Home Energy Conservation Act 1995

A further report on behalf of the

Nottinghamshire and Derbyshire

Local Authority Energy Partnership (LAEP)

And

Bassetlaw District Council

March 2013

LAEP contact:Rina Jones,
LAEP Co-ordinator
Tel: 01629-536130
email: rina.jones@derbyshire.gov.uk

1. The Local Authority Energy Partnership (LAEP)

The LAEP is a non-statutory partnership of all 20 councils across Nottinghamshire and Derbyshire. The LAEP was formed in 1996 in response to drivers such as the introduction of the Home Energy Conservation Act 1995 and increasing awareness of the impact of fuel poverty across the two counties.

Partnership activities are delivered via a membership service and a communications service which are funded through separate subscriptions. Councils benefit from support, information and communication services and collaborate on carbon reduction, affordable warmth and sustainable energy projects, sharing expertise and best practice.

A high level of confidence and trust amongst partners provides a platform from which to develop solutions that could not have been achieved, or afforded alone and results in the sharing of expertise, experience, ideas and information. The partnership's size and reputation means it can draw in support from influential experts and agencies and also helps to get early sight of new policy and guidance

Each council is represented on the Officer Working Group (OWG) which runs the partnership. The OWG is chaired by Phil Keynes, Nottinghamshire County Council, and Vice Chair David Arkle, Amber Valley District Council.

Funds are held by Derbyshire County Council and managed by the Treasurer Kathryn Warrington. Rina Jones, LAEP co-ordinator, is employed by the partnership to manage and initiate LAEP activities and her post is hosted by Derbyshire County Council.

The partnership continues to provide an excellent model of how councils can work together for mutual benefit.

The LAEP has carried out a consultation exercise amongst partners to agree the contents of this combined report.

Chair's introduction

The production of this report by our Partnership, which complements the individual reports of our member councils, is yet another example of how our long-standing collaboration has provided huge benefit and exceptional value to our partners over the years. In increasingly challenging times for local government, this report provides evidence of how our partnership is striving to maximise the economic, social and environmental benefits to our councils and residents through its work on home energy conservation - and long may it continue to do so.

Phil Keynes
Team Manager, Energy and Carbon Management
Nottingham County Council

2. HECA 2013

This HECA report presents information about the strategies and initiatives being delivered by LAEP authorities as they work together to reduce domestic carbon dioxide emissions and fuel poverty.

The attached annex presents information about the activities of Bassetlaw District Council.

The LAEP includes 16 housing authorities and two County Councils.

Nottinghamshire	Derbyshire
Nottinghamshire County Council	Derbyshire County Council
Nottingham City Council	Derby City Council
Ashfield DC	North East Derbyshire DC
Newark and Sherwood DC	South Derbyshire DC
Rushcliffe BC	Amber Valley BC
Bassetlaw DC	Bolsover DC
Broxtowe BC	Chesterfield BC
Gedling BC	Derbyshire Dales DC
Mansfield DC	Erewash BC
	High Peak BC

3. A collective LAEP ambition to reduce carbon dioxide and fuel poverty

The LAEP acknowledges the legal requirements for local government to improve the energy efficiency of residential accommodation as outlined in the Climate Change Act 2008.

In addition, the LAEP will contribute to the delivery of the carbon emission reduction targets presented in the DECC Carbon Plan 2011.

The LAEP will support the following aims of the Carbon Plan:

- To continue to reduce greenhouse gas (CO_2) emissions from domestic buildings;
- To insulate all cavities and lofts, where practical, by 2020;
- To continue to insulate solid walls where possible;
- To continue to promote low carbon sources of heating and power

In addition, the LAEP will support the aims of the 2001 UK Fuel Poverty Strategy to eradicate fuel poverty in England as far as reasonably practicable by 2016.

The practical outcome of the LAEP contributing to these carbon reduction and fuel poverty aims will be:

- Improved opportunities for local economic and physical regeneration
- Support for the creation of local green businesses, jobs and skills
- Help to reduce fuel bills for local residents
- Help to make homes warmer and healthier
- A vital contribution to reducing local and national carbon emissions
- Support for wider strategic priorities on issues such as health and poverty

4. The Climate Local initiative

The Climate Local initiative aims to help local authorities across the country to capture the opportunities and benefits of action on climate change, such as through saving on their energy bills, generating income from renewable energy, attracting new jobs and investment in 'green' industries, reducing flood risks and managing the impacts of extreme weather, such as drought, tackling fuel poverty and protecting our natural environment.

Following a consultation exercise the LAEP has agreed that as a partnership we endorse the aims of the Climate Local Commitment.

The LAEP agrees that local authorities and partners working together towards the common purpose of addressing climate change will help to:

- Deliver economic and social benefits
- Demonstrate our collective commitment, ambition and achievements
- Demonstrate leadership on climate change
- Provide a shared structure around which our efforts may be channelled
- Provide a forum for peer to peer learning and support for local authorities

As such:

We will progressively address the risks and pursue the opportunities presented by a changing climate, in line with local priorities, through our role as:

- *Community leader* – helping local people and businesses to be smarter about their energy use and to prepare for climate impacts;
- *Service provider* – delivering services that are resource efficient, less carbon intensive, resilient and that protect those who are most vulnerable to climate impacts;
- *Estate manager* – ensuring that our own buildings and operations are resource efficient, use clean energy, and are well prepared for the impacts of a changing climate.

In signing this commitment, we will:

- Set locally-owned and determined commitments and actions to reduce carbon emissions and to manage climate impacts. These will be specific, measurable and challenging;
- Publish our commitments, actions and progress, enabling local communities to hold us to account;
- Share the learning from our experiences and achievements with other councils; and
- Regularly refresh our commitments and actions to ensure they are current and continue to reflect local priorities.

Individual LAEP authorities may decide to include specific Climate Local Commitments in their own local authority HECA annex.

5. A collective baseline of information across the LAEP area

The LAEP has agreed to establish a baseline of information around the following issues to help authorities understand the impact of initiatives over time and where to effectively target efforts.

5.1 Levels of fuel poverty
5.2 Fuel consumption
5.3 Co2 emissions
5.4 CERT measures
5.5 PV installations etc.

Some authorities may choose to break this data down to their local authority level and even further to lower super output areas. In doing so, they will be in a position to understand how they may affect these issues at a very local area level.

The following data has been collated from DECC 2010 data aggregated for the two county areas.

5.1 Levels of fuel poverty across the LAEP

A householder is considered to be in fuel poverty when they are spending more than 10% of their income on home energy to heat the home to 21 degrees in main living area and 18 degrees for other occupied rooms. Levels of fuel poverty are affected by the cost of domestic energy, the energy efficiency of the home, the way that energy is used in the home and household income . Rising fuel prices, and incomes reducing in real terms will both contribute to the challenge of eradicating fuel poverty.

Using 2010 Department of Energy and Climate Change (DECC) data we find that about 19% of the households in Nottinghamshire and Derbyshire are vulnerable to fuel poverty.

The average across England is 16.3%.

Derbyshire			**Nottinghamshire (including Ashfield DC)**		
Estimated Number of households	Estimated number of households in fuel poverty	% of fuel poor	Estimated Number of households	Estimated number of households in fuel poverty	% of fuel poor
425,450	80,766	19.0	459,912	87,171	19.0

The following table shows levels of fuel poverty at a local authority level.

Local Authority	Number of fuel poor households	% of fuel poor
Bassetlaw	9,334	19.7%
Broxtowe	7,825	16.5%
Gedling	8,085	16.2%
Mansfield	8,782	19.9%
Newark and Sherwood	9,221	18.9%
Rushcliffe	6,818	14.8%
Amber Valley	9,918	19.1%
Bolsover	6,564	20.6%
Chesterfield	9,191	20.0%
Derbyshire Dales	7,483	24.4%
Erewash	8,429	17.5%
High Peak	7,027	17.8%
North East Derbyshire	7,876	18.6%
South Derbyshire	5,867	15.5%

Some LAEP authorities analyse fuel poverty data to a lower super output area level (a ward level of around 500 houses) to give them a clearer picture of where pockets of fuel poverty exist. This information may be presented in an annex to this report.

Using DECC 2010 data, the ward area with the highest level of fuel poverty is Dunkirk and Lenton in Nottingham with 38.3% and the area with the lowest level of fuel poverty is Hilton in South Derbyshire with just 3.7%.

5.2 Domestic fuel consumption and CO_2 emissions

This table shows 2010 LAEP domestic gas and electricity consumption figures.

Local Authority	Gas kWh	Electricity kWh
Amber Valley	808,262,871	225,222,583
Bassetlaw	607,563,541	211,298,205
Bolsover	469,166,232	125,366,526
Broxtowe	745,755,405	188,151,275
Chesterfield	674,368,385	168,748,487
Derby	1,449,822,529	405,694,501
Derbyshire Dales	442,524,525	155,472,063
Erewash	717,940,638	195,076,916
Gedling	779,458,187	208,782,772
High Peak	629,490,739	167,845,562
Mansfield	692,663,175	168,530,190
Newark and Sherwood	673,480,484	217,894,817
North East Derbyshire	669,375,838	168,435,891
Nottingham	1,621,741,510	490,210,443
Rushcliffe	759,527,216	205,489,464
South Derbyshire	537,575,522	167,217,616
Totals	**12,278,716,797**	**3,469,437,311**

5.3 Domestic carbon dioxide emissions

The release of carbon dioxide from human activities makes up the main greenhouse gas responsible for climate change. Energy used to heat, cool, light and cook in our homes, accounts for around a 1/3rd of all emissions.

Local Authority	**Total tonnes Co_2**
Amber Valley	264,579
Bassetlaw	218,076
Bolsover	151,126
Broxtowe	235,136
Chesterfield	211,992
Derby	475,367
Derbyshire Dales	159,556
Erewash	232,738
Gedling	251,305
High Peak	202,604
Mansfield	215,551
Newark and Sherwood	234,274
North East Derbyshire	210,850
Nottingham	548,374
Rushcliffe	245,814
South Derbyshire	183,934
Total	**4,041,276**

The per capita domestic CO_2 emission across the LAEP area is around 2.5 tonnes per year. The total CO2 emissions per capita (including transport and business activities) is around 8 tonnes although this varies between areas.

5.4 CERT measures

The Carbon Emission Reduction Target (CERT) programme closes at the end of March 2013 and is to be replaced by the Energy Company Obligation (ECO). The ECO programme provides funding to households who would otherwise struggle to achieve energy savings without support e.g. those struggling to achieve affordable warmth, those in hard to treat properties and vulnerable or low income households.

All LAEP councils have worked hard to promote CERT since it started by developing partnerships with various installation companies and agents.

In July 2011, Apex Carbon Solutions were awarded an endorsement agreement by the LAEP to run a loft and cavity wall insulation scheme known as 'Warmstreets'. The scheme includes eleven councils. Importantly, surveyors collect energy housing data for the local council when they visit households which will help target energy efficiency and Green Deal/ECO offers in future.

The table below shows Warmstreets installations from July 2011 to end December 2012. The scheme has collectively saved householders over a million pounds through reduced fuel bills and nearly 5,800 tonnes of CO2 which is equivalent to about 2,300 people's annual domestic carbon emissions.

	total measures	lofts	cavity	£ savings	t CO_2 Savings
Amber Valley	1543	1050	493	£169,360	897.34
Bassetlaw	1207	936	271	£122,740	549.41
Bolsover	470	287	183	£52,125	276.25
Derby City	872	592	280	£90,970	481.38
Derbyshire Dales	450	334	116	£46,220	244.48
Erewash	1158	756	402	£127,710	676.74
Gedling	955	704	251	£116,300	617.7
High Peak	743	424	319	£80,335	425.49
Newark & Sherwood	1243	828	415	£133,915	709.21
Rushcliffe	1168	726	442	£113,740	600.76
South Derbyshire	601	321	280	£63,130	334.12
Totals	**10410**	**6958**	**3452**	**£1,116,545**	**5812.88**

The table below presents information about the number of **total CERT** funded measures that have been installed over the last four years from 31/3/2008 to 31/3/12. There is a 'data gap' of approximately 9% with the quality of this data.

	Cavity	Loft	Homes Treated	% homes treated
Amber Valley	3,272	5,014	7,069	18.0%
Ashfield	2,984	6,098	8,099	18.2%
Bassetlaw	3,571	5,503	7,626	16.7%
Bolsover	2,002	3,272	4,451	10.6%
Broxtowe	3,510	6,157	8,208	19.3%
Chesterfield	2,713	3,817	5,503	12.7%
Derby North	2,493	4,348	5,909	13.8%
Derby South	2,346	4,982	6,438	14.3%
Derbyshire Dales	2,006	3,472	4,663	13.0%
Erewash	2,731	5,857	7,479	17.8%
Gedling	3,169	5,530	7,393	17.9%
High Peak	3,010	4,025	5,970	14.7%
Mansfield	3,340	5,817	7,894	16.7%
North East Derbyshire	3,773	4,650	6,792	16.9%
Nottingham East	1,061	4,476	4,999	11.6%
Nottingham North	2,405	5,349	6,489	15.2%
Nottingham South	1,895	4,775	5,755	13.2%
Rushcliffe	2,576	4,454	5,999	15.0%
Newark & Sherwood	3,251	4,982	6,926	17.1%
South Derbyshire	2,685	4,140	5,888	15.2%

5.5 Renewable technology installations

This section focuses on the number of domestic photovoltaic (PV) panels installed to generate renewable electricity across the LAEP. Many PV systems provide up to 4kWh peak of electricity which can make a useful contribution towards reducing household Co2 emissions.

Local Authority	Total number of PV installations up to Sept 2012
Amber Valley	636
Bassetlaw	1223
Bolsover	595
Broxtowe	532
Chesterfield	1067
Derby	1775
Derbyshire Dales	723
Erewash	625
Gedling	591
High Peak	343
Mansfield	571
Newark and Sherwood	1270
North East Derbyshire	713
Nottingham	3,033
Rushcliffe	1019
South Derbyshire	562
Total	**15,278**

Other renewable and low carbon technologies have been installed, such as:
Solar thermal (hot water), air source heat pumps, ground and water source heat pumps, air to air heat pumps and biomass boilers.

Often these technologies attract a renewable heat incentive tariff to help subsidise the investment. DECC data for the number of installations of this type only currently exists at a regional level.

6.0 Collective Green Deal and fuel poverty plans

The LAEP is playing an active part in the evolution of the government's flagship Green Deal programme and Energy Company Obligation in the region.

In January 2013, the LAEP successfully bid to DECC to fund a proposal to create demand for the Green Deal and provide support for fuel poor households. The aim of the scheme is to achieve high take up of both, through innovative targeting of households and promotional activities across the two counties. The project will be delivered through the LAEP and involve community and voluntary organisations, not-for-profit agencies, the health sector and managing agents and others.

The funding will be used to buy a housing energy database software package (UNO), energy performance certificates and Mosaic (socio economic) datasets and Green Deal Plans. Some LAEP councils have already piloted these tools and achieved efficient targeting and enhanced uptake of measures. All councils in Nottinghamshire already have a populated UNO housing energy database thanks to funding secured from the Nottinghamshire Fuel Poverty fund.

The software will identify property and householder circumstances and tailor promotions accordingly to maximise interest and benefit. This highly cost effective approach will be used by all councils to target households likely to be:

- vulnerable and/or in fuel poverty
- suitable for a Green Deal Plan and likely to be interested in one
- eligible for ECO funding

It will be used to deliver:

- 1130 loft and cavity measures (helping fuel poor)
- 980 boiler and heating measures (helping fuel poor)
- 56 heating systems (helping fuel poor)
- 4 area-based Green Deal and ECO projects
- 400 Green Deal Assessments and 200 Green Deal Plans
- 50 Green Deal installations

Supporting activities include:

- Green Deal promotions - Refurb Roadshow and Eco-homes Open Week
- Conference on delivering affordable warmth through Green Deal and ECO
- Housing data collected during the programme will be added to existing UNO data which will:
    - provide an increasingly accurate picture of the condition of the area's housing stock and demographics
    - provide strategic information for councils' HECA reports.
    - Key legacies will be a proven demand for the Green Deal and ECO and a robust data and analytical resource to enable effective long-term targeting.

Input from DECC and other councils at a LAEP Green Deal conference in December 2012, helped raise awareness about the policy amongst council departments which will be affected (eg. finance, economic development, private sector housing, health and wellbeing), and explored a variety of delivery models being trialled elsewhere.

The LAEP regularly holds such events for partners e.g. on 21st June 2012, Abigail Burridge, Senior Advisor from the Local Government Association ran a Green Deal and Energy seminar for the LAEP, attended by 33 officers and elected members from 16 LAEP councils. The seminar provided an excellent briefing on current and forthcoming policy around local government delivery on climate change and energy, including the Green Deal, HECA and Climate Local, the LGA's Memorandum of Understanding with DECC to assist local councils to tackle climate change.

Other equally useful events have been run by the partnership, such as:

- Workshop 1 - Exploring the role of GD Provider (July 12th 2012 Chesterfield)
- Workshop 2 - Exploring the role of GD Partner (September 20th 2012 Broxtowe)
- Green Deal and Affordable Warmth Dissemination Event (March 2012)
- Warm, Efficient and Healthy Homes - Making the Green Deal and ECO work for all your residents (Dec 2011)
- 'Hot Money' - How to make the Renewable Heat Incentive work for your council (May 2011)
- Green House Gas Emissions from LA Estate and Operations - New DECC reporting requirements (March 2011)
- 'Power and Money' - How to pay for renewables and make renewables pay (January 2011)
- Progress on LAEP's domestic insulation projects (October 2010)
- Warm Homes, Greener Homes (April 2010)
- Our Communities Tackling Climate Change (November 2009)

Looking ahead

The position of the LAEP is clearly one of engagement with the Green Deal programme and a consensus is that individual authorities will at least promote the scheme, while some may wish to extend their commitment to exploring a partnership role with a Green Deal Provider.

The key to tackling fuel poverty in the future will be the increasingly useful information provided by UNO which will maximise the value for money for installations and minimise programme costs by, for example, identifying households in fuel poverty with G-rated boilers who did not qualify for Warmfront. Some would be identified through previous surveys, some through cross-referencing of purchased new data and local knowledge. Mosaic data has been used in combination with UNO by Newark and Sherwood District Council to double conversion rates for loft and cavity measures by tailoring introductory letters to the householder. This approach will be rolled out across the area.

7.0 LAEP information, advice, education and promotion of energy efficiency

The LAEP Advice and Information Group

Providing residents with impartial advice and information about energy efficiency has been a key feature of the LAEP since 1996. One of the first groups to be formed within the LAEP was the Advice and Information Group.

This group has (amongst many other things) over the years:

- operated a mobile energy efficiency advice vehicle;
- supported a Nottinghamshire and Derbyshire Energy Efficiency Advice Centre;
- run many community energy saving events and road shows;
- produced information, advice and guidance booklets for householders;
- developed specific projects to address fuel poverty;
- developed 'warmer and healthier' advice and information with public health and NHS bodies
- providing practical advice to LAEP members about the effectiveness of new energy efficiency technologies and products.

The Advice and Information Group is Chaired by Chris Gilchrist from Newark and Sherwood District Council.

The LAEP Communications Service

The community focused communications service is funded by an optional £1500 p.a. subscription per authority. The service is partially tailored to each partner's requirements and provides advice and information on energy efficiency, sustainable energy and affordable warmth directly to communities, schools, local authority staff, businesses and the general public on behalf of the LAEP.

The Communications Service has been provided by the charity Marches Energy Agency (MEA) through Service Level Agreements (SLA) since 2009. Sixteen local authorities participated in the LAEP Communications Service in 2012-13.

A range of innovative and flexible resources are used, including the well visited LAEP website www.everybodys-talking.org and a versatile mobile exhibition vehicle which promotes domestic energy and water efficiency at public events. MEA also provide information and guidance to community groups through the LAEP's Community Climate Action Network.

Collective procurement of services from MEA has achieved a level and quality of delivery that would have been unaffordable for individual councils.

The LAEP will continue to provide honest, impartial advice to residents at a time when there is an increasing array of options and offerings being made to householders, many of whom are potentially vulnerable and at risk.

8.0 A timeframe for delivery and partners involved in LAEP schemes

Delivery timeframe

In addition to LAEP led initiatives, individual councils will deliver local projects at a timescale that suits them. The timescale for delivery of these individual local authority projects will be reported in their annex attached to this report.

The following LAEP led initiatives will be delivered during 2013-2015.

1. To evaluate and learn lessons from the DECC funded Green Deal and Fuel poverty project which will have been completed by the end of March 2013.

2. To continue to populate UNO with housing information to target suitable properties for ECO and Green Deal assessments

3. To develop more area based schemes using UNO and Mosaic information

4. To provide impartial advice about the Green Deal and fuel poverty to residents

5. To continue to promote the Green Deal and explore the implications of developing a partnership with a Green Deal Provider.

6. To continue to deliver advice and information to householders about ways to save energy and tackle climate change.

7. To engage community groups through the Community Climate Action Network.

8. To develop programmes with Health Authorities to address winter warmth issues.

9. To continue to provide timely events and conferences for LAEP partners about emerging energy initiatives, policy changes, funding opportunities or consultations.

The LAEP is always able to respond quickly to events and will modify this programme to suit new opportunities as they arise.

Progress against these items will be included in the next 'further' HECA report.

LAEP Partners

- Nationally, the LAEP receives support from DECC, LGA and the LGIU around policy issues and new initiatives designed to tackle domestic energy efficiency issues and climate change.

- The LAEP also works occasionally with specialist partners such as NEA and CSE on fuel poverty projects.

- The LAEP operates on a community level with a wide range of groups through the Marches Energy Agency led Community Climate Action Network (CCAN). The CCAN supports more than 300 individuals representing more than 80 community groups, plus a number of third sector organisations, who are all working to tackle climate change.

- LAEP members have partnerships with organisations such as Groundwork, CVS, Rural Action Groups, Transition Groups, Sustainable Community Groups.

- In addition, members of the LAEP work with organisations such as The Citizen Advice Bureaux, Age Concern, Credit Unions and other local service providers.

- The LAEP has partnerships with Apex Carbon Solutions and The Nottingham Energy Partnership to deliver a range of household energy saving and fuel poverty projects.

- A large number of surveyors, installers and contractors work with different LAEP authorities.

- In addition, some councils have partnerships with energy companies to operate area specific schemes.

- LAEP members also work closely with social housing providers, either through ALMO's, Stock Transfer Companies or directly with in house service providers.

The range of organisations involved in delivering energy efficiency improvements across the LAEP is enormous and provides an ever changing partnership landscape.

Members of the LAEP are very well connected with national, regional and local partners and this provides a fantastic basis from which to respond to this agenda and to continue to deliver initiatives for the benefit of our residents.

For further information about the contents of this report, please contact:

Wendy Pigott
or
Bill Purvis
purvisbill1@gmail.com
07901 860094

Section 1) Local Energy Efficiency Ambitions and Priorities

Introduction

Supporting Strategic Priorities

The council's emerging corporate priorities for Housing will incorporate improving energy efficiency and tackling fuel poverty.

The council will work with all statutory and non-statutory organisations, including A1 Housing Bassetlaw Ltd, Nottinghamshire County Council, Public Health and Bassetlaw Action Centre to achieve a reduction in fuel poverty.

Activity to date to address energy efficiency and fuel poverty is detailed below.

Statutory and Strategic Housing Team:

In previous years we supported the installation of heating systems under the Warm Front scheme by providing top up grants from the private sector renewal programme. In 2011 we created the 'Warmstreets' partnership with Apex Carbon Solutions to deliver energy efficiency measures using CERT funding. Later that year, we merged our partnership arrangements with the rest of the LAEP (Local Authority Energy Partnership) member authorities to achieve a more efficient and effective approach. More recently we were part of the successful bid submitted by the LAEP to the DECC Local Authority Funds Competition in 2012. In Bassetlaw, 53 low income private sector households benefited from the funding, which was used to install energy saving measures, as detailed in the table below:

MEASURES	
Replacement Boilers	42
New Heating System	4
Loft Insulation	3
Renewable Energy	2
Minor heating repair	1
Cavity wall insulation	1
TOTAL No of MEASURES	53

The Council's Statutory and Strategic Housing team has also developed a comprehensive housing database (UNO) to help target the most appropriate energy efficiency measures to the most vulnerable householders. This will ensure that energy efficiency measures can be targeted to where it will make the greatest difference to local residents. Merging this property based data with socio economic information will help to ensure that the most appropriate method of communication and message is used to target hard to reach households in the future.

Council Owned Buildings:

To complement and endorse the Council's ethos of energy efficiency and renewable energy, we have installed a wind turbine and solar photo voltaic panels on one of our major office sites. In addition, we have implemented a number of other initiatives relating to our own buildings including Smart metering and energy saving lighting.

Council Housing:
The Council's Arm's Length Management Organisation, A1 Housing has to date delivered:

- **147 ground source heating pumps**
- **312 Air source heating pumps**
- **132 Solar Panel**
- **127 Solid Wall Insulations**

See 2.4 below for further details

Partnerships:

Bassetlaw District Council work with a number of partners to help tackle fuel poverty in the district. The main ones are:

Local Authority Energy Partnership - The council will continue to be an active member of the Nottinghamshire and Derbyshire Local Authority Energy Partnership (LAEP) in order to facilitate joint working across the two counties for the benefit of our residents.

Nottinghamshire County Council – In addition to the County being a member of the LAEP, we have also worked in partnership with the Adult Social Care & Health team and Public Health to deliver the Winter Warmth campaigns in 2011/12 and 2012/13. The aim of this campaign was to reduce the number of winter deaths and was jointly funded by the Dept of Health, the County Council and Public Health.

Bassetlaw Action Centre (BAC) - Bassetlaw District Council has a Service Level Agreement with BAC to deliver the Winter Warmth campaign in Bassetlaw. Their outputs for the last campaign were to:

- Target those who are elderly and at risk with information on keeping warm in winter

- Provide information at flu' fairs

- Provide emergency heating (oil filled radiators)

- Provide information to statutory front line officers to raise awareness of excess winter deaths and the interventions available

If further funding is identified in 2013/14 the campaign will run again this winter as it is a specific priority area for Public Health.

Section 2) Measures Bassetlaw District Council is taking to improve domestic energy efficiency

2.1 Fuel Poverty

Baseline information
Information contained in this section is taken from the latest Department of Energy and Climate Change (DECC) statistics. The latest year reported may vary depending upon the type of data.

Levels of fuel poverty
A household is considered to be in fuel poverty when they spend more than 10% of their income on energy to heat the home to 21 degrees in the main living area and 18 degrees for other occupied rooms. This situation may create significant health and quality of life issues.

Levels of fuel poverty are affected by many factors beyond the control of the authority, such as, the cost of domestic energy, the energy efficiency of the home, the way that energy is used in the home and household income. Rising fuel prices and incomes reducing in real terms will both contribute to the challenge of reducing fuel poverty

Affordable Warmth Strategy
The council has adopted the Nottinghamshire Affordable Warmth Strategy and Action Plan, which contains the following headline outputs:

Outcome 1	Households have access to consistent and comprehensive education, advice, guidance and support on how to achieve affordable warmth.
Outcome 2	Homes in Nottinghamshire are as energy efficient as possible.
Outcome 3	Householders are easily able to access grants, discounts and soft loans to achieve affordable warmth.
Outcome 4	Householders are supported to maximise their income and achieve greater financial capability.
Outcome 5	Households are supported to access the most advantageous fuel tariff for their circumstances.
Outcome 6	Householders adopt low carbon fuels and renewable technologies where these contribute to affordable warmth
Outcome 7	The Nottinghamshire Affordable Warmth Strategy is successfully delivered and effectively monitored

Each output is underpinned by a number of objectives, supported by the action plan to deliver the strategy.

Fuel Poverty Statistics

In 2010 statistics available from the Department of Energy and Climate change (DECC) indicated the average level of fuel poverty across all households in Bassetlaw was 19.7%. This is equivalent to 9,330 fuel poor household's average. The average across Nottinghamshire was 19%.

The map below uses colour coding to show the average level of fuel poverty in Bassetlaw compared to neighbouring local authority areas.

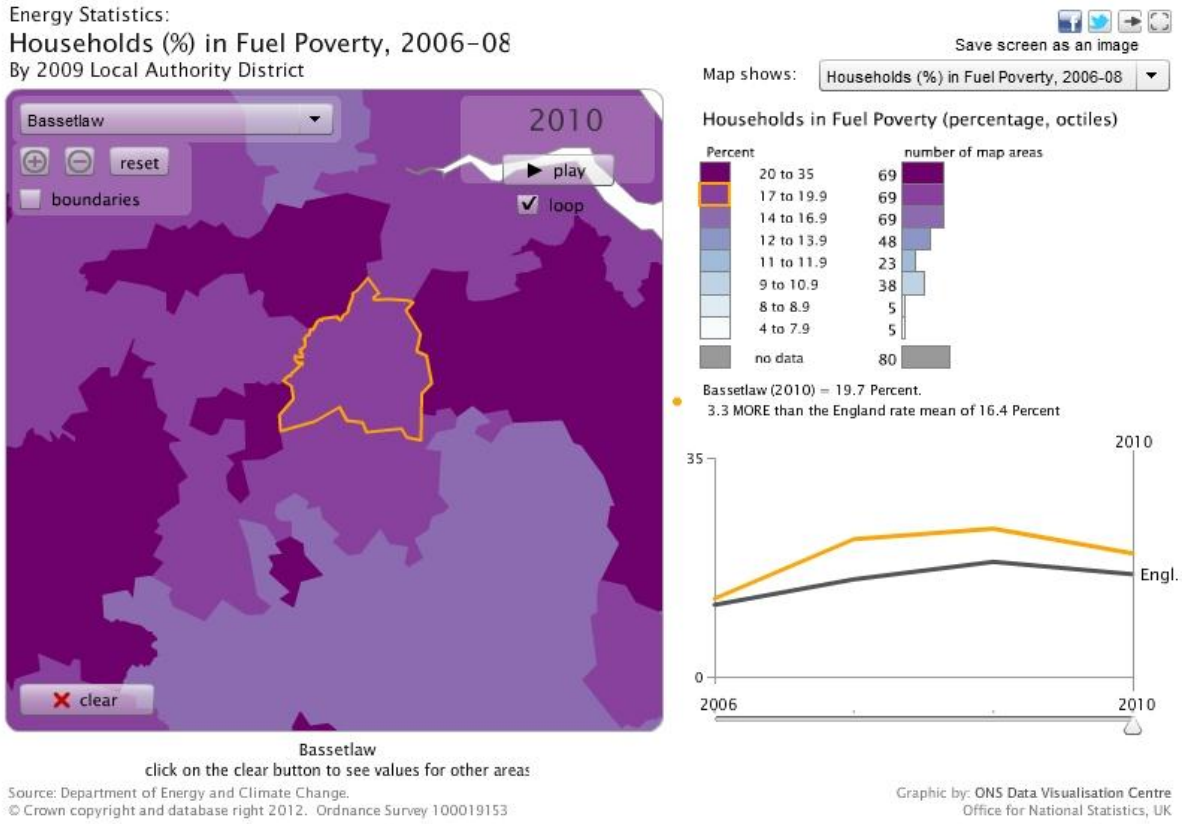


Table 1 below shows that, despite the best efforts of the council, levels of fuel poverty in Bassetlaw have continued to rise year on year until last year when a slight decline is noted This may be attributed to the Warmstreet Insulation scheme and the use of data to target households

Table 1

Year	% of households in fuel poverty
2010	19.7%
2009	23.7%
2008	22%
2007	Data not available
2006	12.5%

Source: DECC data

Impacts on climate change
CO_2 released from human activities makes up the main greenhouse gas responsible for climate change. Energy used to heat, cool, light and cook in our homes, accounts for around a 1/3rd of all UK CO_2 emissions.

Bassetlaw Core Strategy & Development Management Policies
In line with national planning guidance the Bassetlaw District Council is leading and facilitating action across the District to promote energy efficiency in the existing building stock and to enforce the incremental tightening of provisions of the Building Regulations. Local policy relating to new development needs, therefore, are set in the context of amendments to Part L of the Building Regulations, which will introduce a zero carbon requirement for new homes and schools in 2016 and other types of non-residential building in 2018.

The Council is committed the local authority to reducing emissions from its own operations, adapting to the impacts of climate change and encouraging all sectors of the local community to take similar action. A1 Housing, which manages the Council's social rented housing, has shown its commitment to the CO_2 reduction agenda by implementing a number of renewable energy installations in Council properties.

For new development, the Council's aspiration is to allow Building Regulations to deliver reductions in Co_2 emissions, but to take a lead role in delivering the infrastructure required to support the move towards Zero Carbon, both prior to and beyond 2016.

2.2 Energy Use and CO_2

According to the Department of Energy and Climate Change in 2011, energy consumption from the domestic sector was 38,842 thousand tonnes of oil equivalent. This was 5 per cent higher than in 1970, but 5 per cent lower than in 1990 and 20 per cent lower than in 2010.

The sharp fall between 2010 and 2011 is a combination of an unusually high level of consumption in 2010 - largely driven by colder temperatures, a warmer than usual year in 2011, and the continued rollout of energy efficiency measures in homes. The 2011 figure shows a return to a longer term trend, with energy consumption falling since 2004.

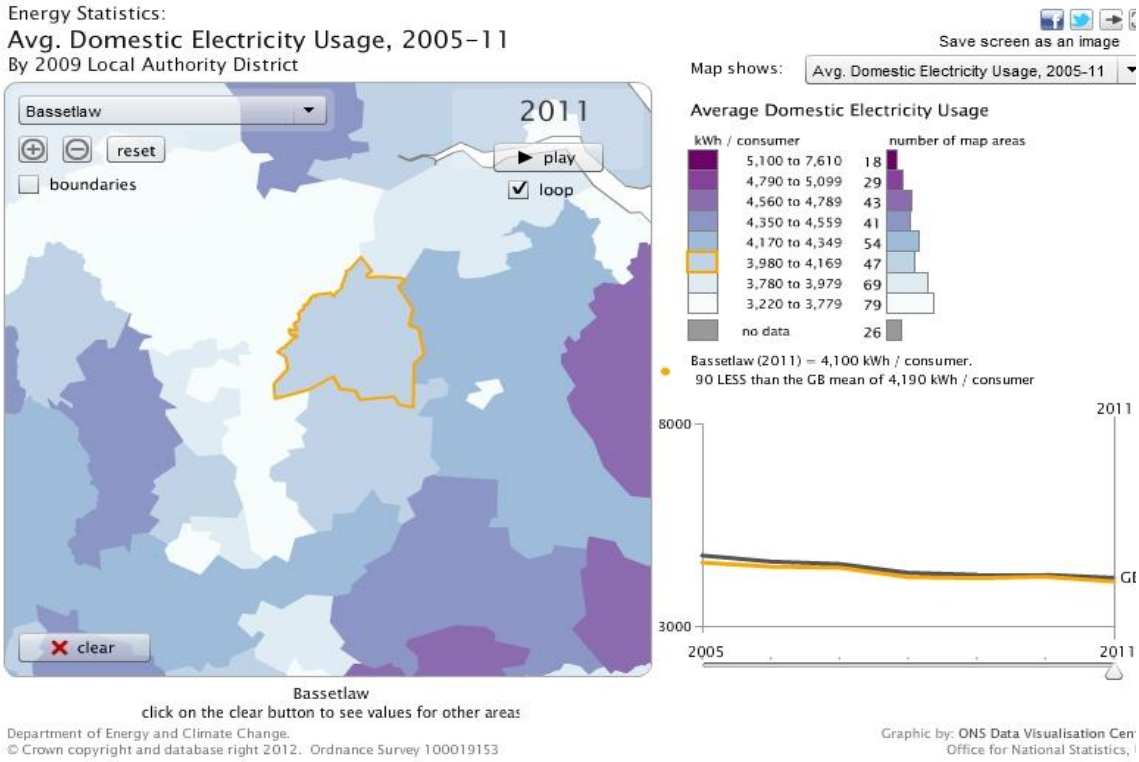
The figures for Bassetlaw mirror the national picture although electric usage tends to be slightly lower that the national average and gas usage tends to be slightly higher as indicated on the maps below. In 2011, the 47,667 households in Bassetlaw accounted for fuel consumption and CO_2 as shown in table 1 below. These figures indicate that domestic energy consumption in 2011 was equivalent to an average of 4.8 tonnes per household.

Table 1

2011	**Gas**	**Electricity**
kWh	683,544,780	195,434,700
Tonnes of CO_2	126,456	102,212

Domestic Electricity Usage

The map below uses colour coding to show the average domestic electricity usage in 2011 in Bassetlaw compared to neighbouring local authority areas. The graph adjacent to the map shows that Bassetlaw's domestic usage was slightly below the national average by 90kWh per consumer.



From the map above it can be seen that Bassetlaw's usage of electricity is higher than neighbouring authorities to the West (Sheffield, and North Derbyshire) but lower that our Lincolnshire neighbours. The reasons behind this will require further research.

The graph adjacent to the map shows that usage has followed the national trend although it has remained constantly below the national average.

Table 2 below shows by how much the domestic electric usage in Bassetlaw fell from 2005 to 2011. The reduction equates to a 10% drop over the period.

Year	Ave domestic Electric usage in Bassetlaw	More or less than national average
2011	4,100 kWh/ consumer	90 kWh/ consumer LESS
2010	4,220 kWh/ consumer	50 kWh/ consumer LESS
2009	4,180 kWh/ consumer	90 kWh/ consumer LESS
2008	4,210 kWh/ consumer	110 kWh/ consumer LESS
2007	4,440 kWh/ consumer	90 kWh/ consumer LESS
2006	4,470 kWh/ consumer	120 kWh/ consumer LESS
2005	4,570 kWh/ consumer	170 kWh/ consumer LESS

Domestic Gas Usage

The map below uses colour coding to show the average domestic gas usage in 2011 in Bassetlaw compared to neighbouring local authority areas. The graph adjacent to the map shows that Bassetlaw's domestic usage was slightly above the national average by 20 kWh per consumer.

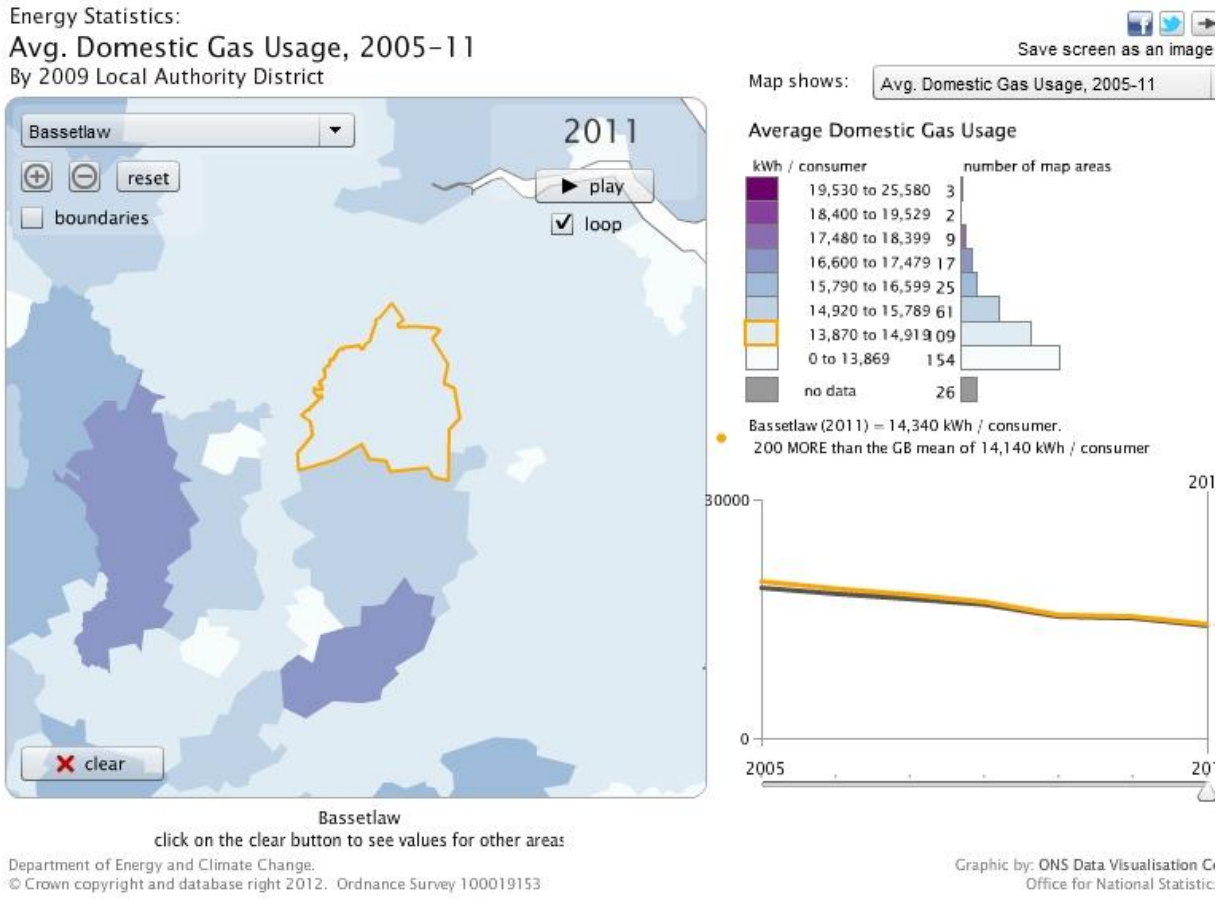


Table 3 below shows by how much the domestic gas usage in Bassetlaw fell from 2005 to 2011. The reduction equates to a 27% drop between 2005 and 2011and is now closer to the national average usage than in 2005.

Table 3

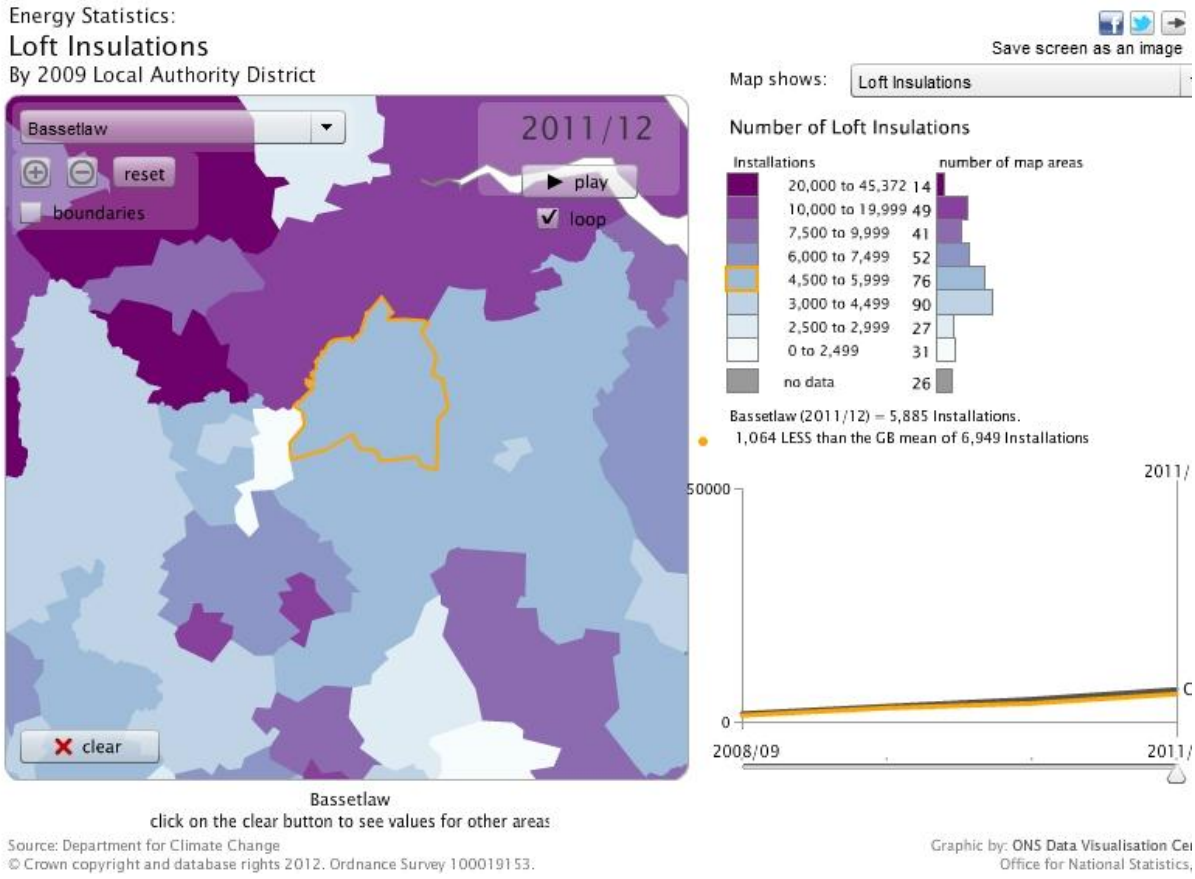
Year	Ave domestic Gas usage in Bassetlaw	More or less than national average
2011	14,340 kWh/ consumer	200 kWh/ consumer MORE
2010	15,310 kWh/ consumer	210 kWh/ consumer MORE
2009	15,500 kWh/ consumer	190 kWh/ consumer MORE
2008	17,140 kWh/ consumer	330 kWh/ consumer MORE
2007	18,040 kWh/ consumer	520 kWh/ consumer MORE
2006	18810 kWh/ consumer	680 kWh/ consumer MORE
2005	19690 kWh/ consumer	780 kWh/ consumer MORE

2.3 Private sector energy efficiency measures

Insulation measures

Loft insulation

Between 2008/9 and 2011/12, a total of 5885 loft insulation measures had been installed across Bassetlaw. The following map shows how Bassetlaw compares with neighbouring local authority areas.



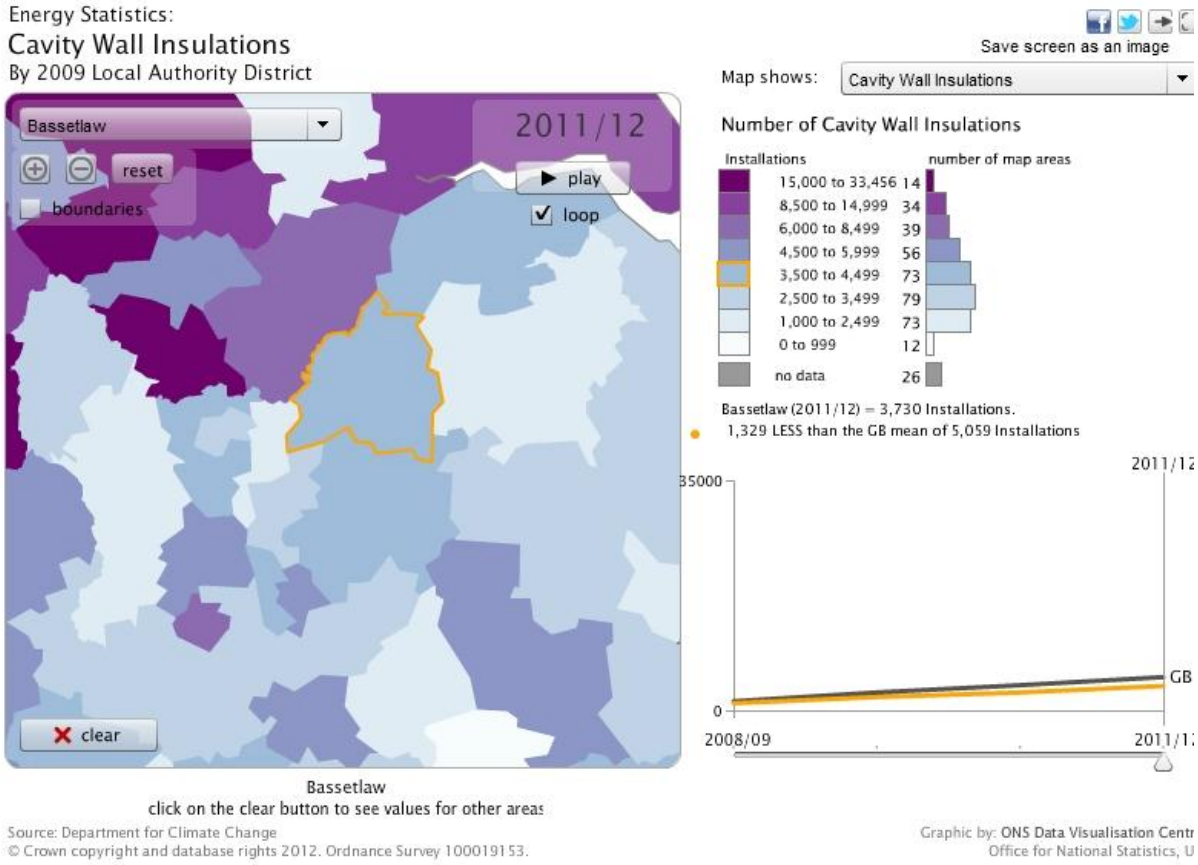
Year	Loft insulations (cumulative)
2011/12	5,885
2010/11	3,937
2009/10	2,891
2008/09	1,305

Source: DECC data

In Bassetlaw, the council endorsed 'Warmstreets' scheme, which installed 1062 loft insulation measures between April 2011 and March 2013, contributing to the total of 5885.

Cavity wall insulation

Between 2008/9 and 2011/12, a total of 3730 cavity wall measures had been installed in Bassetlaw. The following map shows how Bassetlaw compares with neighbouring local authorities.



Year	Cavity wall insulations (cumulative)
2011/12	3,730
2010/11	2,743
2009/10	2,022
2008/09	1,091

Source: DECC data

The installations represent a financial savings of £450,000 to residents and carbon savings of 8,463 tonnes.

The council endorsed 'Warmstreets' scheme installed 437 cavity wall insulation measures between April 2011 and March 2013, contributing to the total of 3730.

2.4 Social housing energy efficiency measures

A1 Housing

Bassetlaw District Council's own stock has been managed by the Arm's Length Management Organisation, A1 Housing since 2004. They manage approximately 7,000 on behalf of the Council.

A1 Housing and their Decent Homes Partner, Bullock Construction Ltd have recently embarked on a major programme of upgrading the sustainability of the housing stock, investing heavily in renewable energy. As part of our Energy Strategy, 147 properties now have ground source heating, and by the end of March 2013, 312 properties will benefit from air source heating. These systems have been installed in areas of deprivation and where there is no mains gas supply, therefore new installations will improve the living conditions of tenants, reduce fuel poverty, CO_2 emissions and enhance our commitment to provide renewable energy to 20% of the council's housing stock by 2020.

Full consultation took place with tenants, representatives from E-On, technical suppliers and Earth Energy prior to commencement of the programmes of works.

Both ground source and air source technology is cheaper to run than electric, coal, or oil-fired heating systems. They reduce CO_2 emissions compared with conventional heating system; the units last for about 20 years compared to 10-15 for a normal boiler. They can be installed externally, utilising internal space, with no need to store coal, oil, or gas cylinders and no need for flues. The systems are user- friendly, low maintenance with "fit and forget" technology.

A training programme has seen nine A1 Housing operatives approved as Mitsubishi installers for their Ecodan Air Source Heat Pumps; they have also achieved accreditation of the Micro-generation Certification Scheme (MCS).

In addition, 132 properties have had Solar Photo Voltaic panels installed in conjunction with a CESP scheme; CESP also provided additional funding for external wall insulation to 127 solid wall dwellings and an extensive replacement door and window programme.

Recognition of A1 Housing's overall service delivery has also been acknowledged with A1 Housing being successful in tendering and being awarded a contract to install six air source heating system for Rotherham Metropolitan Council.

2.5 The Council's Climate Change Strategy and Sustainability Strategy

Energy efficiency works are part of the Council's on-going process to the adaptation and mitigation to climate change. The Council has developed a Climate Change Strategy and a Sustainability Strategy that highlight targets and efficiencies within our own estate and that externally, particularly in regard to Planning and future development.

Our buildings have Smart metering installed and the public can see the usage of energy and carbon emissions on a screen in the reception area. The Council has reduced its own emissions by 24% since 2007 and improved the Display Energy Certification in a number of its administration buildings. The Council also produces a Greenhouse Gas Report every year to mark their own emissions footprint.

The Council recognises however that they have little direct access to improve buildings other than their own, but accepts that they have a responsibility to advise households of their options for saving energy and promote up-take of all appropriate national and local schemes. By setting a good example in its own estate Bassetlaw seeks to advice externally on energy efficiency and use of resources.

Carbon dioxide emissions from domestic housing contribute up to a third of all UK emissions. Households can improve their energy efficiency, reduce their overall costs and reduce their impact on the environment through a number of initiatives within the home.

The Council has devised a programme of communication/information dissemination days that take place every year to help the public achieve these improvements.

Bassetlaw is a large district with a number of outlying villages and information dissemination can often be difficult. However by carrying out the following measures it hopes to overcome this:

- Information stands at main Council events
- Attending village fetes and fairs throughout the summer. Ten different villages have been targeted so far
- Energy Fairs
- Fantastic Homes visits
- Subscribing to Marches Energy Agency – 'Everybody's Talking' website for communities
- Arranging workshops for community groups and organisations to give them the information and tools to provide their own workshops on topics such as energy, fuel efficiency and food.
- Advocating new initiatives and working with other organisations eg RCAN and Sure Start and local schools.

For the future the Council hopes to include further staff training, signposting and campaigns to aid the dissemination of information.

2.6 Private Rented Sector

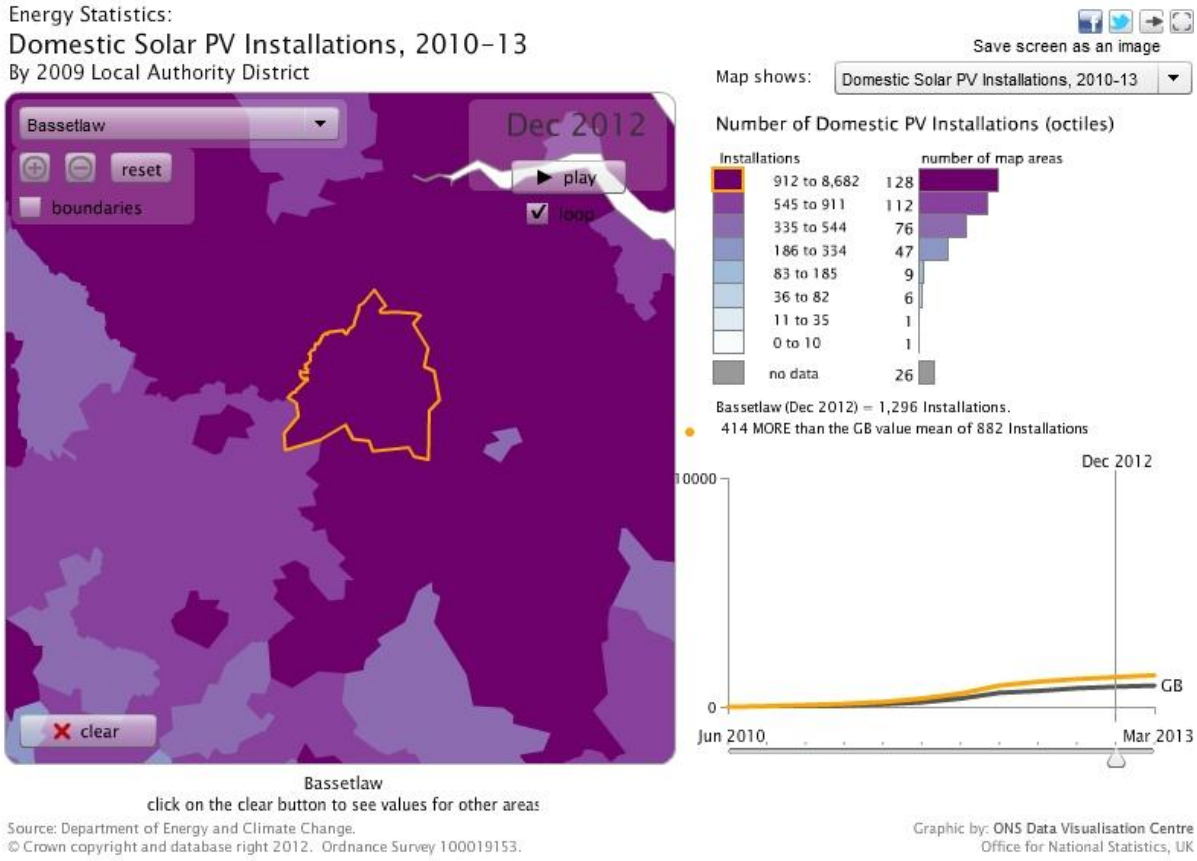
The Bassetlaw Landlord's Forum is run independently of the Council but the Council has good links with the forum and its members. Last year the forum received a presentation from NEA about the implications of Green Deal to Landlords. The council will continue to encourage landlords to engage with Green Deal ahead of the changes being brought about by the Energy Act 2011, specifically:

> **From 2016** landlords should not be able to refuse reasonable requests for consent to install Green Deal measures from their tenants, and;
>
> **From 2018** landlords should ensure their privately rented properties meet a minimum energy efficiency standard (likely to be set at EPC rating 'E') or that they have installed the maximum package of measures under the Green Deal.

2.7 Renewable Energy

Domestic solar photovoltaic installations

As at December 2012 a total of 1,296 sets of photovoltaic panels had been installed across Bassetlaw. The following map shows how Bassetlaw compares with neighbouring authorities.



Year	Domestic Solar PV installations (cumulative)
Dec 2012	1296
Dec 2011	578
Dec 2010	80

Householders continue to access 'feed in tariffs' for installing photovoltaic panels and this will contribute towards reducing CO_2 emissions across the district.

2.8 Green Deal

The council is fully engaged with the Green Deal and Energy Company Obligation (ECO) programme.

Green Deal Pioneer Places
The successful bid to DECC by the LAEP (local authority energy partnership) referred to in the introduction funded four Green Deal pioneer projects. The projects, run by the local authorities in Amber Valley, Chesterfield, Newark & Sherwood and Rushcliffe, comprised of a different combination of factors including house type, tenures, gas connection and likely measures required. Each project was supported by the UNO database, which all council's within the LAEP have access to The UNO Green Deal module is able to run a pre-assessment on properties, calculate which measures would meet the Golden Rule , which could be eligible for ECO and the likely savings. This provides a effective filter of identified leads, maximises conversion rates and minimises costs. All of the member authorities in the LAEP will use the outcomes of the projects as a learning opportunity.

Green Deal Information and Advice
The council has worked with the LAEP to develop information for householders enquiring about the Green Deal. This information along with a link to DECC advice is posted on the council website and the Energy and Home Support Team will continue to provide impartial advice and support in relation to the Green Deal.

The team will also work with Planning to understand the likely impact of different Green Deal measures on house types within the district. This is especially relevant to challenging housing types requesting solid wall insulation or to those properties in conservation areas or listed buildings. Guidance for householders will be produced during 2013.

Officers from the council's strategic housing team will receive training during 2013 about the Green Deal and how to deliver this information to other staff in the organisation, including planning and building control teams.

Feed in Tariffs

Although the Feed in Tariff has been reduced particularly for solar panels it has received a large take up and panels on roofs is a common site in Bassetlaw. The council has invested in its own panels and is working with organisations to extend them on to other buildings.

Information on the Feed in Tariff is on the Council website.

Renewable Heat

The Renewable Heat Incentive (RHI) is a UK Government scheme set up to encourage uptake of renewable heat technologies among householders, communities and businesses through the provision of financial incentives. The UK Government expects the RHI to make a significant contribution towards their 2020 ambition of having 12 per cent of heating coming from renewable sources. The Renewable Heat Incentive is the first of its kind in the world.

There are two phases to the introduction of the RHI:

- **Phase 1**: the introduction of the RHI for non-domestic installations in the industrial, business and public sectors.
- **Phase 2:** the domestic element of the RHI, is expected to be introduced in spring 2014 following the consultation published in September 2012 and more recently the UK Government Heat Strategy

The renewable heat initiative is advocated at all events attended by the Sustainability Officer. Information can be found on the Councils website.

The Council is currently looking at such initiatives in its Leisure Centres.

Zero Carbon homes

Bassetlaw District Council is keen to support developers with ambitions to provide zero carbon homes but we have not set targets ahead of the government's impending changes to part L of the Building regulations. Policies DM4 and DM10 within our Core Strategy demonstrates our commitment to supporting energy efficient developments:

DM4 New development will need to demonstrate that careful consideration has been given to minimising CO2 emissions and measures that will allow all new buildings in Bassetlaw to adapt to climate change. Such measures include, but are not limited to: use of suitable construction materials; site layout and building orientation that makes best use of passive heating and cooling, natural light and natural ventilation; minimising water consumption and maximising water recycling; achieving the highest feasible level of energy efficiency; and maximising opportunities to integrate renewable and low carbon energy infrastructure.

DM10 **A. Carbon Reduction**

The Council will be supportive of proposals that seek to utilise renewable and low carbon energy to minimise CO2 emissions.

B. District Heating and Co-location

Proposals for new development in District Heating Opportunity Areas[46] will, where the scale of the proposal permits, be expected to demonstrate consideration of District Heating as a means of achieving carbon compliance. District Heating opportunities include those supplied by heat from waste management sites, power stations, coalmine methane facilities or new standalone infrastructure. Support will be given to proposals that will ensure the co-location of compatible heat producing and heat consuming development.

C. Major Development

Major development proposals will be expected to deliver specific low-carbon and renewable energy infrastructure in line with assessments of feasibility and overall viability.

D. Community Energy Schemes

Support will be given to community led energy schemes in line with the Council's Renewable and Low Carbon Energy Study (or subsequent replacement), on exception sites if necessary, where explicit community support is demonstrated.

Section 3) Measures to deliver energy efficiency improvements by using area based/street by street roll out

Private sector housing

The Council has a comprehensive stock database, known as UNO, which will help the authority to target specific areas with energy efficiency measures appropriate to the needs of the households. Using the database together with energy performance certificates and Mosaic (socio economic) datasets will help ensure that properties are targeted that can benefit from energy efficiency measures services in a cost effective way. The ultimate aim being that the housing stock in the district will be capable of delivering affordable warmth.

As mentioned in the introduction to this report, between April 2011 and March 2013, the council installed 1499 cavity wall and loft insulation measures through the Warmstreets project. This project will be replaced by ECO funding streams and the council will continue to refine UNO to reflect measures installed and to identify where further improvement works are necessary.

The council plans to continue its membership of the Nottinghamshire and Derbyshire LAEP and will actively participate in the Fuel Poverty and Green Deal project. The project, funded by the Department of Energy and Climate Change (DECC), will pilot innovative methods of targeting householders in fuel poverty and ways of engaging householders with the Green Deal.

In addition the council will work closely with A1 Housing to maximise the investment in the district by combining our data and partnering with one or more of the energy providers with responsibility for delivering ECO.

Council housing

The council will access Energy Company Obligation funding to install solid wall insulation in those areas where properties are likely to benefit the most from this approach.

A1 Housing is aiming to identify the least energy efficient council homes. From this data, potential improvements will be identified and a short/medium term property investment programme produced to reduce the risk of fuel poverty to these occupants.

Energy efficiency works in 2013/14 will include a further 164 properties receiving Air Source heating, installation of 137 Combi-condensing boilers, 200 “Secure by Design” doors, and Upvc double glazed windows to 688 properties.

Private rented housing

The council continues to work with the private sector landlord’s forum to promote energy efficiency and will encourage the take up of Green Deal as part of working with other Nottinghamshire authorities.

Section 4) National and local partners

National and regional partners

DECC & LGiU - The council receives support around policy issues and new initiatives designed to tackle domestic energy efficiency issues and climate change.

LAEP - Regionally, the council is an active member of the Nottinghamshire and Derbyshire Local Authority Energy Partnership.

Energy Audit Company (EAC) - deliver energy services such as maintaining UNO and other stock analysis services.

First Contact partners - deliver affordable warmth through statutory and voluntary organisations

Rural Community Action Nottinghamshire - assist in the delivery of affordable warmth to rural communities

Local partners

Nottinghamshire County Council and Public Health – we have worked together in recent years and will continue to do so to tackle fuel poverty and cold homes

Bassetlaw Action Centre – work jointly to develop and deliver opportunities to tackle fuel poverty in Bassetlaw

2shires Credit Union - help provide safe and fair borrowing services to the residents, providing credit (loans etc) at lower interest rates, as well as other financial services to assist residents in tackling cold homes