



Harborough District Council
Climate Local
Annual Progress Report
For 2016

Nov 2017

1. Introduction

Harborough District Council decided to sign up to Climate Local in April 2013. The Council then worked to put in place the resources to develop a local action plan. The action plan was ratified by full Council in July 2015. The first report on progress was published in 2016, covering the period to the end of 2015. This, second annual report on progress of the action plan, highlights the achievements to the end of 2016.

1.1 Where we are

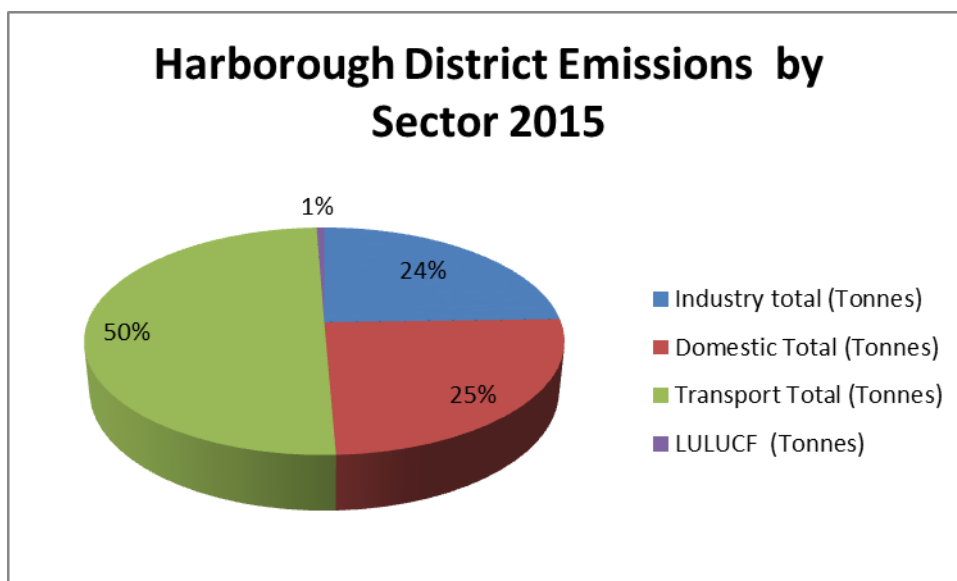
Harborough District covers an area of 238 square miles of rural south and east Leicestershire. It is within the East Midlands Region, bordering Warwickshire to the west, Northamptonshire to the south and Rutland to the east. The District's population of 85,282 (Census 2011) is split between the two market towns of Market Harborough and Lutterworth (37%), large villages of Broughton Astley, Great Glen, The Kibworths and Fleckney (27%) and Bushby, Thurnby and Scraftoft part of Leicester's Principal Urban Area (6%). The remaining 30% of the District's population live in the smaller rural settlements, 71 of which have a population of less than 500.

1.2 Carbon emissions

The emissions data for Harborough District for 2015 is the most recent data available for monitoring emissions¹. Road transport remains the largest source of emissions, accounting for 50% of the overall emissions from the district. Transport has shown a steadily increasing proportion of the total emissions. Overall emissions have decreased from 812.7 tonnes in 2005 to 653.1 tonnes in 2015. The emissions in 2015 have continued the gradual decrease.

Harborough, with per capita emissions of 7.3 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 5.6 tonnes, with UK average at 5.9 tonnes. The table below shows the emissions per capita for each of the sectors, from 2005 to 2015 (the latest date for which figures are available). Emissions from all sectors have fallen since 2005.

<https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>



LULUCF means Land Use, Land-Use Change and Forestry

Figure 1 Harborough District Emissions by Sector 2015

| Date | Industry (Tonnes) | Domestic (Tonnes) | Transport (Tonnes) | LULUCF (Tonnes) | Total (Tonnes) |
|------|-------------------|-------------------|--------------------|-----------------|----------------|
| 2005 | 2.7 | 2.7 | 4.5 | 0.2 | 10.1 |
| 2006 | 2.6 | 2.7 | 4.3 | 0.2 | 9.8 |
| 2007 | 2.4 | 2.6 | 4.3 | 0.1 | 9.5 |
| 2008 | 2.5 | 2.6 | 4.0 | 0.1 | 9.2 |
| 2009 | 2.2 | 2.4 | 3.8 | 0.1 | 8.5 |
| 2010 | 2.3 | 2.5 | 3.8 | 0.1 | 8.7 |
| 2011 | 2.0 | 2.2 | 3.7 | 0.1 | 8.0 |
| 2012 | 2.1 | 2.4 | 3.6 | 0.1 | 8.2 |
| 2013 | 2.0 | 2.3 | 3.7 | 0.1 | 8.1 |
| 2014 | 2.0 | 1.9 | 3.7 | 0.1 | 7.7 |
| 2015 | 1.8 | 1.8 | 3.7 | 0.0 | 7.3 |

Table 1: Harborough District CO2 emission per capita by sector 2005 to 2014

(Source: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014>)

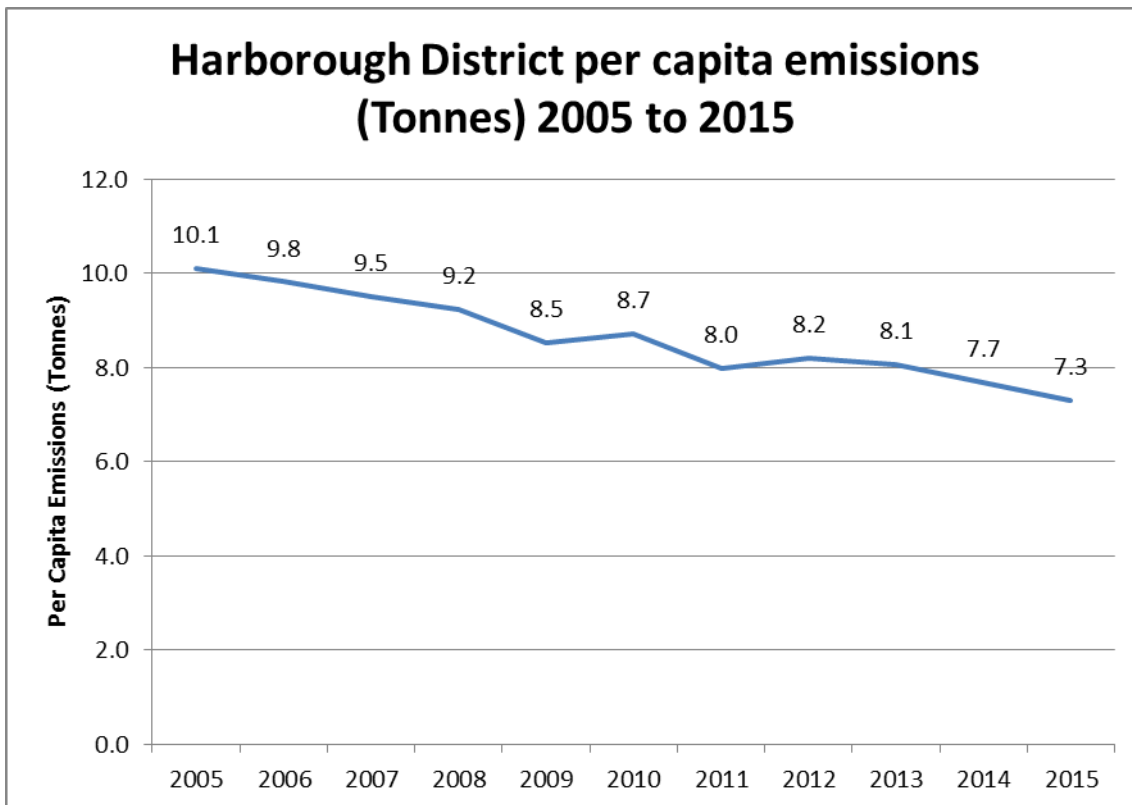


Figure 2 Harborough District Per Capita total emissions 2005 to 2015 (Source <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>)

Harborough emissions are also declining more slowly than Leicestershire. Leicestershire emissions have declined by 29%, which is less than the England average (34%) or the UK average (33%), whereas Harborough District emissions have declined by only 28%. So progress in reducing emissions is not as effective as in some other areas.

1.3 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.

Table 2

| Year | Mean domestic electricity consumption (kWh) | Average domestic electricity consumption per household (kWh) |
|------|---|--|
| 2005 | 5223 | NA |
| 2006 | 5087 | NA |
| 2007 | 5029 | NA |
| 2008 | 4804 | NA |
| 2009 | 4707 | NA |
| 2010 | 4716 | NA |
| 2011 | 4660 | NA |
| 2012 | 4612 | NA |
| 2013 | 4495 | 4600 |
| 2014 | 4472 | 4505 |
| 2015 | 4400 | 4518 |

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

Table 3

| Year | Mean domestic gas consumption (kWh) |
|------|-------------------------------------|
| 2005 | 21513 |
| 2006 | 20524 |
| 2007 | 19866 |
| 2008 | 19170 |
| 2009 | 17590 |
| 2010 | 17468 |
| 2011 | 16447 |
| 2012 | 16425 |
| 2013 | 16001 |
| 2014 | 15561 |
| 2015 | 15379 |

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

There is a continued reduction in average gas usage, however the reduction has slowed in 2015 (the latest year available), this is most likely due to a cold winter.

1.4 Housing

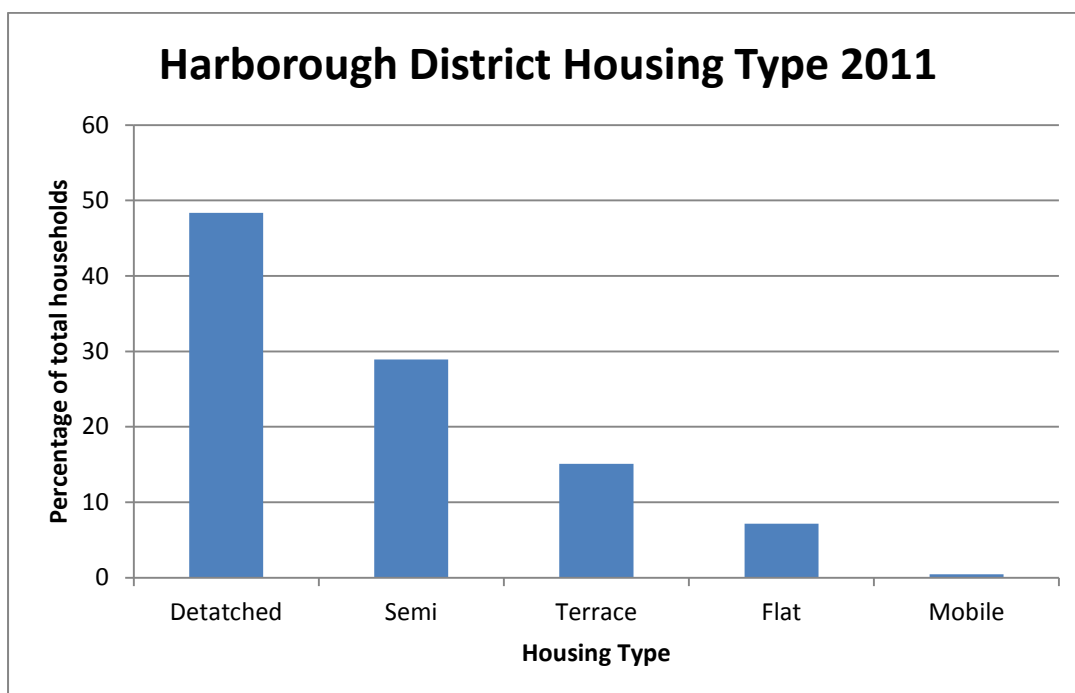


Figure 3: Distribution of housing types across Harborough District 2011 (Source Census 2011)

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 not got gas central heating. This is due to the rural nature of the district, with some 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.

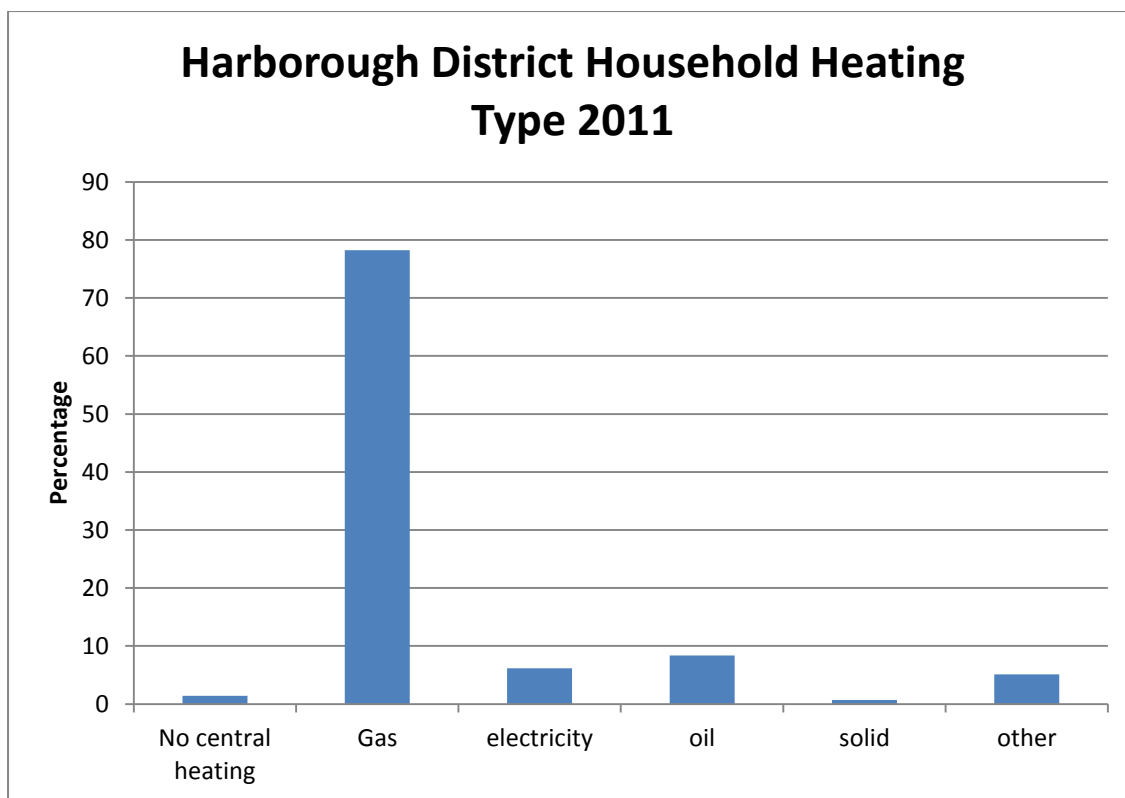


Figure 4: Harborough District household heating type(source: Census 2011)

1.5 Renewable Energy

There are a number of renewable energy installations across Harborough District. There are two commercial wind farms, Low Spinney 8MW and Swinford at 22MW. In addition there are a number of smaller on farm turbines that contribute a further 1,154kW of installed capacity.

There are three field based solar installations with planning permission. A number of roof based systems are also in place, including an installation on the Market Hall, which was commissioned in August 2015. The total installed capacity is 6,432 kW, of which 5,126 is domestic.

There is also some anaerobic digestion (499 kW) and landfill gas. A feasibility study has just completed for a new anaerobic digester. There is no hydropower capacity.

32 accredited non domestic Renewable Heat Incentive (RHI) with capacity of 5.8MW renewable heat and 142 domestic renewable heat installations.

2. What we have achieved so far

This is the second annual progress report since formally adopting the Climate Local Action Plan in July 2015. This report gives an overview of the achievements in 2016. There are detailed tables of the progress against each commitment included as Appendix A. The headline achievements are described under two main areas of work: low carbon pathways and ensuring our Communities and Places are resilient to the possible impacts of climate change.

2.1 Low Carbon Pathways

The Environment Co-ordinator post enables climate change projects to be co-ordinated across the whole council. The Environment Portfolio holder is the lead member, but there is recognition that climate change is important in other areas too, especially planning, assets and health and wellbeing.

Corporate emissions have continued to be monitored and have shown a slow downward trend. However, there is now more detailed quarterly monitoring, that has helped to identify areas where further improvements could be achieved and this is feeding into the assets management plan. The Market Hall building solar photovoltaic array has been monitored and, together with the LED lighting, is indicating a reduction in energy usage.

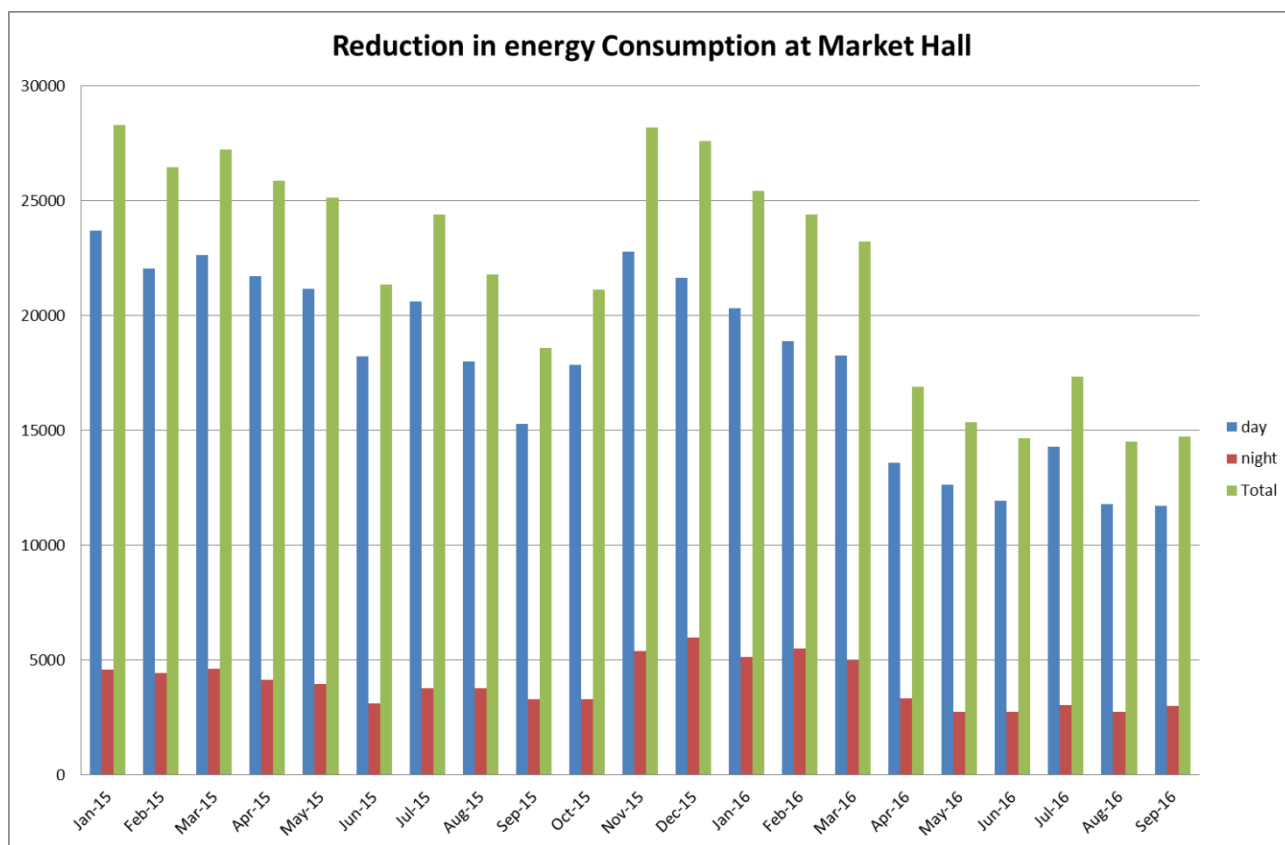


Figure 5: Improvements in Market Hall electricity consumption following the installation of PV and LEDs

Harborough District Council committed to helping residents reduce their own emissions. This has been challenging given the many changes to the domestic energy efficiency market. However, the Council has been able to work with the Flourish Partnership to sign post residents to opportunities for grant funded energy efficiency measures. In total, some 171 homes have had energy efficiency measures during 2016. These measures correspond to carbon savings of over 6600 Tonnes of carbon over the 20 year lifetime. The project completed in August 2016, but Harborough District Council is looking at opportunities to continue the project, once the new ECO funding is in place.

| Summary of Carbon Savings from insulation measures promoted through HDC scheme | | | | | |
|---|------------------------|------------------------|---------------------------|-----------------------|--------------------------------------|
| Month | Number of Homes | Number of lofts | Number of Cavities | Total measures | Total Carbon Savings (Tonnes) |
| Feb-16 | 31 | 8 | 30 | 38 | N/A |
| Mar-16 | 39 | 7 | 39 | 46 | 1820.26 |
| Apr-16 | 41 | 15 | 40 | 55 | 2235.57 |
| May-16 | 35 | 14 | 32 | 46 | 1920.62 |
| Jul-16 | 17 | 5 | 16 | 21 | 133.16 |
| Aug-16 | 8 | 3 | 8 | 11 | 493.48 |
| | | | | 0 | |
| Total | 171 | 52 | 165 | 217 | 6603.09 |

Table 4 Summary of Carbon Savings from the Domestic Energy Efficiency Project

Harborough District Council has also worked in partnership with other Leicestershire Councils on a project called “Warm Homes, Healthy Homes”. This was funded by Public Health at Leicestershire County Council and delivered by the disability charity Papworth Trust and NEA. The project targeted vulnerable people at risk of fuel poverty. The project provided free advice and support to help people stay warm and well in their own homes. The project offered telephone advice and home visits to assess windows, ventilation and insulation, as well as tariff switching and benefits advice. The project has delivered improvements in heating systems to 11 homes, including 2 full mains gas central heating systems. In addition, the local crisis fund has contributed to improvements in 5 properties, including heating repairs, loft insulation and window replacement.

The importance of communities taking charge of their own energy future has been recognised as an important area to act. A community energy company, Harborough Energy, has been set up through the work of the Sustainable Harborough Challenge Project. Harborough Energy has delivered a number of solar PV roof installations, and is actively working on further projects. Sustainable Harborough have also promoted renewable technologies for homes as part of their Green Open Homes annual event and with energy efficiency advice at the I Love Market Harborough annual fair.

Harborough District Council committed to helping businesses to reduce their carbon emissions. In partnership with Sustainable Harborough a business energy group has been established, this is called the Efficiency Network. Meetings include; an update on the latest legislation, speakers, and get a chance to share good practice. The events have been well attended Sustainable Harborough also supported some best practice case studies and are investigating the potential to offer businesses a basket of measures, including LEDs, switching and renewable measures, through Harborough Energy

2.2 Ensuring our Communities and Places are resilient to the possible impacts of climate change

In addition to actions to reduce emissions, there has also been action to ensure that our communities are prepared for climate change. Working with the Resilience forum Harborough District Council has continued working with parishes to support them in drawing up resilience plans. A number of parishes already have emergency plans in place.

Harborough District Council is also working with the Catchment Partnerships for the Soar and Welland rivers. The Welland River, following the very successful naturalisation project in Market Harborough, is now the focus for upstream small scale water retention projects. . On the Soar, the Willow brook project is engaging with rural and urban communities to improve the brook, which joins the Soar in Leicester. Houghton on the Hill and Stoughton are actively involved in citizen science on the brook. In addition there have been small scale flood alleviation measures, such as field storage systems put in place along the brook through collaboration with local farmers. The renowned Allerton project has been showcasing good practice on water friendly farming <http://www.gwct.org.uk/allerton/>.

The new draft Local Plan includes a number of mitigation and adaptation policies, including sustainable drainage and a further study on flood risk is being completed. A Water Cycle study was also completed, which gives important information on where potential actions could be taken.

Sustainable Harborough has been working with various groups to increase the profile of local food growing and buying. There are a number of new community growing projects, one at Waterloo Cottage Farm and another at a care home. There is also a “grow and pick” project that has its inspiration from the “incredible edible” model. There is a local food click and collect service. Generally the awareness and knowledge of local food has grown over the last two or three years. (WWW.SustainableHarborough.co.uk)

3. Next Steps

In the next year Harborough District Council are committed to continuing to deliver on their Climate Local commitments. The particular focus for action includes better management of assets, improving domestic energy efficiency and incorporating Climate Local into the emerging Local Plan.

Climate Local Commitments: Low carbon pathways

| | | |
|--|---|---|
| Commitment: Demonstrate political and corporate commitment to acting on climate change. | | |
| Justification: Action on climate change helps the Council deliver its corporate goals and Harborough DC wishes to show leadership to residents and businesses within the district. (Corporate Priority CO1) | | |
| Specific action(s) | Measure | Progress |
| Lead Member to be appointed and staff resource allocated | Environment Co-ordinator appointed - completed | The Environment Portfolio holder has responsibility for Climate Change, although the cross cutting nature is recognised and the Environment Co-ordinator sits in Regulatory services and works closely with strategic planning team, Corporate Assets and Health and Wellbeing Partnership. |
| Specific information on website | Ongoing | Climate change is a specific area and is being continually developed. |
| Regular information on website including information on carbon emissions in the district | DECC carbon data and other information reported locally | First Annual Progress report on Climate Change is on Website. Information on projects is reported. Social media used for specific campaigns |

| | | |
|---|---|---|
| Commitment: Manage our assets in a resource efficient manner. | | |
| Justification: The Council is committed to providing the public services that are value for money. Reducing waste and using energy efficiently are crucial to delivering on this priority. (Corporate Priorities CO2, CO6 and CO8) | | |
| Specific action(s) | Measure | Progress |
| Continue to upgrade Council owned buildings to reduce energy use, water use and waste created. | Monitor energy usage and water and waste data where available | Quarterly gas and electricity consumption is now reported. An annual inventory of emissions for financial years 2013/2014; 2014/15 and 2015/16 has been completed and placed on website. |
| Encourage staff to use resources efficiently through targeted campaigns, based on monitored data | Specific events and programmes | Initial contact with other building users has commenced |
| Promote sustainable transport through the green travel plan | Monitor transport modes | Bike Purchase scheme set up. Campaigns for walking and cycling promoted. Green Travel under review. |

| <p>Commitment: Work with households to promote the uptake of energy efficiency measures to reduce household carbon footprints and alleviate fuel poverty</p> | | |
|---|---|---|
| <p>Justification: Harborough DC is committed to working with communities to develop places where people wish to live and to support the vulnerable within those communities. Reducing fuel bills and helping communities be more environmentally conscious is vital to delivering our priorities (Corporate Priorities CO1, CO2, and CO6 also actions identified in (Home Energy Conservation Act (HECA) report and Leicestershire Carbon Reduction Strategy).</p> | | |
| Specific action(s) | Measure | Progress |
| Work with partners to encourage the uptake of all schemes for improving energy efficiency in homes of all tenancies | Contribute to the Leicestershire carbon reduction target for housing stock (Proportion of 75K tonnes). Record Number of Measures installed | Signposting to grants for efficiency measures has led to over 200 measures being installed with estimated savings of over 6000 Tonnes of carbon saved. |
| Work with partners to access health funding to support vulnerable people in fuel poverty | Access funding maintain and develop programmes | Leicestershire CC and districts together with the Papworth Trust and NEA have a joint project to target energy efficiency improvements for the most vulnerable householder, who are in fuel poverty and at risk of illness. |
| Develop programmes with partners for rural areas, especially off gas. | Develop projects with funding via the Local Economic Partnership | Leicestershire Together is no longer active, but other partnership projects continue. Half day drop in sessions were held in Lutterworth, Billesdon and Houghton on the |

| | | |
|--|--|---|
| | via Leicestershire Together | Hill, which led to a number of energy efficiency improvements for local residents. Opportunities for renewable energy were promoted at parish liaison days, but so far none have progressed. |
| Work with partners to encourage residents across the borough to reduce their own carbon footprint. | Sustainable Harborough project will promote and engage residents in and around Market Harborough including through ECO house project | Sustainable Harborough promoted the Green Open Homes day to show the opportunities for low carbon energy and efficiency savings. The event has grown over the last two years and now has homes across the district. |

| <p>Commitment: Support local businesses to become more resource efficient and encourage businesses in the low carbon/ green technology sector</p> | | |
|--|---|--|
| <p>Justification: Harborough District Council is committed to supporting business in the district. Reducing costs is vital for all business. The green technology sector is growing rapidly and could be an important growth area in the district (Corporate Priorities CO1 and CO9). The Leicestershire Carbon Reduction Strategy aims to reduce carbon emissions from business by 90k tonnes across the county.</p> | | |
| Specific action(s) | Measure | Progress |
| Support development of an Business Resource Club in Market Harborough | Waste and energy advice offered | <p>Sustainable Harborough has initiated a business energy group, which is now called the Efficiency network.. Meetings take place quarterly and a number of local businesses attend to hear about new legislation and share good practice. Funding has been brought in to do energy audits for local businesses and produce good practice guidance.</p> <p>HDC provide a business waste recycling service, which is well used by local businesses.</p> |
| Promote green travel plans via planning | Green Travel Plans required for all business development | Core strategy policy requires all large business development sites to incorporate green travel plans. |
| Promote local food economy with partners | In conjunction with Sustainable Harborough - Food forum established | Sustainable Harborough have led on developing a food forum, producing a local food map and supporting development of a local food label. Local food |

| | | |
|--|--|---|
| | | <p>distribution company “Edible 16” is established and growing. A local Grow and Pick project started in 2016, following the principles of incredible edible. Planters at various points in the town offered opportunities for people to pick local food. Local growing projects at Little Bowden school and Waterloo farm.</p> |
|--|--|---|

| <p>Commitment: Support communities to take advantage of the financial opportunities offered by community energy projects.</p> | | |
|---|---|---|
| <p>Justification: Harborough DC is committed to working with communities to develop places where people wish to live. Supporting communities to be more resilient to economic change is an important part of this, particularly encouraging an entrepreneurial approach to energy. (Corporate Priorities CO1, CO2, and CO6 also actions identified in HECA report and Leicestershire Carbon Reduction Strategy).</p> | | |
| Specific action(s) | Measure | Progress |
| Develop community renewable energy project in District | Feasibility study for community owned PV on Market Hall completed | Sustainable Harborough have initiated a new community owned cooperative, Harborough Energy. The first projects have been completed with 57kWp capacity installed. |
| Promote community owned renewable energy through neighbourhood plans | Renewable energy included in emerging neighbourhood plans | Communities that are progressing Neighbourhood Plans are supported by HDC. Advice on climate change is given as required. There are over 25 Neighbourhood plans in preparation and 4 “made” plans in the district |
| Promote awareness of Renewable Heat Initiative opportunities in off-gas areas | Information at Parish Engagement Event | Parishes have been initially engaged in an energy efficiency project for rural areas. Where opportunities arise, renewable heat will be considered. This work will continue into 2017. |

Climate Local Commitments: Ensuring our Communities and Places are resilient to the possible impacts of climate change

| | | |
|--|---|--|
| Commitment: Encourage Communities to build their resilience to climate change | | |
| Justification: Harborough District Council recognises that we cannot avoid the impacts of climate change, so we must build resilience. Harborough District Council recognise the distress that can be caused by weather related risks and also the costs to homes and businesses that can be incurred. Building resilience will support better places. (Corporate Priority CO6 and CO9) | | |
| Specific action(s)¹ | Measure | Progress |
| Include climate adaptation in neighbourhood plans, especially flood resilience, but policies for well designed adaptive buildings and multifunctional green space. | Information and guidance available throughout neighbourhood planning process | Communities that are engaged in Neighbourhood Plans are supported by HDC staff and advised where appropriate on climate change adaptation. Many seek higher standards for Sustainable Urban Drainage Systems (SUDS) |
| Incorporate specific risks within parish emergency plans | Information for parishes at parish engagement event. Parishes engaged with directly | HDC and the resilience forum have worked with a number of parishes on preparing emergency plans. Good practice guidance has been included and members of parish councils have taken part in simulation emergency events for training. There are 24 parish councils engaged, with 13 completed plans. |
| Encourage Community management of green space to maintain multifunctional value for leisure, water management, possible food | Parishes supported to take over green space Green space plan for major development in Market Harborough | HDC has developed a greenspace strategy that feeds into the local plan. HDC is encouraging local parishes to be involved in local green space management. Many parishes have taken control of the management of green space. Great Glen Wildspace has supported some other |

| | | |
|--|--------------------------------|--|
| and wood supplies | developed | groups and also offer outdoor activity projects on behalf of HDC. |
| Promote flood protection for at risk business and homes. | Reduced risk of financial loss | Willow Brook project has identified opportunities for small scale rain storage on farms, the first of these have been delivered and offer some protection from flooding downstream. The projects will be monitored. Similar projects are also happening upstream of Market Harborough on the Welland |

| Commitment: Promote good water management across the district | | |
|--|---|---|
| Justification: Rivers are an important aspect of a place and can contribute to the attractiveness and biodiversity of a place. Harborough District Council recognises the importance of working with partners to maintain rivers and waterways and promote sustainable drainage. (Corporate Priorities CO1, CO2, CO3 and CO6) | | |
| Specific action(s)ⁱⁱ | Measure | Progress |
| Support Welland River Restoration project | Improved river attractiveness, enhancing the town. Improved biodiversity | The Market Harborough Environment Group are doing regular litter picks around the river to maintain the benefits of the re-naturalisation project on the Welland. A showing of a movie of the restoration project has been shown in the town. |
| Promote sustainable drainage systems within local plan and neighbourhood plans for new developments | No increase in flood risk from new development Enhanced green infrastructure | Sustainable drainage is required in new development through planning. New studies have been completed to help understand the flood risk issue and ensure SUDS are embedded in the emerging local plan. |
| Support partners working with landowners to improve water quality of rivers | Improved biodiversity | HDC engages with the Welland Catchment Partnership and the Soar Catchment Partnership. Work on the Welland has included a range of work rural pollution, including septic tanks. In the Soar Catchment work is ongoing to improve the storage of water in the rural catchment working with landowners and communities. 2 Communities have become Waterside Care groups. |

| | | |
|---|--|---|
| Commitment: Encourage climate resilient design | | |
| Justification: Harborough District Council recognises that good quality buildings are essential for the wellbeing of residents. Climate change may mean that some buildings are not fit for purpose. As the local planning authority Harborough District Council recognises it has an important role in future-proofing development (Corporate Priorities CO1 and C6). | | |
| Specific action(s)ⁱⁱⁱ | Measure | Timescale |
| Promotion of climate resilient buildings through the revised Local Plan policy | Robust policy in Local Plan, supporting development. | Information on overheating in new buildings and opportunities for low carbon buildings has been embedded in local plan policy. |
| Working with partners to bring forward local exemplars, including ECO House with Seven Locks Housing Association. | Families engaged in adapting to climate change in house and garden | The growing Green Homes open day has identified more exemplars. The river Welland Restoration has also been a local exemplar. Case studies on energy efficiency in business have also been delivered. |
| Investigating the development of low carbon and resilient community buildings with partners | New exemplar buildings developed Local business engaged | Opportunities for improvements in village halls are continuing to be investigated as part of the community energy brief. |