbon Plan (2011) set out targets for reducing carbon emissions and increasing the energy efficiency of homes. The Carbon Plan sets out housing targets as:

- To reduce CO₂ emissions by 29% by 2017, 35% by 2022, and 50% by 2027 (from 1990 levels)
- To insulate all cavities and lofts, where practical, by 2020
- Between 1 and 3.7m additional solid wall installations and between 1.9-7.2m other energy efficient installations by 2030

- Between 1.6m and 8.6m low carbon heat installations (e.g. heat pumps) by 2030
- For CO₂ emissions from buildings to be 'close to zero' by 2050
- To eradicate fuel poverty in England, as far as reasonably possible, by 2016

A series of initiatives have been introduced by the Government to support local authorities in reducing carbon emissions and improving energy efficiency. These include:

- Energy Company Obligation (ECO) – requirement for the larger energy providers to fund works to reduce fuel bills, now focussed on those in fuel poverty. This focuses on vulnerable and low income households.
- Feed in Tariffs (FiT) – Government initiative to encourage the take up of renewable electricity generating schemes such as solar panels and wind turbines. Any excess energy produced by the household can be supplied back to the national grid for profit. Scheme closes on 1st April 2019
- Renewable Heat Premium Payment – provides a one off payment to households for purchasing renewable technologies (e.g. solar panels, heat pumps). This funding is not paid back but instead information on energy use is provided for government statistics and information. This is now superseded by the Renewable Heat Initiative.
- Renewable Heat Incentive (RHI) – provides financial support to encourage individuals, communities and businesses to switch to renewable energy sources.
- Energy Performance Certificates (EPC) – a system of ranking households from A to G on energy efficiency, with rental properties having to achieve at least an E grade (for new tenancies from April 2018 and all tenancies by April 2020)
- Smart meters – recording energy consumption in homes and communicating back to energy providers, reducing the need for estimated billing and providing customers with accurate information about their energy consumption

There has been a review of fuel poverty and a new Fuel Poverty Strategy² published (Cutting the cost of keeping warm; 2015). The Strategy includes a new definition of fuel poverty and new targets for addressing fuel poverty. Previously the target was to eradicate fuel poverty by 2016. The suggested new target is to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency standard of Band C, by 2030.

NICE have also published guidelines (March, 2015) on excess winter deaths³ and illness associated with cold homes. The guidelines identify a number of agencies that would need to take action. Given the NHS difficulties during the winter 2014/2015, this guidance is likely to have some impact in the future.

Local context

Harborough District works very closely with its neighbouring councils and with the County Council to ensure that there is good links between health and social care and housing. The Leicestershire district and borough councils have worked together to deliver joint programmes of energy efficiency advice and measures. All of the councils worked together to achieve funding from DECC to carry out a range of projects and programmes. Further collaboration is in train, in particular with Public Health and social care partners, with the Lightbulb project. The Lightbulb project is designed to ensure that vulnerable householders have access to all improvements, once the need for intervention is identified. So a vulnerable householder would effectively access, energy efficiency measures, falls measures, fire safety, etc.

Harborough District Council has signed the Local Government agreement “Climate Local”. The Action Plan has been developed and many of the actions align with energy efficiency activity. The Action Plan is available at

http://www.harborough.gov.uk/directory_record/1163/climate_change_action_plan.

Harborough District Council is also promoting improving the energy efficiency in homes through local partnerships. The Health and Wellbeing partnership is an enabling partnership supporting work on affordable warmth. As part of this

² <https://www.gov.uk/government/publications/cutting-the-cost-of-keeping-warm>

³ <https://www.nice.org.uk/guidance/ng6>

Harborough District Council are partnering with Harborough Energy to ensure that local residents have the opportunity to access energy efficiency grant funding via ECO. This builds on an earlier pilot project, which aims to give local residents more confidence in the energy efficiency offer, and reduce the risks of residents becoming victim to scams. Harborough District Council has also adopted an ECO help to heat statement of intent on flexible eligibility. The latest version published in November 2018 is on our website.

(https://www.harborough.gov.uk/info/20017/housing/175/energy_advice)

Harborough District Council is close to adopting a new Local Plan. New plan policy will continue to support carbon emission reduction, through sustainable siting of development; promoting low carbon homes standards; encouraging energy efficient industrial and commercial development; promoting green travel choices; promoting on-site or decentralised energy and encouraging renewables and low carbon energy. In addition the plan will ensure new development is resilient to the impacts of climate change, including flooding and overheating.

What we have achieved

Commencing in September 2017, the Harborough Warmer homes partnership has delivered energy efficiency improvements to 199 homes (September 2017 to April 2018). In 2018/19 the project has continued, including developing a Local Authority Statement of Intent on flexible eligibility (SOI) for ECO3 funding. This has allowed the council to target groups that are at risk of fuel poverty or vulnerable to the cold, due to ill health. In total to the end of 2018 some 350 homes have received energy efficiency improvements. The project has delivered to over 300 households at risk of fuel poverty, since the SOI was adopted. We have worked with partners to better target funding, including drop in sessions with Citizens Advice; parish councils; targeted communications to schools, GP surgeries and pharmacies; and engagement with private landlords.

Working with Leicester City's Health through warmth project, a further 5 boiler replacements were completed, including one oil boiler. Leicestershire Public Health has a one stop shop named First Contact Plus which has information on the project, so that residents can self-refer.

What we plan to do next

The Lightbulb project is a Leicestershire-wide project funded by LCC public health that has been operating a pilot scheme in specific areas of Leicestershire, this is due to be rolled out more fully during 2017. The project aims to offer advice and support in a range of areas. Referrals are generated from a partnership with First Contact Plus, a single point of contact for referrals of vulnerable people from front-line health workers, social workers, voluntary organisations the fire service and other council services such as housing and benefits. For some people, a free home visit will then take place and a qualified energy advisor and energy rating assessor will advise on energy saving. People will also be able to self refer later in 2017. This project will be the major delivery route for action for those vulnerable to fuel poverty.

The Harborough Warmer Homes Project will continue, targeting the homes of those either vulnerable to cold, due to health issues or at risk of fuel poverty due to the housing they are in. Subject to the ECO3 guidelines and funding, at least 200 homes will be treated in 2018/19 and 2019/20. Opportunities to work with partners to improve energy efficiency, especially for the most vulnerable will be investigated.

A collective switching project will launch in the autumn. Residents will be able to sign up for an opportunity to switch supplier and save money. This is particularly aimed at those who have not engaged with energy markets previously. Although this does not improve energy efficiency directly, it will allow for further engagement with groups that are perhaps less engaged in thinking about their energy use and may offer opportunities to engage on smart meters as well.

The detailed Action Plan is attached as Appendix 1.