FAREHAM
BOROUGH COUNCIL

Home Energy Conservation Act 1995 Further Report 2015

Contents

Part 1

1.1 Introduction

The Home Energy Conservation Act 1995 (HECA) requires local authorities to develop and implement local home energy efficiency strategies. Authorities are expected to consider practical and cost effective measures that will bring about a significant improvement in the energy efficiency of all types of housing in their areas. The original aim was to achieve a 30% improvement in energy efficiency over 10 years, but this was later extended to 15 years.

From 1997, English authorities were required to submit annual reports showing their progress towards achieving the 30% target. The 12th annual report was produced in 2008 and then the requirement ceased. The independently prepared information submitted by Fareham established that the overall energy improvement achieved in the Borough between 1997 and 2008 was 23.9% and therefore the Council was on target to achieve the 30% improvement in energy efficiency by 31 March 2011.

Following the introduction of new guidance in 2012, the legal requirement remains for councils to improve home energy efficiency, and to report on progress. The aim is to make continuous improvements to home energy efficiency to 2027, and we are required to publish further reports and action plans every two years which set out the energy conservation measures that the authority considers practicable, cost-effective and likely to result in significant improvement in the energy efficiency of residential accommodation in its area. Reports are required to outline issues such as the domestic carbon dioxide emissions and levels of fuel poverty, as well as the steps that the local authority will be taking to encourage the uptake of the Green Deal and Energy Company Obligation and other local initiatives. All the Home Energy Conservation Act reports must be published online, with a link forwarded to the Secretary of State on or before the required date.

1.2 Climate Change and CO_2 Emissions

The Climate Change Act 2008 sets a legally binding national target to reduce CO_2 emissions by 80% by 2050 from 1990 levels.

The Act requires the Committee on Climate Change to recommend a series of five-year carbon budgets leading to the 2050 target. In May 2011 the Government accepted the Committee's recommendation for the 4th budget: a limit of 1,950 $MtCO_2e$ over the years 2023-2027, equivalent to an emissions cut of 50% on 1990 levels by 2027.

The government has stated that local authorities are expected to play a major role in meeting these targets through the management of their buildings and vehicle fleets, and in how they influence householders, businesses and transportation in the wider community. We are working to reduce carbon emissions by 20% on 2012 levels by 2020. Our aspiration is for an 80% reduction by 2050, in line with the Climate Change Act.

Table 1 shows the carbon Dioxide (CO_2) emissions from domestic properties as calculated by the Department for Energy and Climate Change (DECC) for 2005 to 2012. These are the most recent figures

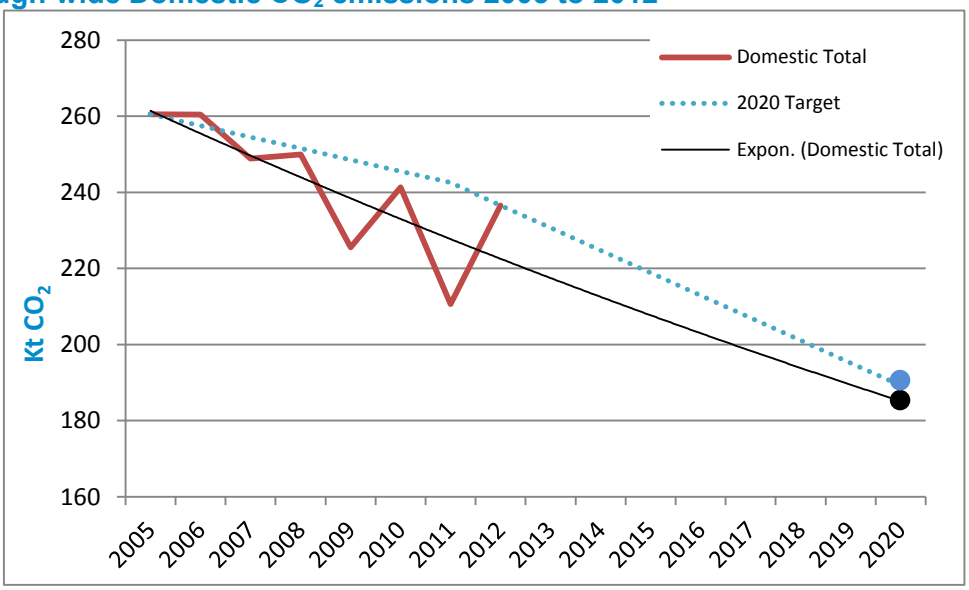
available. The figures show that despite an increase in population the total domestic emissions have fallen by 9% from 260.5Kt to 236.6Kt, whilst per capita emissions have fallen by 17% from 5.8t to 4.8t.

Table 1: Domestic emissions for the Fareham Borough[1] 2005 to 2012

Year	Total emissions (Kt CO2)	Population (000's)	Per capita total emissions (t)
2005	260.5	108.1	5.8
2006	260.5	108.4	5.8
2007	248.9	109.4	5.5
2008	249.9	110.2	5.5
2009	225.5	110.8	4.9
2010	241.3	111.4	5.1
2011	210.7	111.9	4.5
2012	236.6	112.8	4.8

Chart 1 illustrates the total domestic carbon emissions in kilo tonnes (Kt), an approximation of the trajectory for emissions to meet the 2020 target, and an exponential trend line for emissions based on performance to date. Changes in energy consumption can change due to energy cost changes, changes in economic activity, and seasonal temperature changes, each of these being outside of the Council's control. The figures indicate that continued reduction at the current overall rate should achieve the 2020 target. It should be noted that the most recent figures differ from those reported in 2013 as the Government introduced new data, together with some improvements to the underlying methodology. In order to ensure that the data for 2005 to 2011 are consistent with the data now available for 2012, the estimates for previous years have been revised to incorporate both the new data and the improvements in the underlying methodology.

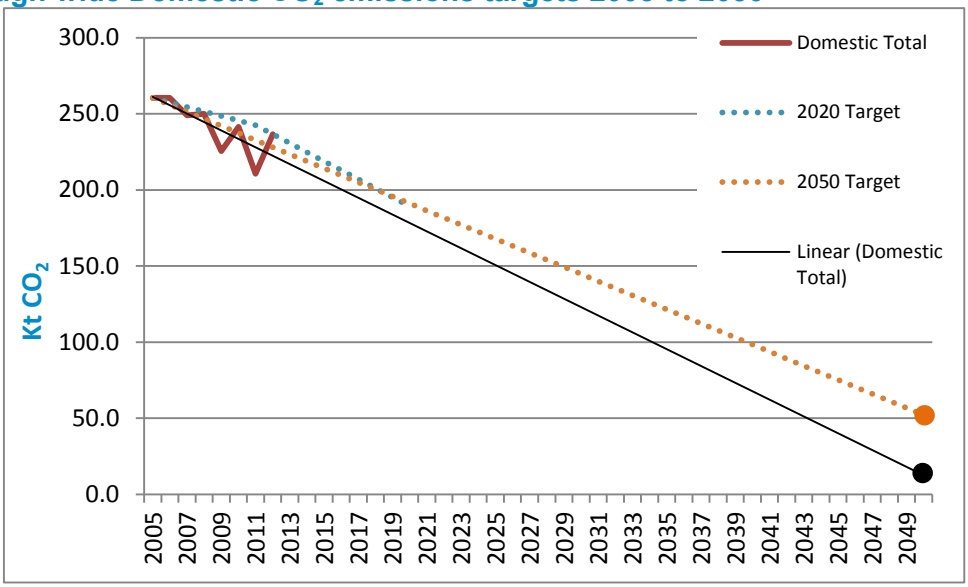
Chart 1: Borough-wide Domestic CO_2 emissions 2005 to 2012



[1] https://www.gov.uk/government/statistics/local-authority-emissions-estimates

Projected for the 2050 target of an 80% reduction on 2012 levels, the current trend for emission reduction is sufficient to meet this target, however it cannot be assumed that the current rate of improvement will be maintained; simple measure such as cavity wall and loft insulation which have been installed will need to be supplemented by more difficult measures such as solid wall insulation and renewable energy technologies. Chart 2 shows the current reductions trend projected linearly to 2050.

Chart 2: Borough-wide Domestic CO_2 emissions targets 2005 to 2050



1.3 Fuel Poverty

In August 2013 the Government released new figures for fuel poverty in England using a new definition. Fuel poverty in England is now measured by the Low Income High Costs (LIHC) definition, which considers a household to be in fuel poverty if:

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

This is different to the previous definition: when more than 10% of household income is spent to adequately heat the home. Consequently it is not possible to compare statistics prepared using the different definitions.

The Government's new fuel poverty strategy, "Cutting the Cost of Keeping Warm"[2] launched on the 3rd March 2015 confirms several measures, chiefly the adoption of the above LIHC measure of fuel poverty as well as new minimum Energy Performance Certificate (EPC) E standards in private rented homes from 2018. There is also an extension of fuel poverty support under ECO until 2017.

Additionally DECC sets a new "fuel poverty target" of EPC C by 2030 for "as many fuel poor homes as is reasonably practicable". This target is supported by two intervening milestones of EPC E by 2020 and D by 2025, for as many homes "as is reasonably practicable".

[2] https://www.gov.uk/government/consultations/cutting-the-cost-of-keeping-warm-a-new-fuel-poverty-strategy-for-england

The latest figures from DECC[3] (published in June 2014) indicate that there are approximately 2,450 households in fuel poverty within the Borough, equating to 5.2% of all households. The Wards with the highest proportion of fuel poor households are shown in Table 2.

Table 2: Wards with the highest proportion of fuel poor households (LIHC)

Row Labels	Estimated number of households	Estimated number of Fuel Poor Households	Estimated Percentage of Fuel Poor Households
Fareham East	3159	238	7.5%
Fareham North	3051	201	6.6%
Portchester East	4803	311	6.5%
Titchfield	2964	190	6.4%
Fareham South	3086	191	6.2%
Fareham North-West	3059	162	5.3%
Portchester West	2879	143	5.0%
Stubbington	2910	143	4.9%
Fareham West	2869	140	4.9%
Hill Head	3114	146	4.7%
Park Gate	3186	145	4.6%
Sarisbury	2782	119	4.3%
Warsash	2853	120	4.2%
Locks Heath	2853	98	3.4%
Titchfield Common	2967	94	3.2%
Grand Total	**46535**	**2441**	**5.2%**

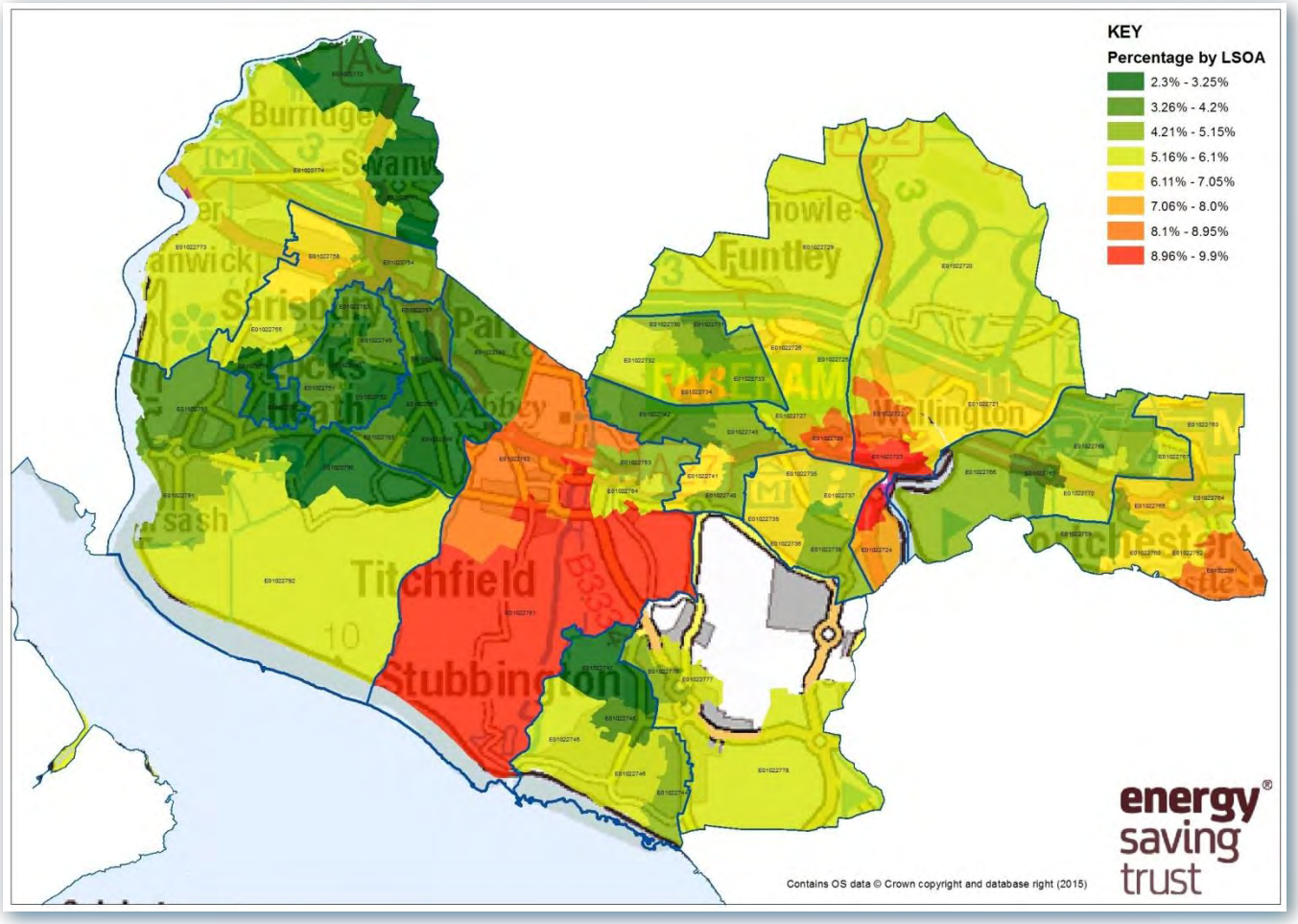
The Council established a target for reducing fuel poverty within the Local Area Agreement by 12.5% by 2011[4], however this target was set under the previous fuel poverty definition. At that time (2009) fuel poverty was calculated to stand at 6.3% in the Borough under the old fuel poverty definition. Government statistics calculating fuel poverty for 2012[5] using this definition indicated that 6% of households in Fareham Borough were in fuel poverty, a reduction of 4.76%. The Government is unlikely to publish further statistics using this definition.

Whilst the fuel poverty priority Wards vary from those identified in 2013 there is still a high degree of correlation. The magnitude of the issue has apparently reduced, however this is predominantly due to the change in definition and should not be counted as an improvement in the lives of a significant number of residents. Map 1 shows the distribution of fuel poverty (by percentage) across the Borough mapped at Lower Level Super Output Area (LSOA) with Ward boundaries shown. This approach helps to place concentrations of fuel poverty within boundaries understood by the public. Where parts of the

[3] https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2012
[4] http://www3.hants.gov.uk/item5bsenate10072009.pdf
[5] https://www.gov.uk/government/statistics/fuel-poverty-subregional-data-under-10-indicator June 2014

Borough are not coloured, data was not available for the area ie. Newlands farm and Peel Common sewage works.

Map 1: Fuel poverty concentrations by LSOA



Contains OS data © Crown copyright [and database right] (2015)

The Council's work towards reducing fuel poverty is set out in the Housing Strategy for the Borough of Fareham 2010 – 2015[6]. This set out the Council's priorities for action as:

- Direct Council financial resources to reduce fuel poverty and to meet NI 187 targets[7] (this measure has been discontinued by the Government);
- Continue to work with external agencies, particularly the Environment Centre,
- Warm Front and PUSH 4 Safer Homes to reduce domestic energy consumption across all tenures (both of these programmes have ended, however Warm Front has been superseded by ECO by the Government);
- Work with social housing providers and private landlords to ensure that new affordable housing schemes continue to achieve the highest levels of energy efficiency and work towards zero-carbon housing by 2016.

[6] http://www.fareham.gov.uk/PDF/housing/hsgstrat10-15.pdf
[7] NI187 measured the number of households with SAP Ratings below 35 and to increase the number with SAP ratings above 65

Since the adoption of the Housing Strategy there have been changes in the national policy environment which have removed programmes and initiatives identified as priorities for the Council, however the Council retains the priority actions which should be read as relating to the current programmes in place.

One LSOAs in the Borough falls within the 25% most deprived areas in England which qualify for the Carbon Savings Community Obligation (CSCO) part of the Government's ECO initiative. This area is the **Fareham Park Area** LSOA E01022732 which sits within Fareham North-West Ward. Up to 20% of activity under CSCO may be undertaken in areas which adjoin a qualifying LSOA.
Map 2 shows the location of LSOA E01022732.

Map 2: The location of the Fareham Park Area LSOA E01022732

Contains OS data © Crown copyright [and database right] (2015)

1.4 The Borough's Housing Stock

Fareham has an unusual profile of domestic property tenure with just over 80% of all housing being in private ownership compared to 68% in the South East of England and 63% in England as a whole[8]. This type of tenure is usually in a better state of repair and energy efficiency than privately rented accommodation, and as such Fareham is better placed than many Authority areas in terms of its residents' thermal comfort.

Table 3: Breakdown of housing tenures 2011

	Fareham		South East		England	
Tenure	Total	Percentage	Total	Percentage	Total	Percentage
All Households	46,579	100.0%	3,555,463	100.0%	22,063,368	100.0%
Privately Owned	37,460	80.4%	2,404,517	67.6%	13,975,024	63.3%
Social Rented	3,785	8.1%	487,473	13.7%	3,903,550	17.7%
Private Rented	4,645	10.0%	578,592	16.3%	3,715,924	16.8%
Living Rent Free	412	0.9%	45,601	1.3%	295,110	1.3%

[8] Office for National Statistics 2013

The Council's Private Sector House Condition Survey 2010 (PSHCS) shows that The average Standard Assessment Procedure (SAP) rating in Fareham for private sector dwellings was approximately 54 (approximately an EPC Band E), compared to an average national SAP rating of approximately 46 (also approximately an EPC Band E) (for private sector dwellings only), based on the findings of the English House Condition Survey 2007. Approximate values are given here as the methodology used to calculate SAP Ratings has been revised and SAP2005 used in the Survey is no longer the current standard[9].

The survey indicated that of the 46,500 dwellings in the Borough, 96.9%, have mains gas, with 94.6% of dwellings having a central heating system.

The PSHCS indicates the cost of carrying out all energy efficiency works to all dwellings where the residents were not in fuel poverty but where potential improvements could be made is just over £31.8 million. This represents an average expenditure of approximately £820 per dwelling in 38,790 properties.

The Council estimates that there are approximately 4,000 dwellings with solid walls, and 13,000 uninsulated cavity walls within the Borough.

The PSHCS recommends:

"The greatest impact, in terms of reducing fuel poverty, can be achieved by focusing on making energy efficiency improvements to dwellings with: older heads of household; dwellings with benefit recipients; households on low incomes, households with disabled occupants and the privately rented stock. The Authority may wish to consider how to encourage landlords to improve the energy efficiency of their dwellings in the private rented sector."

The Council has retained its own housing stock ('Council houses') and currently has 2,314 homes in ownership. Most of the properties were built between 1945 and 1990 with a high proportion being sold under right-to-buy legislation. This has left predominantly flats, maisonettes and sheltered accommodation in Council ownership. The stock has benefitted from an improvement plan in order to meet the Decent Homes Standard and consequently is in relatively good general condition with an average SAP Rating of 70 (2009) this equates to approximately EPC Band C . The Council re-commenced a house building programme in 2011 and has enabled 131 new homes since 2013 in partnership with Registered Providers of Housing.

Under the former Government CERT funding programme Fareham residents took up 6,622 cavity wall insulation and 7,546 loft insulation measures between 2008 and 2012 when the programme ended. A full breakdown of these CERT installations is at Appendix 1. Statistics for ECO at local authority level are not currently available.

1.5 Spatial Analysis

By considering the areas of the Borough where deprivation and fuel poverty both occur in the highest concentrations, it is possible to identify where there is most need for intervention by the Authority through direct or indirect activity. The areas with the highest concentration of homes which are most deprived and most in fuel poverty are Fareham East, Fareham North, Fareham South and Portchester East. This does not mean that fuel poverty alleviation is not important in other areas of the Borough, however these areas should become priority areas for action.

[9] The current standard is SAP 2012

Table 4: Wards' incidence of fuel poverty and Index of Multiple Deprivation scores

Ward	Percentage of Households in Fuel poverty	Index of Multiple Deprivation Score
Fareham South	6.3%	17.92
Fareham East	9.0%	10.88
Fareham North-West	5.8%	14.84
Portchester East	8.2%	9.41
Titchfield	7.9%	7.80
Fareham North	8.3%	7.19
Stubbington	6.2%	7.22
Fareham West	8.1%	5.46
Park Gate	5.3%	8.02
Portchester West	6.2%	6.55
Hill Head	6.5%	3.84
Titchfield Common	3.7%	6.60
Sarisbury	5.2%	4.66
Warsash	5.2%	4.21
Locks Heath	4.3%	3.87

1.6 Green Deal and ECO

The Green Deal is a nationwide Government initiative designed to help homeowners and tenants to make energy efficient improvements to their homes with no up-front cost. A Green Deal is a kind of loan tied to the electricity meter which is repaid through an additional charge on electricity bills. The expected savings made on electricity bills will always be equal or greater than the cost of the work. The Green Deal is designed to remove the barrier to householders carrying out energy efficiency improvements and the Council has joined Solent Green Deal in order to help residents access the programme and be assured of high quality services. The main measures that can be funded by Green Deal include:

- cavity wall insulation
- loft insulation
- solid wall insulation
- central heating system
- upgrade to a condensing boiler
- draught proofing
- energy efficient windows and doors
- solar thermal
- solar PV
- ground and air source heat pumps
- biomass boiler
- micro and small scale wind turbine system

The Energy Company Obligation (ECO) is additional help being made available to those most in need such as the vulnerable, those on low incomes and with homes that are expensive to improve. Through

ECO, the main energy companies are making funding available to subsidise energy efficiency in these instances. . ECO is designed in part to work alongside the Green Deal.

The Green Deal, ECO and other funding streams such as the Feed in Tariffs and Renewable Heat Incentive schemes are key measures to improve the energy efficiency of homes and should be encouraged in Fareham.

Enquiries into the Green Deal or ECO can be made to the Council's partner Solent Green Deal (0800 052 2242 www.solentgreendeal.org.uk), to the national Energy Saving Advice Service (0300 123 1234, energy-advice@est.org.uk), by approaching energy suppliers, or by contacting Green Deal providers (http://gdorb.decc.gov.uk/consumersearch).

1.7 Partnerships

The Council's main partnership delivering energy efficiency and sustainable energy change across the Borough is Solent Green Deal. This project is a consortium of the following local authorities:

- Eastleigh Borough Council,
- Southampton City Council,
- Gosport Borough Council,
- Winchester City Council,
- East Hampshire District Council,
- Havant Borough Council,
- New Forest District Council,
- Fareham Borough Council,
- Test Valley Borough Council,
- Rushmoor Borough Council and,
- Portsmouth City Council

Solent Green Deal offers a trusted and transparent Green Deal service that provides impartial advice and information to Hampshire residents, landlords and businesses. This trust is built upon its foundations of local authority impartiality, council employee Green Deal Advisors, selected partnerships with Green Deal Providers, and the use of local services and labour where possible.

1.8 Estimated Costs of Improvement to the housing stock

The PSHCS 2010 established an estimated cost of installing measures to bring all Fareham private sector dwellings up to the optimum standard of thermal comfort as being £37.1 million. The measures do not include renewable energy installations, but are based on combinations of the following:

- Loft insulation to 270mm (21,000 dwellings)
- Cavity wall insulation (11,400 dwellings)
- Double glazing to all windows (2,900 dwellings)
- Cylinder insulation (17,100 dwellings)
- Installation of a modern high efficiency gas boiler (9,600 dwellings)
- Full central heating - where none present (700 dwellings).

1.9 Current and recent activities

Fareham continues to make good progress in improving the energy efficiency of the local housing stock. Given the high level of owner occupation, the delivery of significant improvements is dependent on encouraging homeowners to invest in energy efficiency measures through offering advice and promoting

available initiatives, rather than through direct local authority intervention. Our key areas of activity and achievements are described below.

- **Renewable Energy installations**[10] - Under the Government's Feed in Tariff programme 4,240kWp of photo-voltaic solar generation capacity across 1,361 dwellings and 2kWp of capacity of micro combined heat and power across 2 private dwellings has been installed in the Borough. Domestic combined heat and power is still an emerging technology and the installation of two systems within a small authority area demonstrates some of the Borough's residents' forward looking attitude.

- **Council Housing Improvement Plan** – The Council has previously completed work to bring Council homes to meet the Decent Homes Standard including eliminating failures under "Excess Cold" and to provide high levels of thermal comfort. The improvements installed include cavity wall and external wall insulation, improved loft insulation, double glazing and the replacement of defective heating systems.

  Since April 2013 the Council has carried out the following energy efficiency programmes to its own housing:

  Arras House improvements (Block of 24 units)
  - Replaced cavity wall insulation with beaded type
  - Fuel switch from electric to gas.
  - New central heating and mixer Showers
  - Low energy extractor fans
  - New composite entrance doors
  - New A-rated windows and balcony screen doors due to be installed by April 2015

  Work on this programme is still in progress and has an anticipated total cost of £196,000;

  Energy Efficient Communal Lighting to Frosthole Close Flats (40 dwellings) and Garden Courts (40 dwellings)
  - The existing communal lighting and emergency lighting installations have been upgraded with LED fittings.

- **Photovoltaic panels to Council Schemes** – In 2013 the Council installed two solar PV schemes to its housing stock at Barnfield Court and Downing Court. Barnfield Court has a 4.2kWp system which was installed at a cost of £16,000, whilst Downing Court has a 6.86kWp system installed at a cost of £22,000. These installations provide electricity for communal areas, and export surplus to the national grid. This reduces the cost of the accommodation to residents and generates income for the Council through export and Fee In tariff payments. These could collectively generate up to 10,800kWh of electricity per year and have an installation payback from Feed in Tariff payments of approximately 25 years. During this time residents' communal electricity usage will be subsidised and additional payments will be received by the Council for electricity not used on site and exported to the National Grid. There is an ongoing monitoring programme which will enable the Council to evaluate performance and inform decisions on the use of PV in other council dwellings.

- **Raising awareness** - Hitting the Cold Spots (HTCS) is the programme delivering awareness raising across Fareham Borough. It is managed by The Environment Centre[11] (tEC) and is Hampshire County Council's response to the guidelines and recommendations of the Cold

[10] DECC - Cumulative installations confirmed on the Central Feed-in Tariff Register
[11] http://www.environmentcentre.com/

Weather Plan for England 2012: to reduce the number of people who die from the effects of cold weather and to reduce the impact of fuel poverty particularly during the winter months.

The programme has been available across the county since 2011-12, and works with vulnerable residents, particularly older people and those with children under 5 years to find ways to reduce fuel poverty, provide small emergency funding to alleviate crises and improve household living conditions, in particular heating and hot water facilities.

The Hitting the Cold Spots service provides information, advice and support to Fareham residents on keeping warm and well, increasing their energy and water efficiency, and saving money.

The advice line is a single point of contact for residents and professionals and is staffed by independent, professional and trusted energy advisors from tEC. Customers are referred or signposted to other sources of assistance where appropriate including the Hitting the Cold Spots Advisors.

HTCS advisors provide further 'hand-holding' support to vulnerable residents, often in the home. This support often includes:

- Assisting households to explore funding options for essential home energy efficiency improvements including heating and hot water system work
- Assisting households to access housing and heating benefits they may be entitled to
- Assisting households to access specialist help to resolve fuel and other debt issues
- Assisting households to look at energy usage and energy tariffs where appropriate
- Provision of temporary heating (oil filled radiators) to those without heating, at a nominal cost of £1 per radiator.
- Provision of a small grant to assist those struggling with the cost of winter

The Council's website is also used to promote energy efficiency, containing information on reducing energy consumption.

- **Switch Hampshire** – During 2013/14 the Council participated in Switch Hampshire, a project designed to enable residents to change energy suppliers with the benefit of support and bulk purchasing power. In total the County Council ran three Switch Hampshire schemes for residents, and a further scheme for small and medium enterprises (SMEs). Over 11,000 registrations were received from residents, either through the website or over the phone and the total saving for residents who switched with the scheme was over £314,000. The SME scheme saved local small and medium businesses over £53,000[12].

- **New Sustainable Homes** - The Council's Local Development Framework Core Strategy adopted in 2011 sets out the Government's national planning policy inclusion of: *'Achieving inclusive development that secures the highest possible resource and energy efficiency, a reduction in emissions, sustainable transport, resilience to climate change, conservation and enhancement of biodiversity and responding to business concerns in providing for mitigation and adaptation to climate change.'*

  As a result, the Council's policy strategic objective in this field is:
  'To safeguard and ensure the prudent use and management of natural resources, increase energy and water efficiency and encourage and promote the use of renewable energy sources to help adapt to climate change, and manage pollution and natural hazards, avoid inappropriate

[12] http://documents.hants.gov.uk/climate-change/switch-hampshire-final-report-jan2015.pdf

development in areas at risk of flooding, secure improvements in air and water quality and ensure effective waste management."[13]

In order to meet its strategic objectives the Council will, amongst other things explore the potential on major development sites to introduce a Combined Heat and Power system which could provide a platform for compatible development and existing uses to connect with, helping to meet the Council's renewable energy requirements.

There is a further commitment Welborne, the new settlement north of Fareham "will be an exemplar of energy efficient design; and aspire to meet lifetime homes standards, and demonstrate high levels of energy efficiency."

All new developments are expected to contribute towards the Fareham target of 12MW of renewable energy by 2020, dependent upon their size. This is set out as 1 dwelling or more and 500m^2 or more of non-residential floor space will be encouraged to contribute to the target, whilst major developments (250 dwellings or more or 5,000m^2 or more of non-residential floor space) should aim to maximise on-site renewable energy production and resource efficiency.

In addition the council is currently building 40 new homes which are due to be ready in spring 2015. A further 58 are due to be constructed by the end of 2016 which will include 6 built to the Passivhaus standard.

Part 2

2.1 Local energy efficiency ambitions and priorities

Our aim is to ensure that Fareham Borough residents are able to take best advantage of the funding and other initiatives available, to make continued energy efficiency improvements to the Borough's housing stock.

- **Green Deal & ECO targets**

  Since the beginning of Green Deal in January 2013 to December 2014 statistics from DECC[14] show that there were 596 Green Deal Assessments within Fareham Borough; this is equivalent to 12.5 assessments per 1,000 households and falls only slightly below the 13.0 per 1,000 rate of take-up for the South East as a whole. The statistics also show that there are currently 2 live Green Deal Plans within the Borough. Whilst this is a small number, it compares favourably with the other Hampshire Authorities and is higher than in 6 of the 12 Unitary Authorities in the South East of England. Within the South East of England there were 96 live Green Deal Plans at the end of December 2014 (the latest available figures). There were 26 Green Deal Home Improvement Fund vouchers paid by the Government within the Borough, and 2 Green Deal Home Improvement Fund vouchers paid. A total of 1,894 energy efficiency measures were installed under ECO to 1,545 homes. The number of ECO measures broken down by ECO obligation is shown in Table 5.

[13] http://www.fareham.gov.uk/pdf/planning/CoreStrategyAdopted.pdf SO12

[14] https://www.gov.uk/government/statistics/green-deal-energy-company-obligation-eco-and-insulation-levels-in-great-britainquarterly-report-to-december-2014

Table 5: Breakdown of ECO Installations

	Carbon Saving Target (CSO)	Carbon Savings Community (CSCO)	Affordable Warmth (HHCRO)	ECO measures per 1,000 households
Fareham	1,571	24	299	39.7
Hampshire	13,415	2,068	3,034	33.2

The Council is committed to the Solent Green Deal programme and will continue to promote its services as its primary activity to increase uptake of Green Deal and ECO within the Borough. Solent Green Deal is a partnership of a number of local Councils and as such brings the benefits and efficiencies of increased scale, enabling it to operate for the optimum benefit for residents.

Through the partnership with Solent Green Deal 85 households have enquired into Green deal or ECO, and 7 Green Deal Assessments have been carried out.

- ## Fuel poverty targets

Data on fuel poverty published in 2014 shows that 5.2% of Fareham households are in fuel poverty (2,441 homes). This figure varies from that calculated for the 2013 HECA Further Report; the method for calculating levels of fuel poverty has been changed by the Government and as such the figures are not comparable. However, the Council has a clear understanding of the profile of fuel poverty in the Borough including the households, properties and sub-areas to target and has identified where it needs to focus its efforts and resources in order to bring about a reduction. However it has not been possible to set an achievable target for reduction as the partnerships and funding streams for the Borough are still gaining momentum and profile.

The Environment Centre has been effective in its support to Fareham residents; between April 2012 and January 2015it has assisted 140 households. This has included:

- 39 households receiving HTCS Advisor home-visiting support
- 16 Households supported with heating &/ hot water system works
- 13 replacements or new central heating installations
- 3 minor repairs
- 22 households benefitted from small grant support
- 1 household assisted with significant fuel debt clearance

In total, Hitting the Cold Spots has brought over £41,500 of practical support to vulnerable Fareham residents through heating system repair and replacements and small grants to help pay energy bills.

- ## Zero Carbon Homes targets

Sustainable development requires new buildings to be constructed to maximise the use of renewable or low carbon energy sources. In order to achieve this, the Council will seek development to meet prescribed standards and levels identified within the Code for Sustainable Homes. In addition, the Council will seek a proportion of energy use to be from renewable or low carbon sources, particularly for large schemes to help meet the Partnership for Urban South Hampshire Sustainability Policy Framework target. This will be subject to viability testing and if necessary the Council will require developers to demonstrate where this prescribed standard cannot be achieved.

At present new homes are expected to be built to Code 4 and the Government's aspiration is that this will rise to Code 6 (or future equivalent), effectively zero carbon houses by 2016. Building Regulation requirements will guide the minimum carbon efficiency of new homes when the Code for Sustainable Homes is removed as the guide standard. The Council's policy for

delivering sustainable development and dealing with climate change is set out in Core Strategy Policy CS15 of our Local Development Framework and requires that all residential development now achieves Code 4 unless it can be demonstrated to be unviable, with Code 6 (or equivalent) being achieved from 2016. The Council has developed an Action Plan to deliver and monitor Policy CS15 with annual updates being made from March 2013.

Welborne provides the opportunity to deliver low and zero carbon energy. The size of the new garden town development and orientation of much of the site on a south-facing slope makes this an ideal location to maximise the potential for Passivhaus techniques. The Council expects a proportion of each phase of the development to meet this standard with an overall target of 10% of dwellings meeting the Passivhaus standard (or equivalent). The Eco-Opportunities Study considers a range of technologies that could be used to generate the energy demanded by new and existing buildings on site and an outline feasibility study[15] indicates that a district energy network is feasible and could possibly be economically viable.

The District Centre is particularly suitable for a district energy network because it will contain a mix of uses requiring heat throughout different times of the day and is also the area with the highest proposed density of development.

It may also be appropriate to install low and zero carbon energy technologies on individual buildings in some parts of Welborne. These could include solar thermal, photovoltaics and ground or air source heat pumps.

The Council is supportive of the creation of an Energy or Multi-Utility Services Company (ESCo / MUSCo) at Welborne as a way of supporting the delivery of innovative solutions to Welborne's energy needs.

- **Council Housing Improvement Plan**
  The Council is due to embark on replacing its properties' 1st generation of windows, commencing in 2015/16, ramping up expenditure during 2017 to 2021. Our boiler replacement programme continues on a reactive basis replacing older inefficient boilers where they are identified. Most boilers are less than 12 years old and a broad replacement programme is not necessary.

Over the coming years the Council plans to undertake the following energy efficiency improvement schemes to its housing stock:

Improvements to blocks of flats (24 Flats in each)

Seven blocks of flats will receive the following:

- Replaced cavity wall insulation with beaded type
- Fuel switch from electric to gas.
- New central heating and mixer Showers (10 dwellings to date)
- Low energy extractor fans
- New composite entrance doors
- New A-rated windows and balcony screen doors

This work has an estimated cost of £1,400,000.

[15] http://www.fareham.gov.uk/PDF/planning/welborne/welborneDENFeasibilityStudy.pdf

Window and door replacements

The average SAP Rating of the Council's housing stock was last calculated at 70 in 2009. Because this is a relatively high Rating there is no intention to introduce a target for further improvement. Where inefficient properties are identified they will be treated on an individual basis, subject to tenant approval.

The Council intends to investigate the possibility of funding of energy efficiency improvements to blocks of flats in partnership with Southampton City Council's ECO framework.

- ## Renewable Energy Targets

In 2009, the Government sets a target of increasing the amount of energy produced from alternative and renewable sources, such as solar, wind or water power from 2% to 15%. Whilst this is more of a national issue and the Borough Council has no influence in terms of development of new fuel technologies, it can, nevertheless, through its planning policies and the Local Development Framework, encourage their use. PUSH has set a target of 100MWe of energy from renewable sources in new developments, of which Fareham's contribution is 12MWe.

The Renewable and Low Carbon Energy Capacity Study[16] conducted for the Council by Parsons Brinckerhoff in August 2013 identified an estimated available resource for biomass within the Borough of 159.5GWhe and 1.6GWhth. This report also highlighted previous findings that within Fareham there are no supply led Combined Heat and Power and District Heating opportunities such as waste industrial or power station heat or Energy from Waste plants. One demand led opportunity, the proposed Welborne New Community, was identified with significant potential estimated at 66,000MWh/yr. The heat density and the density of commercial premises were noted as being low, reducing the viability of heat networks.

The same report identified the domestic building integrated capacity for solar PV in the Borough to be 23,589MW, assuming that 25% of dwellings are suitable, and a system size of 2kWp

- ## Energy Performance Certificates

The Council has Energy Performance Certificates for private rented accommodation it provides access to through its leasing arrangements. We will consider the added value of purchasing further certificates as a means of targeting future activities on the homes in most need.

- ## Minimum Standards in the Private Rented Sector

Although the private rental sector in Fareham accounts for less than 5% of all dwellings (approximately 2,240 properties) there is further scope to encourage landlords to invest in energy efficiency measures. Our research indicates that many local landlords have failed to take advantage of initiatives and therefore we need to re-double our efforts to pilot energy efficiency activity through our partnerships. The Council currently manages private leased properties and makes referrals to approximately a further 150 privately rented homes. We will be targeting our efforts on this group. In view of the comparatively low numbers in the private rented sector, we do not proposing to target our activity in any particular ward or area of the Borough.

The council will investigate its options for meeting the new DECC fuel poverty target of all privately rented properties meeting EPC Rating C by 2030 for "as many fuel poor homes as is reasonably practicable" and the intermediate targets of EPC E by 2020 and D by 2025.

[16] http://www.fareham.gov.uk/pdf/planning/local_plan/renewableenergystudy.pdf

- **Smart Meters**
  The European Union has legislated for smart meters to be rolled out by 2020 where it is cost effective to do so, and the UK Government expects that most households will have smart meters installed at no cost by their energy company between 2014 and 2019, although some energy companies are starting to install them now. We believe there will be significant interest from local households once the full scheme is fully rolled out by the fuel utility companies. Subject to the full roll-out of the national programme within the specified timescale, we are targeting that 20% of all Fareham households will have smart meters by December 2016. At the present time this target is likely to be affected by the delays in the national availability of long term compliant meters and communications infrastructure. We expect residents with smart meters to reduce their electricity consumption by 2.8% and their gas consumption by 2% in line with the Government's expectations[17].

- **New Community North of Fareham**
  The new sustainable development of Welborne north of Fareham is due to provide approximately 6,000 new homes by 2037 which will be required to make a significant contribution towards meeting renewable energy and carbon and energy reduction targets. The Area Action Plan will include a sustainability strategy to demonstrate how renewable energy might be provided together with an indication of how the development will contribute towards meeting other key sustainability objectives. Current activity includes investigating the feasibility of implementing an Energy Service Company (ESCO) or a Multi-Utility Service Company (MUSCO) providing an integrated approach to delivering energy efficiency and possibly telecommunications and water for the community.

- **Cheaper Local Energy Tariff**
  The Switch Hampshire project has now ended, however the connection between Fareham Borough Council and Hampshire County Council remains with supplier switching being recommended through the Big Community Switch[18].

- **Carbon Emissions**
  The latest data on carbon emissions published the Government show that the per capita CO_2 domestic emissions for Fareham have reduced by 17% between 2005 and 2012 from 5.8 tonnes to 4.8 tonnes. This progress is meeting the Council's targets for domestic carbon emission reductions and as such the Council will continue to undertake activities to continue this trend. The Council's target remains as a carbon emission reduction target of 20% on 2012 levels by 2020.

17 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276656/smart_meter_roll_out_for_the_domestic_and_small_and_medium_and_non_domestic_sectors.pdf

18 http://bigcommunityswitch.ichoosr.com/

HECA ACTION SUMMARY

ACTION	ACTIVITY	TIMING
i) LOCAL ENERGY EFFICIENCY AMBITIONS AND PRIORITIES		
	The Council is a partner within Solent Green Deal which is designed to make Green Deal and ECO funding available to residents through a trusted and cost efficient partner. http://www.solentgreendeal.org.uk. We will continue to promote its services as its primary activity to increase uptake of Green Deal and ECO within the Borough. Data on fuel poverty published by the Department for Energy and Climate Change (DECC) in 2014 shows that 5.2% of Fareham households are in fuel poverty (2,441 homes) https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2012. The areas of highest concentration of homes which are most deprived and most in fuel poverty are Fareham East, Fareham North West, and Fareham South. The Council's work towards reducing fuel poverty is set out in the Housing Strategy for the Borough of Fareham 2010 – 2015 http://www.fareham.gov.uk/PDF/housing/hsgstrat10-15.pdf which contains the strategic objective to promote and implement cost effective measures that will help reduce fuel poverty, achieve significant improvements in home energy efficiency and a reduction in carbon emissions. Carbon Dioxide (CO_2) emissions from domestic properties as calculated by (DECC) for 2005 to 2012 show that despite an increase in population the total domestic emissions have fallen by 9% from 260.5Kt to 236.6Kt, whilst per capita emissions have fallen by 17% from 5.8t to 4.8t. This rate of reduction is sufficient to meet the Council's carbon reduction target of 20% on 2012 levels by 2020 as set out in the Environmental Sustainability Strategy - Revised Action Plan (http://moderngov.fareham.gov.uk/documents/s3514/xpt-131007-r02-mch.pdf) and the National 80% reduction on 2012 levels by 2050 target.	On-going activities throughout 2015/16 and 2016/17
ii) MEASURES WE ARE TAKING TO RESULT IN SIGNIFICANT ENERGY EFFICIENCY IMPROVEMENTS OF OUR RESIDENTIAL ACCOMMODATION		
Green Deal and ECO	The Green Deal is designed to remove the barrier to householders carrying out energy efficiency improvements and the Council has joined Solent Green Deal in order to help residents access the programme and be assured of high quality services. The Council continues to refer enquiries to Solent Green Deal, whilst acting as a 'Green Deal Promoter'. The Council intends to investigate the possibility of funding of energy efficiency improvements to blocks of flats in partnership with Southampton City Council.	On-going activities throughout 2015/16 and 2016/17

Feed in Tariffs scheme	Under the Government's Feed in Tariff programme 4,240kWp of photo-voltaic solar generation capacity across 1,361 dwellings and 2kWp of capacity of micro combined heat and power across 2 dwellings. Domestic combined heat and power is still an emerging technology and the installation of two systems within a small authority area demonstrates Fareham's forward looking attitude The Council has installed a combined capacity of 11.06kWp of solar PV on two of its sheltered housing schemes at a total cost of approximately £38,000. These could collectively generate up to 10,800kW of electricity per year and have an installation payback from Feed In Tariff payments of approximately 25 years. During this time residents' communal electricity usage will be subsidised and additional payments will be received by the Council for electricity not used on site and exported to the National Grid. Ongoing monitoring of system performance will inform our decisions on increasing our investment in PV on council owned dwellings and buildings.	On-going activities throughout 2015/16 and 2016/17
Renewable Heat	Between April 2014 and January 2015 there were 11 Domestic Renewable Heat Incentive accredited installations within the Fareham Borough[19]; prior to this 10 domestic Renewable Heat Premium Payment vouchers were redeemed[20] although there is no information available from Government to show which technologies or capacities were installed under either programme. The council will continue to promote renewable heat opportunities through its partnership with Solent Green Deal	On-going activities throughout 2015/16 and 2016/17
Zero Carbon Homes	To ensure new homes are built to zero carbon standards by 2016 the Council Core Strategy Policy CS15 http://www.fareham.gov.uk/planning/local_plan/adoptedcorestrat.aspx requires that unless it can be demonstrated to be unviable dwellings will be built to meet the Code for Sustainable Homes (or equivalent) from 2016	2016
EPCs	The Council holds EPC data on rented properties for which it has a letting responsibility in both the private and public sector. The Council will investigate the added value to its energy efficiency promotional work of acquiring data for all EPCs in the Borough	2015
Minimum standards in the private rental sector	Fareham has an unusually small private rented sector and the Council will make new efforts to engage landlords in the current energy efficiency funding opportunities.	2015/16

[19] https://www.gov.uk/government/statistics/rhi-deployment-data-january-2015
[20] https://www.gov.uk/government/statistics/rhi-and-rhpp-deployment-data-november-2014

	The council will investigate its options for meeting the new DECC fuel poverty target of all privately rented properties meeting EPC Rating C by 2030 for "as many fuel poor homes as is reasonably practicable" and the intermediate targets of EPC E by 2020 and D by 2025.	
Council Housing Improvement Plan	The Council has programmes in place for the energy efficient retrofit of seven blocks of flats at a cost of approximately £1,400,000. In addition there ae plans in place to replace its housing's 1st generation double glazed windows through 2015/16 to 2021 at a cost of approximately £500,000 per year. The Council intends to investigate the possibility of funding of energy efficiency improvements to blocks of flats in partnership with Southampton City Council's ECO framework.	
Smart meters	The Council has a target for 20% of households to have smart meters installed by December 2016	2015/16
iii) MEASURES WE PROPOSE TO COST EFFECTIVELY DELIVER ENERGY EFFICIENCY IMPROVEMENTS IN RESIDENTIAL ACCOMMODATION BY USING AREA BASED/STREET BY STREET ROLL OUT.		
The Council's primary partner for energy efficiency projects and programmes is Solent Green Deal, a multi-authority partnership hosted by Portsmouth City Council. Solent Green Deal will continue to be the Borough's main conduit for enquiries, referrals and marketing activities. Our research has identified that Fareham East, Fareham North West, and Fareham South are the Wards with the highest proportions of residents in multiple deprivation and fuel poverty, and as such these areas will receive additional attention in our discussions with Solent Green Deal for targeting appropriate marketing and programmed work. Our single ECO CSCO eligible area will be included in this. Our small geographic area and high proportion of owner occupied properties have led us to the decision that smaller area based initiatives may be less valuable than in larger, more diverse authority areas, and as such we aim to work across the Borough as a single area.		On-going activities throughout 2015/16 and 2016/17 2015/16
iv) TIME FRAME FOR DELIVERY AND NATIONAL AND LOCAL PARTNERS		
We are working with Portsmouth City Council, Eastleigh Borough Council, Southampton City Council, Gosport Borough Council, Winchester City Council, East Hampshire District Council, Havant Borough Council, New Forest District Council, Test Valley Borough Council and Rushmoor Borough Council as the Solent Green Deal partners for our primary energy efficiency activities in the private sector. Our investigation of the added value of EPC data will inform our plans to deliver and quantify the investment required from residents and other funding sources such as ECO.		On-going activities throughout 2015/16 and 2016/17 2015/16

Signed:

Peter Grimwood
Chief Executive Fareham Borough Council

APPENDIX 1: Historic CERT Uptake of Cavity Wall and Loft Insulation Measures by Ward

CERT Uptake of Cavity Wall Measures by Ward

	Cavity Wall Insulation Uptake (Dwelling Count)							Cavity Wall Insulation Uptake (% of Dwellings with Cavity Walls)						
Ward	2008	2009	2010	2011	2012	Total	Average	2008	2009	2010	2011	2012	Total	Average
Fareham East	62	76	47	120	139	444	89	2%	3%	2%	4%	5%	15%	3%
Fareham North	93	73	78	108	133	485	97	3%	2%	3%	4%	4%	16%	3%
Fareham North-West	61	80	78	82	96	397	79	2%	3%	3%	3%	3%	13%	3%
Fareham South	66	58	48	115	100	387	77	2%	2%	2%	4%	3%	13%	3%
Fareham West	79	92	76	101	106	454	91	3%	3%	3%	4%	4%	16%	3%
Hill Head	91	99	96	115	111	512	102	3%	3%	3%	4%	4%	17%	3%
Locks Heath	44	103	113	102	98	460	92	2%	4%	4%	4%	3%	16%	3%
Park Gate	49	64	108	77	95	393	79	2%	2%	3%	2%	3%	12%	2%
Portchester East	111	122	155	168	184	740	148	2%	3%	3%	3%	4%	15%	3%
Portchester West	49	79	75	98	146	447	89	2%	3%	3%	4%	5%	17%	3%
Sarisbury	29	52	56	60	94	291	58	1%	2%	2%	2%	3%	10%	2%
Stubbington	94	86	105	61	75	421	84	3%	3%	4%	2%	3%	15%	3%
Titchfield	78	62	59	97	98	394	79	3%	2%	2%	3%	4%	14%	3%
Titchfield Common	57	65	73	95	150	440	88	2%	2%	2%	3%	5%	14%	3%
Warsash	61	87	65	71	73	357	71	2%	3%	2%	3%	3%	13%	3%

CERT Uptake of Loft Insulation Measures by Ward

	Loft Insulation Uptake (Dwelling Count)							Loft Insulation Uptake (% of Dwellings)						
Ward	2008	2009	2010	2011	2012	Total	Average	2008	2009	2010	2011	2012	Total	Average
Fareham East	39	43	46	124	175	427	85	1%	1%	1%	4%	5%	13%	3%
Fareham North	71	67	67	131	187	523	105	2%	2%	2%	4%	6%	17%	3%
Fareham North-West	54	61	51	116	166	448	90	2%	2%	2%	4%	5%	15%	3%
Fareham South	61	39	41	92	151	384	77	2%	1%	1%	3%	5%	12%	2%
Fareham West	95	68	79	178	231	651	130	3%	2%	3%	6%	8%	22%	4%
Hill Head	97	99	89	162	247	694	139	3%	3%	3%	5%	8%	21%	4%
Locks Heath	56	70	99	132	180	537	107	2%	2%	3%	4%	6%	18%	4%
Park Gate	43	36	74	82	172	407	81	1%	1%	2%	2%	5%	11%	2%
Portchester East	84	76	118	157	289	724	145	2%	2%	2%	3%	6%	15%	3%
Portchester West	48	64	76	103	220	511	102	2%	2%	3%	4%	7%	17%	3%
Sarisbury	36	31	36	76	107	286	57	1%	1%	1%	2%	3%	9%	2%
Stubbington	103	87	95	115	149	549	110	3%	3%	3%	4%	5%	18%	4%
Titchfield	74	48	57	112	215	506	101	2%	2%	2%	4%	7%	16%	3%
Titchfield Common	50	64	71	115	209	509	102	2%	2%	2%	3%	6%	15%	3%
Warsash	51	60	47	80	152	390	78	2%	2%	1%	2%	5%	12%	2%