

Warrington Borough Council
Home Energy Conservation Act 1995
Progress Report 2017

1. Introduction

The Home Energy Conservation Act 1995 (HECA) recognises the ability of local authorities to use their position within the community to significantly improve the energy efficiency of all residential accommodation in their areas - this includes owner-occupied, privately rented and social housing.

In July 2012 the Department for Energy and Climate Change (DECC) published a requirement under HECA for all local authorities in England to report on the measures they propose to take to achieve this aim. This reflects the legal requirements embodied within the Climate Change Act 2008 requiring significant improvements in the energy efficiency of residential dwellings across the country by 2050. The Government has subsequently set challenging targets for reductions in carbon emissions, which are set out in its Carbon Plan, which was published in 2011.

DECC set a deadline of 31st March 2013 for local authorities to publish the first of these HECA reports, known as a “further report”. A summary of achievements during the period covered by the Further Report (April 2013 – March 2015) is available on the Council’s website. Subsequent reports, known as progress reports must be published at two-yearly intervals following this date.

http://www.warrington.gov.uk/info/200635/home_energy_efficiency/1723/affordable_warmth

This Progress Report sets out the Council's objectives and those of its partners in improving energy efficiency of homes within the borough and the actions that will take to help achieve these targets.

2. Current Position

The Council has maintained a dedicated officer dealing with energy efficiency matters in residential property within Warrington, who is based within the Private Sector Housing Team at the Gateway. The Home Energy Conservation Officer has played a key role in developing and implementing the use of innovative low carbon technologies throughout the borough and continues to be involved in an education programme developed by the Council, delivering energy efficiency and climate change messages to local school children and undertakes a significant number of talks, surgeries and roadshows throughout the Borough to assist residents locally by maximising income.

2.1 Private Sector Stock Condition Survey

The Private Sector Housing Stock Condition Survey, undertaken on behalf of Warrington Borough Council in December 2008 using the Health and Safety Hazard Rating System (HHSRS), remains the most up to date stock survey. This covered all tenures, except the Council's own stock (which was subsequently transferred to Golden Gates Housing Trust in 2010). This survey showed that of all the dwellings with a category 1 hazard, some 45.1% were identified to be *excess cold*. For category 2 hazards, this proportion rose to 91.4%.

The Housing Act 2004 requires local authorities to take action where category 1 hazards are found in residential property and gives them the discretion to take action over category 2 hazards. The survey also identified that the owner-occupied stock had the lowest average SAP rating at 54, followed by privately rented dwellings at 55, with housing association dwellings having the highest mean SAP at 62. The Standard Assessment Procedure or SAP is the energy rating for a dwelling based on the calculated annual energy cost for space and water heating, expressed on a scale of 0-100. The higher the number the better the energy rating for the dwelling.

The headline information from the 2011 census indicates that the level of owner-occupation in Warrington is 72.3% (including shared ownership dwellings), with 15.6% in social housing and 11.2% in the private rented sector.

<http://www.candwleadersboard.org.uk/what-we-do/research-and-intelligence>

Government research suggests that living in a non-gas home is a significant factor in being fuel poor and that these households face some of the highest energy costs unless new low carbon technologies are introduced. Although the majority of properties within the Borough are near to the gas grid we recognise that this can place additional costs on the home owner through the need for annual servicing. As a result we have piloted micro district ground source heating systems supported by solar photo voltaic arrays.

Cold, damp housing is a health risk, linked to a number of health effects including mild hypothermia, increased blood pressure (lowering of the ambient temperature indoors is associated with a small rise in blood pressure and a rise in blood pressure during the cold increases the risk of heart attacks and strokes), respiratory illness (the cold lowers resistance to respiratory infections) and mobility (resulting in increased falls and non-intentional injuries). Excessive cold remains the hazard most frequently identified through HHSRS surveys undertaken by Private Sector Housing on dwellings in Warrington.

2.2 Fuel Poverty

Fuel Poverty has damaging effects on health and quality of life. Research identifies that certain groups are particularly vulnerable with regards to fuel poverty and the adverse effects of cold housing. These include older people, particularly those living on their own, lone parents, young children, disabled people and families where adult members are either unemployed or working on a low income (The Eurowinter Group, 1997; Wilkinson et al, 2004; Kinsella, 2009)

The Council utilises the knowledge of the Home Energy Conservation Officer in line with its Fuel Poverty Strategy as its main recourse to tackle domestic fuel poverty, this is undertaken through work with external agencies, these include Cheshire Fire and Rescue (identifying properties in fuel poverty as part of their data collection during home visits) currently being extended through a formal agreement, Utility companies (accessing ECO funding for the installation of heating systems and insulation), registered

housing providers within the borough (programmed improvements to their housing portfolio's) and private sector landlords (through the landlord forum advice sessions).

For this submission, figures produced have been extracted from BEIS statistics. These show Warrington's position both locally and at a national level

<u>Sample</u>	<u>Place</u>	<u>% in FP</u>
North West Regions place against eight other regions	5 / 9	11.2%
Warrington's place against thirty eight other northwest regional authorities	2 / 39	8.4%
Warrington's place against three other Cheshire county authorities	1 / 4	8.4%
Warrington's place nationally against three hundred and twenty six other authorities	=78 / 326	8.4%

From these figures it would appear that Warrington's fuel poverty fall into the top quartile for the North West although a figure of 8.4% is still of significant concern.

<https://www.gov.uk/government/statistics/2014-sub-regional-fuel-poverty-data-low-income-high-costs-indicator>

The Government has accepted the definition of the Hills Fuel Poverty Review (March 2012) and adopted the "low income high costs" indicator as the primary measure of fuel poverty. Although when dealing with the public it is more appropriate to explain fuel poverty through the old definition as the principle is more readily transferable to the recipient.

Based on the findings of the Hills Fuel Poverty Review DECC issued “Cutting the cost of keeping warm – a fuel poverty strategy for England” in March 2015. This sets out the legal framework that is in place to tackle fuel poverty, through the Warm Homes and Energy Conservation Act 2000 and the recently enacted Fuel Poverty (England) Regulations 2014 which set out the following fuel poverty target:

The fuel poverty target is to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency rating of **Band C** by **2030**

This strategy advises that currently 5% of fuel poor households in England have an energy efficiency rating of Band C and above (18% across all households); also that 36% of fuel poor homes are Band D rated, almost half are E rated and 14% are rated at Band F or G.

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

The Government’s strategy will focus on installation of energy efficiency measures (walls and lofts), installation of central heating systems, boilers upgrades and installation of heat pumps. The Government has set 2 interim milestones to achieve its target above:

1. As many fuel poor homes as is reasonably practicable to **Band E** by **2020**
2. As many fuel poor homes as is reasonably practicable to **Band D** by **2025**

2.3 Excess Winter Mortality (EWM)

The most significant potential consequence of fuel poverty is excess winter mortality (EWM) which is defined as: the average number of deaths that occur between December and March minus the average number of deaths that occurred in the previous August to November and the following April to July (i.e. the number of “excess” deaths in winter compared to the rest of the year). EWM in Warrington has been analysed by age-band, gender, cause of death and deprivation level and of the 5,350 deaths in the borough between August 2007 and July 2010, some 285 were classed as “excess winter deaths”.

Excess winter mortality is also linked with exposure to outdoor cold, which contributes to deaths from heart disease, as well as fuel poverty and cold, damp housing which contributes to deaths from respiratory problems in winter. In Warrington, the largest disease specific cause of excess winter death is respiratory disease, a pattern also observed at national levels.

Mean NW winter temperatures don't appear to have a great influence on the Warrington EWM Index and respiratory disease continues to be a significant cause of death in the area, although the link between fuel poverty and health and well-being is recognised and the Government is committed to developing a means of measuring this.

2.4 Domestic CO2 Emissions

For this submission, figures produced have been extracted from BEIS statistics. These show the carbon dioxide emissions for Warrington and its position both locally and at a national level. The figures displayed on the BEIS website are the latest available (dated 2014)

Domestic gas CO2 Emissions for the year (2013 / 14)	198.2 kt
Domestic electric CO2 Emissions for the year (2013 / 14)	133.9 kt
Domestic other fuels CO2 Emissions for the year (2013 / 14)	11.8 kt
Warrington's total domestic CO2 Emissions for the year (2013 / 14)	343.9 kt

It must be noted that these figures are not broken down per capita allowing for a direct comparison to be made between authorities. With future investment in low carbon technologies, new domestic properties being built to a higher energy efficiency standard than their predecessors along with improvements to existing systems and insulation, the authority will be working to reduce the level of domestic CO2 emissions within the borough.

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

2.5 Domestic Electricity Consumption

For this submission, figures produced have been extracted from BEIS statistics. These show the mean electricity consumption for all domestic consumers in Warrington and its position both locally and at a national level. The figures displayed on the BEIS website are the latest available (dated 2015)

Mean domestic electricity consumption for all households in Warrington for the year 2010	3,945 kWh
Mean domestic electricity consumption for all households in Warrington for the year 2014	3,729 kWh
Mean domestic electricity consumption for all households in Warrington for the year 2015	3,668 kWh

This shows a reduction of 7.02% reduction over the last 5 year period and a 1.63% reduction over the last 12 month period. It is hoped that by continued improvements in housing standards and energy efficiency education this figure can be reduced further.

<https://www.gov.uk/government/collections/sub-national-electricity-consumption-data>

2.6 Domestic Gas Consumption

For this submission, figures produced have been extracted from BEIS statistics. These show the mean gas consumption for all domestic consumers in Warrington and its position both locally and at a national level. The figures displayed on the BEIS website are the latest available (dated 2015)

Mean domestic gas consumption for all households in Warrington for the year 2010	15,134 kWh
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Mean domestic gas consumption for all households in Warrington for the year 2014	12,795 kWh
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Mean domestic gas consumption for all households in Warrington for the year 2015	12,572 kWh
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This shows a reduction of 16.93% reduction over the last 5 year period and a 1.74% reduction over the last 12 month period. It is hoped that by continued improvements in housing standards and energy efficiency education this figure can be reduced further.

<https://www.gov.uk/government/collections/sub-national-gas-consumption-data>

3. Our aims and ambitions

Improving the energy efficiency of the housing stock will improve living conditions and reduce fuel poverty with fewer winter deaths, emergency hospital admissions, non-elective readmissions and better physical and mental health for residents. The requirement to improve the energy efficiency of dwellings is underpinned by the legal requirements of the Climate Change Act 2008 and the Government's 2011 Carbon Plan for reductions in carbon dioxide emissions.

These require carbon reduction targets of 34% by 2020 and 80% by 2050, using 1990 figures as a baseline. In addition, all cavity walls and lofts in homes, where practicable, are expected to be insulated by 2020 and by 2050, all buildings will need to have an emissions footprint close to zero.

Local Authorities are expected to use their unique position in the community to actively support Government to achieve these very challenging targets.

4. Proposals to achieve our ambitions and targets

Although the Council and its partners have made great improvements in some areas over the last 2 years, the scale of the challenge of retrofitting energy efficiency measures to improve the thermal efficiency of the Borough's existing housing stock remains significant. The action plan set out below details how the Council will continue to address this challenge by improving data collection, accessing any available forms of funding and working with partners to facilitate delivery of energy efficiency projects.

Objective	Actions	Target date
i) Local Energy Efficiency Ambitions and Priorities		
To work closely with the public, 3 rd sector and community organisations to develop community energy initiatives in the Borough	The Council has already supported the establishment of 2 Community Benefit Societies for the development of Community Energy within the borough. These Societies have completed installations of low carbon technologies which will bring benefit to the community, provide an educational resource and reduce carbon emissions in the borough over the next 19 years.	Ongoing
Work closely with partners in the public and voluntary sectors to actively seek funding opportunities, particularly those supporting health priorities identified in Warrington (including housing and fuel poverty issues)	<ol style="list-style-type: none"> 1. The Council will continue to work with local RPs who have the experience to deliver significant energy efficiency improvements to the older housing stock in Warrington, particularly those in the most deprived LSOAs and the adjoining areas. 2. Following an extensive programme of surveys carried out across the borough, private sector properties with solid walls have been mapped. Should suitable funding become available, work programmes will be developed to engage and assist these home owners with the financing and installation of external wall insulation. 	Ongoing
ii) Measures we are taking to result in significant Energy Efficiency Improvements of our Residential Accommodation		

Energy efficiency improvements to existing housing stock	<p>Refurbishment works to 5 GGHT and 2 Council owned blocks of have been completed. Works included external wall insulation and replacement windows, doors and roof, together with new combination boilers. A system of Smart Share Solar (allowing up to 4 properties to be connected to one large solar pv array, accommodating potential distribution network issues and sharing the solar energy generated between properties based on demand from residents) This installation now utilises the electricity generated to charge lithium ion batteries to power all the communal lights, door entry systems and external lighting which have been converted to LED luminaires).</p> <p>Golden Gates Housing Trust has engaged in a number of projects over the last two years that have resulted in energy efficiency improvements. These have extended beyond the standard insulation measures and targeted hard to treat stock.</p> <p>Completion of the installation of ten solar PV battery storage systems during 2015 / 16</p> <p>Completion of a programme of works to install Voltage Optimisers to 400 properties resulting in estimated saved by customers of £30,000 and 64 (tonnes) CO₂ saved per year during 2015 / 16</p> <p>Completion of a programme of works to deliver external wall insulation to 102 properties resulting in estimated saved by customers of £7,055 and 160 (tonnes) CO₂ saved per year during 2015 / 16</p> <p>Completion of a programme of works to deliver the installation of new A rated double glazed windows to 285 homes 2015 / 16 & 31 during 2016 / 17</p> <p>Completion of a programme of installing energy monitors to 382 properties resulting in estimated saved by customers of £19,884 and 133(tonnes) CO₂ saved Per Year during 2015 / 16</p>	2017 / 2018 2017 / 2018
New build properties	<p>Torus have built 55 new homes in Warrington, affordable / Shared Ownership, These have been built to Level 3 of the Code for Sustainable Homes. 2015 / 16</p> <p>Torus will build 184 affordable / Shared Ownership new homes in Warrington, which will be built to current building regulations as code no longer required. Each of these properties will have an electric charging point for cars were possible.</p> <p>The Council will consider a report in May 2017 to build new homes which will be built to high levels of energy efficiency standards.</p>	2017/18

<p>Pilot scheme to build 2 bungalows to Passivhaus standards</p>	<p>A business case has been prepared by the Council to build two 2 bed roomed bungalows in Bewsey to this very high energy performance standard (excellent thermal performance, renewable technology and exceptional airtightness with mechanical ventilation).</p> <p>GGHT will complete the delivery of upgrading widows in Warrington to 36 homes during 2017</p>	
<p>Feed in Tariffs Scheme</p>	<p>Warrington Borough Council (WBC) in partnership with Golden Gate Housing Trust (GGHT) have completed PV installations to 1,692 properties resulting in estimated saved by customers of £203,040 and 1549(tonnes) CO₂ saved per year over the next nineteen years</p> <p>Warrington Housing Association has installed solar photo voltaic arrays to two of its sheltered housing schemes totalling 85 kW. These are providing electricity to the communal areas of the property.</p> <p>Warrington Borough Council have integrated the installation of 44 kW solar photo voltaic arrays into its new build 54 one and two bed roomed apartment scheme for older people. These are providing electricity to the communal areas of the property.</p>	<p>Ongoing</p>
<p>Renewable Heat Premium</p>	<p>Warrington Borough Council recognises that the majority of properties within the Borough are near to or on the gas grid, we also understand that this may not be the most suitable fuel for every resident and that this can place additional costs on the home owner through the need for annual servicing. As a result we have piloted micro district ground source heating systems supported by solar photo voltaic arrays, this installation has been carried out on a scheme of four homes that have been refurbished and highly insulated. We are currently monitoring the running costs for the installation and the residents interaction with the systems.</p>	<p>Ongoing</p>
<p>Apartment scheme for older people developed by the Council and built to high energy efficiency standards</p>	<p>The Council has developed a residential scheme, Penketh Court on brown field land in the west of the borough for residents over sixty years of age. The housing scheme comprises a total of 54 one and two bed roomed apartments in a secure environment. The development incorporates low carbon technology and has been designed where possible to promote 21st century living while maintaining the use of high levels of thermal insulation, triple glazing, LED lighting to all communal areas and solar photo voltaic</p>	<p>Ongoing</p>

	<p>arrays.</p> <p>The performance of the technologies used in the construction of this development are being monitored, these will then be utilised if future schemes of a similar nature.</p>	
Minimum standards in the private rented sector	<ol style="list-style-type: none"> 1. The Home Energy Conservation Officer works closely with the Grants and Enforcement teams within Private Sector Housing to ensure that information is disseminated to the private rented sector through the regular meetings of the Landlord's Forum and news letters. 2. The council has continued to encourage landlord accreditation through the Cheshire Landlord Accreditation Scheme, jointly operated through Warrington, Cheshire East and Cheshire West Councils. (Subject to Council capital funding, some loans may be available to bring empty dwellings back into rental use, which will also require energy efficiency improvements to the property). 3. Promote improved energy efficiency in the private rented sector by making landlords aware of the Energy Efficiency (Private Rented Property) (England & Wales) Regulations 2015 SI 962 <p>These regulations are intended to improve the energy efficiency of privately rented properties in the domestic (and non-domestic) sectors, as follows:</p> <ul style="list-style-type: none"> ○ From April 2016, residential private landlords cannot unreasonably refuse consent to a tenant's request for energy efficiency improvements where finance or subsidies are available to pay for them, ○ From April 2018, private domestic and non-domestic landlords will need to ensure that their properties reach at least an E EPC rating, or have installed those improvements that could be funded using Green Deal finance or subsidies available to pay for them, before granting a tenancy to new or existing tenants. These requirements will apply to all properties – including occupied properties – from April 2020 in the domestic sector (and 2023 in the non-domestic sector) 	Ongoing
Improve the SAP rating of off-grid homes	Although the number of off grid properties that the authority has within its geographical boundary is relatively low, we recognise that heating these homes to a satisfactory standard within a reasonable	Ongoing

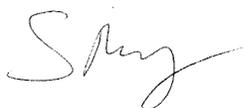
	<p>budget can be challenging. As a result, where possible we are engaging with energy suppliers, RPs, private landlords and home owners to locate and then target these off-grid homes to improve their energy efficiency and where possible, obtaining Government funding to install first-time heating systems in off-grid houses.</p> <p>https://www.gov.uk/government/news/renters-and-landlords-to-enjoy-warmer-properties-and-cheaper-bills</p>	
Information, advice, education and promotion	<p>The Council's Home Energy Conservation Officer has a programme of roadshows and talks throughout the year to promote energy efficiency matters, often in conjunction with other professionals (benefits and waste minimalisation staff).</p> <p>The Council also has an active schools programme, delivered by Private Sector Housing, which covers KS2, 3 and 4 and which raises awareness about such topics as global warming and global dimming, with the aim of delivering the programmes to all 69 Primary and 13 High Schools within the Borough – the programmes will be delivered to 16 schools in this academic year.</p> <p>Golden Gate Housing Trust have completed one to one energy advice to 1,089 properties resulting in estimated saved by customers of £53,361 and 370 (tonnes) CO₂ saved per year funded by the Council and GGHT</p> <p>WHA has a dedicated money advice officer.</p>	Ongoing throughout the year
iii) Measures we propose to cost effectively deliver Energy Efficiency Improvements in Residential Accommodation by using area based / street by street roll out		
Registered Provider (RP) Partners	<ol style="list-style-type: none"> 1. Work with RP partners to build new affordable homes to current building standards, or higher where possible. 2. Following on from surveys of solid wall homes in the borough the Council is monitoring funding streams to allow programmes of works to be undertaken to improve the thermal efficiency of these hard-to-treat properties through the installation of internal and external thermal insulation. 	Ongoing

iv) National and Local Partners		
British Gas PLC	In order to encourage eligible residents to engage with the Energy Company Obligation (ECO) the Council is working in association with British Gas to maximise the uptake of the assistance available	Ongoing
NW Association of Local Energy Officers (ALEO) / NEA Fuel Debt Forum / NEA Fuel Poverty Forum	<p>The Council links into the NW Association of Local Energy Officers (ALEO), a not-for-profit organisation, to share knowledge on reducing the carbon footprint of residential properties and tackling fuel poverty across the north-west region.</p> <p>As part of its Fuel Debt and Mentoring project, the NEA (National Energy Action, a national charity which aims to eradicate fuel poverty and campaigns for greater investment in energy efficiency to help those who are fuel poor and vulnerable) facilitates quarterly meetings which brings together local authorities, energy suppliers and other organisations to develop and promote good practice in this area.</p> <p>The NEA Fuel Poverty Forums are aimed at strategic policy makers and front line service providers and endeavour to examine Government policy and to find practical initiatives / solutions related to fuel poverty.</p>	Ongoing
Low Carbon Lymm (LCL)	<p>Low Carbon Lymm has set up a community benefit society (Lymm Community Energy) and has installed low carbon technology in the form of solar photo voltaic arrays on the four local community primary schools. In order to maximise the benefit of the electrical generation and reduce carbon emissions, two of the schools have had primary areas of lighting updated to LED luminaires. Profits will be re-invested back into the local community. Other benefits will include education about energy efficiency and renewable energy for local school children. This project has a life of 19 years left to run</p> <p>Lymm Community Energy successfully bid to the Department for Business, Energy & Industrial Strategy to deliver the 2016 /17 Big Energy Saving Network. This is seen as a way of engaging with the community on primarily energy switching, but also broader domestic energy efficiency matters.</p>	Ongoing
Livewire Community Energy	Livewire Community Energy, a Community Benefit Society has installed renewable low carbon technologies on neighbourhood hubs, schools, community and sports centres etc. Local communities and school children are benefit from education, energy efficiency savings and renewable energy. This project has allowed the local community to play a role in shaping the way that community venues	Ongoing

	<p>purchase their energy over the next 19 years.</p> <p>Livewire successfully bid to the Department for Business, Energy & Industrial Strategy to deliver the 2016 /17 Big Energy Saving Network. This is seen as a way of engaging with the community on primarily energy switching, but also broader domestic energy efficiency matters.</p>	
<p>Warrington Healthy Homes – delivered by WHiA (Warrington Home Information & Improvement Agency</p>	<p>WHiA assist elderly and disabled home owners to remain in their own homes by offering advice and practical assistance with heating repairs and improvements, insulation and draught-proofing.</p> <p>In addition, WHiA has been successful in attracting funding from Gas Safe (£7,500 in July 2015 and £7,500 in March 2016) to assist with keeping residents safe in their own homes. The type of work covered in this scheme includes gas servicing, gas boiler / cooker / fire repairs and gas safety checks. Funding is targeted at home owners who are over 60 years / disabled and in receipt of means tested benefits.</p> <p>WHiA also act as an advocate securing individual charitable funding throughout the year for all sectors of the community, but have recently assisted ex service personnel. This has been used to assist with amongst other things energy efficiency improvements to meet individual requirements.</p>	<p>Ongoing</p>

Review date: 31st March 2018
Submission of next progress report: 31st March 2019

Signed:



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