

DARTFORD

BOROUGH COUNCIL

Home Energy Conservation Act (1995)

Dartford Home Energy and Fuel Poverty Action Plan 2017 – 2020

March 2017 Report

Summary

The economic and social benefits of reducing energy consumption are well documented and Dartford Council is committed to reducing energy consumption and improving energy efficiency in all residential properties in the Borough. In addition to inadequate heating and insulation standards, low household incomes and high energy costs are all factors linked to fuel poverty.

As community leaders, service providers and the local planning authority, we can help tackle these issues across the services we provide. This plan covering the period from 2017 – 2020 is our response to these challenges and expectations.

The plan summarises the national and legislative context of the borough's energy efficiency work. It examines the current situation, our strategic commitment and our direct environmental impact. The plan looks at examples of how we are already helping the community to be energy efficiency, for example through grants for insulation and renewable energy schemes.

The document contains an analysis of the Council's greenhouse gas emissions and the current position around energy and fuel poverty.

The Plan also sets out our vision for a more energy efficiency Dartford. It contains a series of actions for delivery between 2017 and 2020. It concludes by explaining how we will measure progress and outlines some more detailed examples of how we are already putting our approach into action. We will develop a new Home Energy Conservation Report in 2019 which will provide an update on the actions contained in this report.

The actions within the Plan includes some already listed for reporting on the Kent Environment Strategy (Cabinet Report 3rd March 2016 Minute 106) and the Kent Fuel Poverty Strategy and Action Plan (Cabinet Report 8th September 2016 Minute 47)

Why we need this Plan

The Council has a vital role to play in cutting energy consumption, tackling fuel poverty and reducing reliance on fossil fuels. Through our role as community leaders, service providers and as the local planning authority we can help to tackle these issues across the range of our activities. This plan is our response to these challenges and expectations.

The National Context

The Energy Company Obligations (ECO)

The Energy Company Obligation (ECO) was originally designed to sit alongside the Green Deal in situations where additional financial support was required for households. Funding for the Green Deal and the Home Improvement Fund was withdrawn (July 2015) and ECO continued to run in its current format until March 2017. Under ECO, energy companies are obliged to meet targets. The three Eco obligations have been:

- Carbon Emissions Reduction obligations (CERO)
- Carbon Saving Community Obligations (CSCO)
- Home Heating Cost Reduction Obligation (HHCRO) or Affordable Warmth.

In recent times the level of ECO funding has greatly reduced and eligibility criteria for ECO has changed too.

Following consultation there is an 18 month extension to ECO from April 2017 to September 2018 known as ECO2E. Some of the key changes are:

- Introduction of more simplified and targeted schemes around fuel poverty and low income
- Eligibility for certain measures extended to social housing EPC bands E, F and G
- Local Authorities to have a role in determining eligible homes via a 'flexible eligibility' mechanism
- Increase the number of solid wall insulation
- Rural delivery will be protected
- Deemed scores will be introduced in place of the current (SAP) methodology

Fuel Poverty Strategy for England – cutting the cost of keeping warm

In March 2015 the Government launched its new Fuel Poverty Strategy “Cutting the Cost of Keeping Warm: a new fuel poverty strategy for England”. This Strategy outlines the challenges and actions for the next 15 years to tackle fuel poverty and get help to those who need it most. The strategy sets a target for fuel poverty:

- To ensure that as many fuel poor homes as is reasonably practicable achieve a minimum standard of energy efficiency (Band C) by 2030.

There are 2 interim milestones which have been adopted:

- As many fuel poor homes as is reasonably practicable to Band E by 2020
- As many fuel poor homes as is reasonably practicable to Band D by 2025

Under the new definition of fuel poverty; Low Income High Cost, a household is considered to be fuel poor where:

- 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.

It is stated in the Fuel Poverty Strategy for England that the key challenges are:

- Improving energy efficiency standards in fuel poor homes
- Working together to help the fuel poor through partnership and learning
- Increasing effective targeting of fuel poor households
- Improving the support to certain high cost homes ie non gas or park homes
- Improving the reach of support to certain low income households – such as those who have health conditions linked to living in a cold home
- Tackling the financial burden of energy bills for those on low incomes
- Ensuring the fuel poor are able to get maximum benefit from a fair and functioning energy market
- Enhancing and improving understanding of fuel poverty

Dartford Borough Council has historically purchased EPC data from 'Landmark' to help analyse individual property data. On 28 March 2017 we received notification that this information would be available free of charge. There are still terms and conditions linked with the use of this data.

Where are we now ...as a Council Our strategic commitments

The current Corporate Plan 2014 – 2017 sets the strategic context for this plan. Three of the themes are relevant to this area of work:

- Health and well being
- Environment and sustainability
- Housing and stronger communities

Within these themes:

Aim: To reduce overall health inequality in Dartford and to provide for a rich and varied quality of life.

Objective: HW2: reduce overall health inequalities in the Borough

Aim: To promote an environment which is attractive, adapted to climate change and which provides a realistic choice of travel options

Objective: ET1: reduce carbon emissions

Objective: ET2: ensure that development in Dartford is sustainable, with high standards of design, layout and energy efficiency

Council Performance Indicators: The number of households taking part in the Green Deal home energy efficiency improvement programme

Aim: To facilitate quality, choice and diversity in the housing market, to create strong and self - reliant communities and deliver high quality services to service users

Objective: HS1: to work towards meeting the housing needs of the Borough

Objective: HS2: to provide high quality housing services and increasing the percentage of private rented stock which meets the Decent Homes Standard.

Kent and Medway Sustainable Energy Partnership (KMSEP)

The KMSEP is an executive level group providing overall direction to the establishment of a coordinated retrofit programme of sustainable energy efficiency measures and sustainability retrofitting for Kent and Medway.

The partnership comprises public, private and voluntary sector bodies including representation from all local authorities in Kent and Medway, water companies, registered housing providers in Kent, National Landlord Association, and the Kent Members of the South East Consortium.

Key aims of the partnership are:

- To ensure residents and businesses get a clear and consistent message about what funding and finance options are available to support retrofitting of energy efficiency measures.
- To tackle fuel poverty by drawing in as much Energy Company Obligation (ECO) and other funding to Kent as possible.
- To support our local network of Small/Medium Enterprises (SME's) to be 'Green Deal Ready' and take advantage of economic growth and opportunities in the sector.
- Reduce carbon emissions in Kent and Medway.

At the time of writing this report the group is reviewing its priorities for the coming years following a workshop in February 2017

Kent Environment Strategy

On 3 March 2016 Cabinet agreed that we work towards the targets in the revisited Kent Environment Strategy (KES) (minute 106)

The revisited Kent Environment Strategy includes the following three themes:

- Building the foundations for delivery
- Making best use of existing resources, avoiding or minimising negative impacts
- Towards a sustainable future

The second of these themes includes:

Priority 6: improve our resource efficiency such as energy, water and land and includes a sub priority:

- Improving the resource efficiency of our homes, reducing costs, tackling fuel poverty and improving health outcomes.

Kent Fuel Poverty Strategy and Action Plan

Kent Energy Efficiency Partnership (KEEP) was tasked by the Kent Housing Group (via the Private Sector Housing Sub Group) with developing a fuel poverty strategy for Kent. This Strategy and Action Plan outlines the key issues and a series of areas of work with the aim of helping people in Kent out of fuel poverty and into affordable warmth. The Strategy had been developed and consulted on and subsequently an Action Plan workshop was held in November 2016 with partner agencies

Our Environmental Performance

Greenhouse Gas Emissions

The Council has produced and published an annual Greenhouse Gas Emission Report.

The table below relates to the period 1 April 2008 to 31 March 2016 and shows a significant reduction in emissions over the reported period. These are reported in tonnes of carbon dioxide equivalents (CO₂e) and have been worked out using the Ricardo – AEA UK Government Conversion Factors for company reporting.

The following tables use a standard template:	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Scope 1*	1468	1175	1056	866	1403	1261	1183	1231
Scope 2 **	1261	1468	782	1002	1049	944	927	703
Scope 3 ***	851	884	718	721	118	113	106	89
Total gross emissions	3580	3527	2556	2502	2570	2318	2216	2023
Carbon offset	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Green tariffs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total annual emissions	3580	3527	2556	2502	2570	2318	2216	2023

Reduction compared to prev year %	n/a	1.5%	27.5%	2.11%	-2.71%	9.8%	4.70%	9%
Reduction compared to base year %	n/a	1.15%	28.60%	30.1%	28.21%	35.2%	38.29%	43%
Breakdown of Scopes:	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Scope 1*								
Gas	1434	1142	1023	836	940	872	799	814
Fleet vehicles	34	33	33	30	31	28	23	18
Emissions from outsourced activities or leased assets	n/a	n/a	n/a	n/a	432	361	361	399
Scope 2 **								
Electricity	1261	1468	782	1002	1049	944	927	703
Scope 3 ***								
Business travel/staff mileage	n/a	n/a	n/a	48	36	35	27	28
Transport emissions from fuel use	n/a	n/a	n/a	87	n/a	n/a	n/a	n/a
Emissions associated with the production of electricity	n/a	n/a	n/a	85	82	78	79	61
Emissions from outsourced activities or leased assets	n/a	n/a	n/a	501	n/a	n/a	n/a	n/a

*2016/15, 2015/14, 2014/13, 2013/14 and 2012/13 figure includes fuel used from contractors waste and recycling figures – 2011/12 this had been included in Scope 3.

**figures have been updated to reflect a change to the UK electricity generation conversion 2008-2012 inclusive

***figures incorporate emissions from UK electricity transmission and distribution and for 2008-2012 inclusive had included waste and recycling contractor figures

Changes in Emissions

The gas consumption figures have been analysed and the properties showing unusual data queried. A new utility contract has been negotiated during the report period and higher estimates have been received. The Council is querying some of the data.

In addition solar PV systems have been fitted to the communal supply in some sheltered housing units along with some of its housing stock too. LED sensors have been placed on a number of sheltered housing units.

Employee numbers are lower and there had been a gradual decrease in mileage claims by members of staff. During the reporting period there has been a very small increase in carbon tonnage associated with staff travel mileage.

The Council continues to use the Systemslink software for gas and electricity billing.

Details about the Solar PV systems are included later in this report

We are committed to help government meet its carbon reduction targets set out in the Climate Change Act 2008. The current Kent performance on emissions (industry, domestic and transport) towards the overall 2020 target (60% by 2030) is to reduce carbon dioxide emissions by 34% based on a 2005 baseline. The total reduction for Dartford in CO₂ from 2005 – 2014 is 242.5 kt CO₂.

Local Authority CO₂ emissions estimates 2005-2014 (kt CO₂)

Year	Kent Per Capita Emissions (t)	Dartford Per Capita Emissions (t)
2005	9.5	9.6
2006	9.6	9.6
2007	9.1	9.1
2008	8.4	8.9
2009	7.3	7.6
2010	7.7	7.7
2011	7.0	6.9
2012	6.9	7.1
2013	6.7	6.7
2014	6.0	6.1

Data from the BEIS Local and Regional CO₂ Emissions Estimates for 2005-2014
<https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014>

Our Leadership Role

As a service provider and community leader we do a range of things to encourage and help residents and businesses. These include:

- Promoting collective switching schemes/energy deal for residents
- Promoting home energy efficiency measures
- Ongoing programme of planned works on the council housing stock including boilers, external wall insulation
- Extension of handypersons scheme for hospital discharge

Where are we now As a District

Fuel Poverty

Page 3 of this report gives a background to the Fuel Poverty Strategy for England – cutting the cost of keeping warm

Delivering Affordable Warmth - A Fuel Poverty Strategy for Kent

Kent Council's developed, consulted on and published Delivering Affordable Warmth – A Fuel Poverty Strategy for Kent to demonstrate commitment to reducing the negative impacts of fuel poverty and cold homes on the health and well-being of the County's residents. The Strategy and underlying Action plan progressed through Kent Energy Efficiency Partnership (KEEP) recognised the importance of partnership working with a wide range of organisations to identify resources to develop a range or effective interventions that will maximize the impact on fuel poverty levels across the County. An Action Plan workshop was held in late November 2016 to bring together public, voluntary and community sector organisations to develop the action plan further, and get a better understanding of the activities already happening in Kent and how we can enhance/contribute/link up to ensure we reach and assist vulnerable residents and tackle the wider inequalities of health.

Local Fuel Poverty Statistics

Dartford	2014 LIHC
Estimated number of households in the borough	41425
Estimated number of households in fuel poverty	2989
% fuel poor	7.2%

Data from BEIS Fuel Poverty Statistics 2014

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

As at 2014, fuel poverty levels in Dartford are below the Kent average of 8.9% and South East average of 8.3%

This table shows the Lower Super Output Areas (LSOA) in Dartford that are above the Kent average of 8.9%

LSOA CODE	LSOA NAME	LA CODE	Estimated number of households	Estimated number of fuel poor households	Proportion of households fuel poor %
E01024154	Dartford 001c	E07000107	530	47	8.9
E01024179	Dartford 002d	E07000107	1252	117	9.3
E0 1024181	Dartford 003b	E07000107	516	54	10.5
E01024176	Dartford 004b	E07000107	813	76	9.3
E01024177	Dartford 004c	E07000107	620	56	9
E01024178	Dartford 004d	E07000107	646	60	9.3

E01024161	Dartford 005b	E07000107	826	104	12.6
E01024164	Dartford 005e	E07000107	826	104	12.6
E01024165	Dartford 009a	E07000107	697	65	9.3
E01024166	Dartford 009b	E07000107	642	64	10.00
E01024167	Dartford 009c	E07000107	797	75	9.4

Data: Table 2

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

Estimate of the numbers and percentage of dwellings meeting the key indicator criteria assessed by the Housing Stock Models and Database by tenure for Dartford. This process uses a variety of data sources, calculations and models.

Indicator		Private Sector Stock				Social Stock	
		Owner occupied		Private rented		No.	%
		No.	%	No.	%		
No of dwellings		27601	-	6633	-	6178	-
HHSRS category 1 hazards	All hazards	222	8%	704	11%	242	4%
	Excess cold	658	2%	283	4%	111	2%
	Fall hazards	1828	7%	558	8%	124	2%
Disrepair		1176	4%	565	9%	4	0%
Fuel poverty 10%		1854	7%	713	11%	451	7%
Fuel poverty (low income high costs)		1519	6%	971	15%	414	7%
Low income households		5036	18%	2371	36%	414	7%

NB the information on hazards refers to the number of dwellings with a hazard of the stated type. Because of this there is likely to be some overlap – for example, some dwellings are likely to have excess cold and fall hazards but this dwelling would only be represented once under ‘all hazards’. The number of dwellings under ‘all hazards’ can therefore be less than the sum of the excess cold plus fall hazards.

Table from: BRE Dwelling Level Housing Stock Modelling and Database for Dartford Borough Council (October 2015)

The BRE dwelling level housing stock modelling and database for Dartford Borough Council (October 2015) shows various details:

- Fuel Poverty Low Income and High Cost definition – the highest concentrations are in the Castle, Swanscombe and Newton and Bean and Darenth wards
- In Longfield, New Barn and Southfleet, particularly in New Barn, levels of fuel poverty are relatively high under the 10% fuel poverty definition, but relatively low under the Low Income High Costs definition. This suggests that

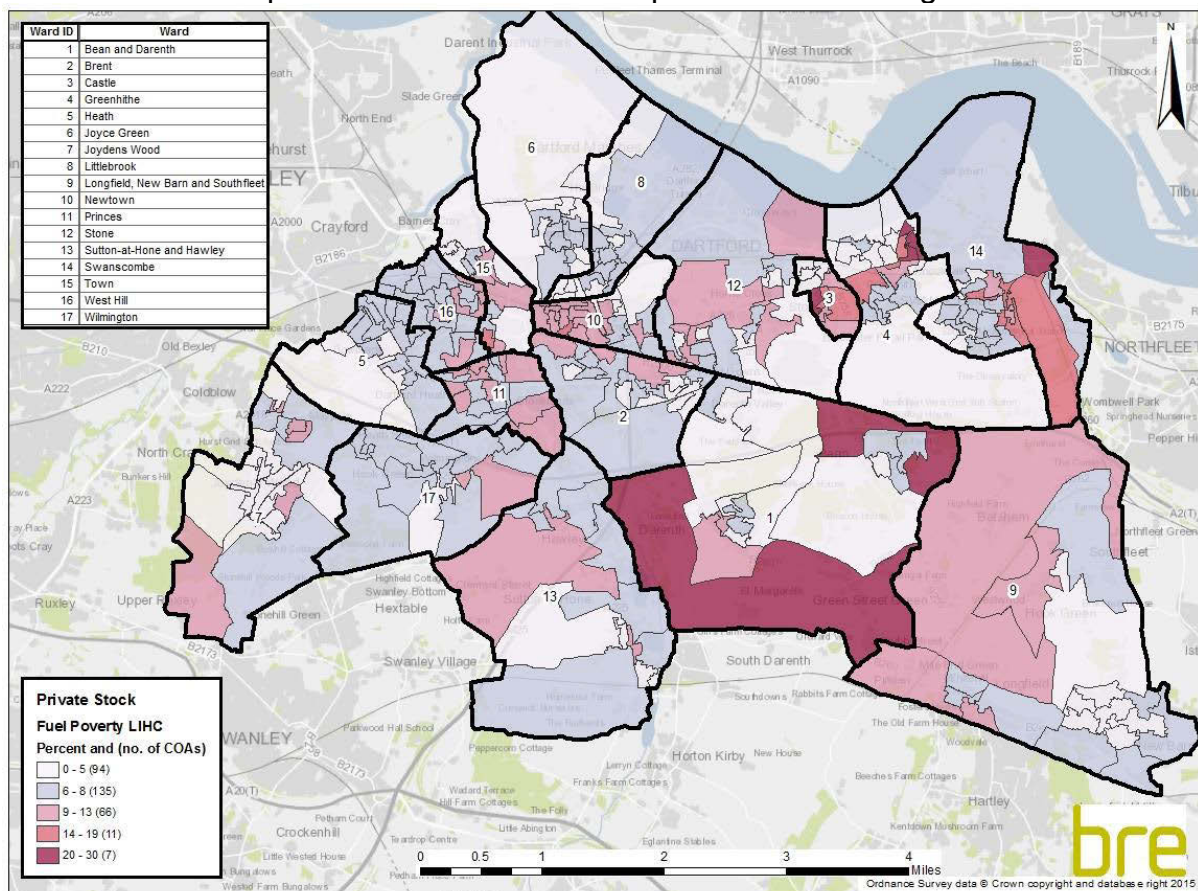
occupiers of properties in these areas may not be on low incomes and have larger properties that cost more to heat.

- Higher levels of fuel poverty are seen in the private rented sector in and around Dartford and in Western wards of the Borough when compared to the private sector as a whole. This suggests that in those areas the private rented sector in fuel poverty have relatively low income whilst living in properties that have relatively high heating costs.

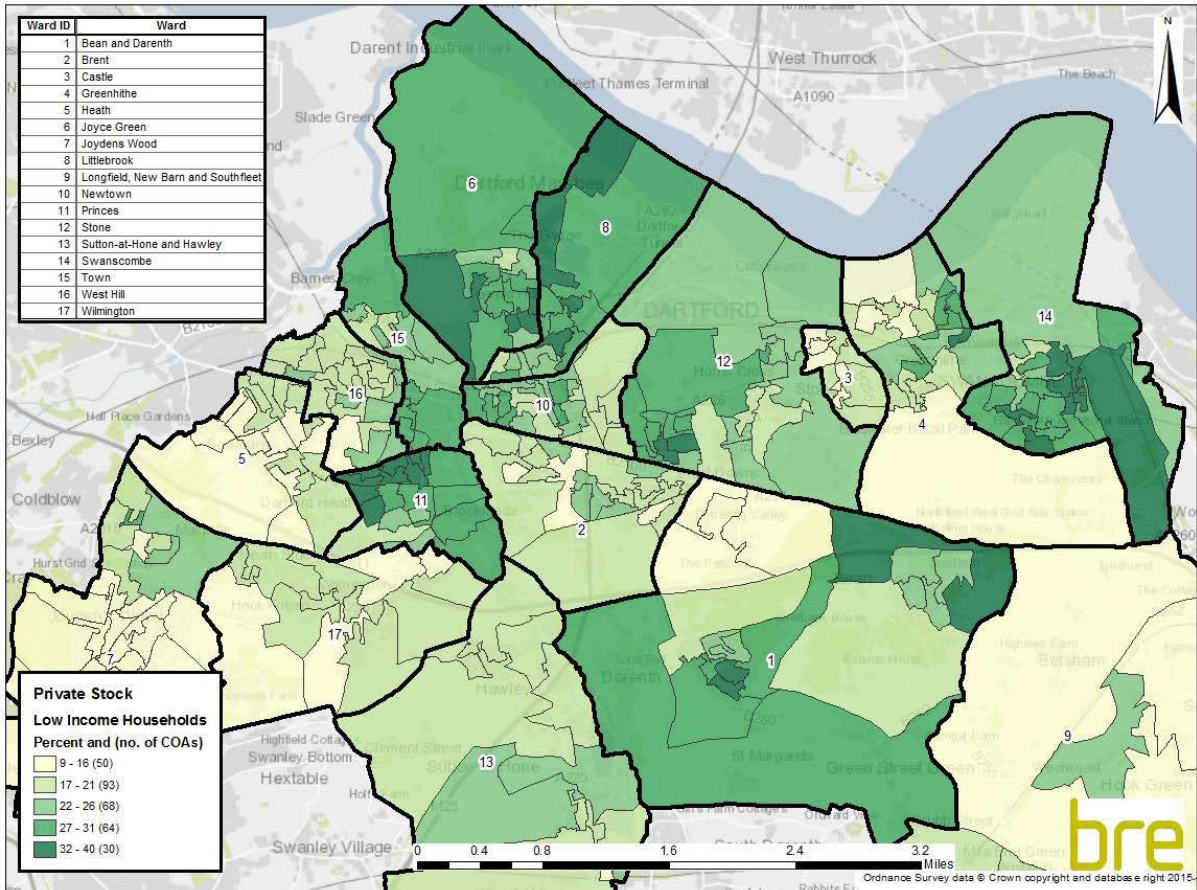
Included at the end of this report are several maps showing fuel poverty or low income areas in relation to private sector dwellings. The BRE also provides detailed ward level information showing a breakdown of stock and details around HHSRS, Excess Cold, Low Income Households, Fuel Poverty Low Income High Costs

Some of the other key points from the BRE Housing Stock Condition Report include the likely composition of a fuel poor household under the Low Income High Costs Definition:

- 76% of fuel poor households have an EPC rating of E to G
- 20% of fuel poor households are rural
- 82% of fuel poor households live in houses as opposed to flats or bungalows
- A third of fuel poor households are found in a fifth of the most deprived households
- Fuel poverty is spread fairly evenly between regions, including London
- 34% of fuel poor households contain a person with a long term illness or disability
- 10% of fuel poor households contain a person over the age of 75
- 20% of fuel poor households contain a person under the age of 5

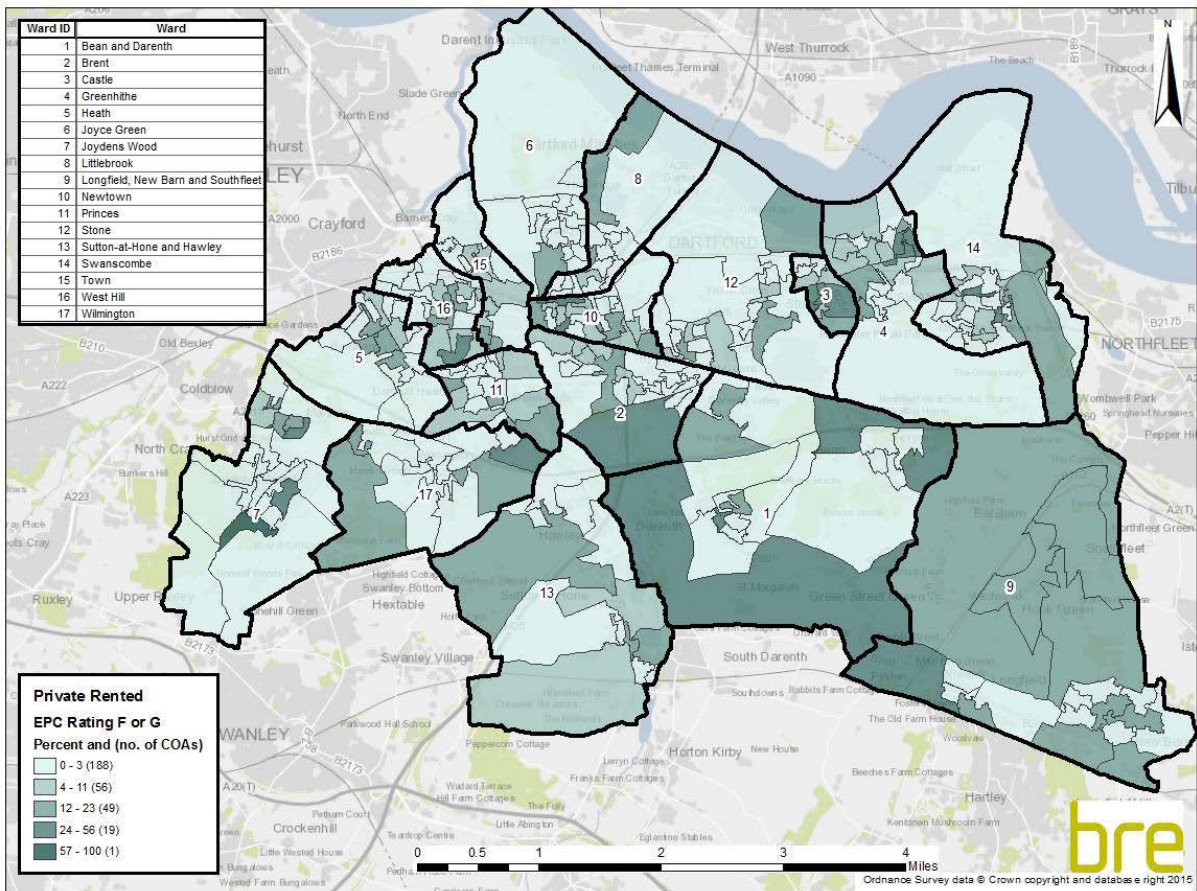


Percentage of private sector dwellings in Dartford occupied by households in fuel poverty – Low Income High Costs definition. BRE Dwelling Level Housing Stock Modelling and Database for Dartford Borough Council (October 2015)



Urban Dartford households with low income – private sector

Map: BRE Dwelling Level Housing Stock Modelling and Database for Dartford Borough Council (October 2015)



Distribution of dwellings with F or G EPC ratings in the private rented stock

Map: BRE Dwelling Level Housing Stock Modelling and Database for Dartford Borough Council (October 2015)

Energy Company Obligation

Dartford Borough Council has actively promoted ECO over the years and will get involved in 'Flexible Eligibility' when full details are known.

ECO measures by ECO obligation up to end of December 2016		
ECO type	ECO measures installed in Dartford	ECO measures installed in Kent
CERO	940	15441
CSCO	276	6412
HHCRO	279	6926
Total	1495	28779

Data from : <https://www.gov.uk/government/statistics/household-energy-efficiency-national-statistics-headline-release-march-2017> (table 2.2.1)

With the changing focus on the next round of the Energy Company Obligation (ECO) starting in April 2017 to identifying and reaching fuel poor and vulnerable people living in a cold home, the Council will be working to develop a Statement of Intent around the new Flexible Eligibility section of ECO. The Statement of Intent will focus on:

- People living in fuel poverty, particularly those not in receipt of benefits
- People living on a low income and vulnerable to the effects of living in a cold home using Nice guidelines to cover:
 - Cardio vascular problems
 - Respiratory problems
 - People with mental health issues
 - People with a disability
 - Those moving in and out of homelessness
 - People attending hospital due to a fall
 - People with suppressed immune systems (ie cancer treatment etc.,)
- Using existing EPC data
- Targeting lower super output areas (LSOA) to improve the energy efficiency of properties of our more vulnerable residents

Renewable Energy

On 1 April 2010 the Government introduced the Feed in Tariff (FIT) whereby any electricity produced over and above the electricity usage level of the property to which the Solar PV is fitted can be sold back to the national grid at a level set by the Government. This agreed figure has changed a number of times since FITs commenced. Once your system has been registered, the tariff levels are guaranteed for the period of the tariff (up to 20 years) and are index linked.

FIT installations on the Central FIT register for Dartford Borough Council area from 1 April 2015 to 31 March 2017 are shown in the following table:

Technology	Domestic installation	Domestic installation installed	Commercial	Commercial installation	Industrial installation	Industrial installation installed	Community	Community installation	Total installation	Total installed capacity
Photovoltaic	162	0.510	4	0.151	0	0.000	1	0.041	167	0.702
Total installed capacity (MW)		0.510		0.151		0.000		0.041		0.702
Total installations	162		4		0		1		167	

Data from Ofgem report viewer:

<https://www.renewablesandchp.ofgem.gov.uk/Public/ReportManager.aspx?ReportVisibility=1&ReportCategory=0>

The Council has installed a number of Solar PV systems on Council properties in the Borough – both corporate buildings and on its own housing stock. The aim of the Solar PV is to reduce the energy expenditure of the affected tenants and positively impact on their fuel poverty and to contribute towards meeting the Government targets.

Excess Winter Deaths

Excess winter deaths (EWD) occur mostly in older populations and can be attributed to a combination of factors namely, pre-existing medical condition, cold home environment, poor uptake of flu vaccination etc

England has higher rates of EWD than some countries with much more severe winters. The UK also performs poorly in relation to other Western European countries for fuel poverty, homes in a poor state of repair and poor insulation

Excess Winter Deaths 2015/16

There were an estimated 24,300 excess winter deaths (EWDs) (provisional) in England and Wales in the 2015/16 winter period. This represents an excess winter mortality index of 15%; that is 15% more deaths occurred in winter compared to the non-winter months. The number of EWDs has almost halved since the 2014/15 period and is closer to the 5-year average (years 2011/12 to 2015/16)

The South East is one of the lowest Regions in England and Wales with 14.7% EWDs (2015/16).

At the time of writing this report, data for Kent/Gravesend is currently not available. However, the council closely monitors these figures and looks at ways to ensure that provisions are in place for those vulnerable households who are most at risk.

Date from Office for National Statistics 2016

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2015to2016provisionaland2014to2015final>

At the time of writing this report, 2015/16 data for Kent/Dartford is currently not available. Public Health Kent recognizes the link between healthier homes for

healthier people and provides Kent authorities with Winter Warmth funding to assist vulnerable residents with certain health conditions to achieve affordable warmth.

Winter Warmth Funding from the 2015 – 2017 budgets have assisted a further 9 properties benefitting from the Winter Warmth funding available in the form of repayable assistance to help install new boilers and heating systems.

Where we want to be by 2020 – Dartford Home Energy and Fuel Poverty Action Plan 2017 – 2020

Actions to Improve Energy Efficiency in Residential Properties in the Borough 2017 – 2020

A Raising Awareness		
NUMBER	TARGET	DATE
A1	Provide information and presentations to Landlords including Landlord Forum and Landlord events	Ongoing to 2020
A2	Promote government and other grants and discounts for the installation of energy efficiency measures and renewable energy/alternative technology systems	Ongoing to 2020
A3	Encourage Dartford Borough council (DBC) officers when visiting homes to share information if energy efficiency measures are required	Ongoing to 2020
A4	Provide information to Members to keep them informed around energy efficiency projects	As necessary
A5	Complete presentations with external groups on request	As necessary
A6	Promote Smart Metering in the borough	Ongoing to 2020
A7	Promote the Priority Services Register to DBC officers and residents	Ongoing to 2020
B Schools and Education		
B1	Identify groups to liaise with to promote the importance of energy efficiency	Ongoing to 2020
C Gathering Information		
C1	Develop and use systems that enable the targeting of measures for vulnerable residents living in cold homes	2017 onwards
C2	Use the information available in Energy Performance Certificates (EPC) to provide a focus for additional energy efficiency works and map potential areas for energy efficiency measures	2017 onwards
C3	Continue to identify existing council housing stock that require energy efficiency measures and keep data up to date following improvements	Ongoing to 2020
C4	Investigate data sharing processes and use of Kent Integrated Data Set	2017 onwards
C5	Use the data from the Private Sector Stock Condition Survey to develop schemes and	2017 onwards

	projects	
D Providing Information		
D1	Provide residents with information about energy efficiency measures and grants using media opportunities	2017 onwards
D2	Use the website and social media to raise the profile and increase understanding of energy efficiency and renewable technologies and ensure information is kept up to date	Ongoing
E Improving the Housing Stock		
E1	Develop activities to improve energy efficiency in private rented sector	Ongoing to 2020
E2	Continue to look at the feasibility of energy efficiency measures in Sheltered Housing Accommodation	Ongoing to 2020
E3	Continue the programme of planned works in the Council's housing stock linking with funds available	Ongoing to 2020
E4	Continue to investigate new energy efficiency products being introduced and undertake trials where appropriate	Ongoing to 2020
E5	Work in partnership with Kent and Medway Sustainable Energy Partnership to deliver energy efficiency measures. Continue to work in partnership with Framework providers	Ongoing to 2020
E6	Ensure that various funding assistance is available to increase energy efficiency measures in the home	Ongoing to 2020
F Engaging with Partners		
F1	Investigate input from external agencies from health and care organisations	2017 -2020
F2	Be members of Kent wide partnerships for energy efficiency, affordable warmth and climate change	Ongoing
F3	Work alongside other agencies to develop new projects for example through Clinical Commissioning Groups (CCG), Distribution Networks, Public Health	2017 onwards
G RENEWABLE ENERGY		
G1	Promote renewable energy and innovative/alternative technologies	Ongoing
G2	Support the installation of renewable technology in Council buildings (including housing stock) and monitor progress	Ongoing
H FUEL POVERTY		
H1	Improve energy efficiency standards in	2017 onwards

	properties where people on low incomes or who are vulnerable to the cold live	
H2	Promote collective switching campaigns/energy deal to residents in the borough	Ongoing to 2020
H3	Work in partnership with other agencies including health to identify as many fuel poor homes as reasonably practicable by targeting F and G energy rated homes including private rented sector	Ongoing to 2020
H4	Work in partnership to reach and support certain high energy cost homes such as non gas properties or park homes	Ongoing to 2020
H5	Develop a referral process for low income or vulnerable people living in cold homes	Ongoing to 2020
H6	Develop appropriate activities from the Kent Fuel Poverty Strategy and Action Plan	Ongoing to 2020
I IDENTIFY NEW RESOURCES		
I1	Identify existing funding available for energy efficiency work and where appropriate take action	Ongoing to 2020
J PLAN AND MONITOR ACTIVITIES		
J1	Report on and revise the Council's action plan every two years	2019
J2	Review activities undertaken on behalf of Dartford Borough Council	Ongoing to 2020

**Dartford Home Energy Conservation Act (1995)
March 2017 Progress Report
Examples of our successes**

Kent Warm Homes Scheme

Since March 2012, the KMSEP has run the Warm Homes initiative to provide a clear and subsidised offer to residents for making energy efficiency improvements to their homes. Since October 2014 a Retrofitting Framework was procured with 15 service providers to offer subsidised heating, loft and cavity wall insulation to residents, taking advantage of available Energy Company Obligation (ECO) funding (HHCRO/CERO/CSCO) and public health funding to reduce the cost of these measures for residents. The framework is available for use by all local authorities in Kent and Medway

To date the Warm Homes initiative and its Retrofitting Framework has:

- Supported 2220 energy measures across 2075 homes in Kent and Medway
- Utilised £1.6 million ECO grant funding and £1.3 million public health and wider government funding to make energy measures as affordable as possible
- Saved residents an estimated £8.8 million on their energy bills across the lifetime of these measures
- Saved an estimated 38,0000 lifetime tonnes of carbon dioxide across Kent and Medway

An independent county wide Warm Homes Call Centre has also been procured with the support of the Kent Energy Efficiency Partnership (KEEP) and is delivered by Shepway Lifeline. To date, the Warm Homes call centre has processed 1235 referrals for residents in to the Warm Homes initiatives.

Since the last HECA report there have been a number of changes to the ECO schemes and funding available which has impacted on the number of installs taking place. There have also been a number of changes in providers of the different energy efficiency schemes offered through Warm Homes. The figures below purely show the number of measures installed through the Warm Homes scheme and don't include measures installed through other schemes offered in the Borough (Warmer Streets) and measures installed through residents making arrangements directly with their utility company or other means. Dartford has historically actively promoted different energy efficiency schemes to their residents therefore a number of properties have already had some of these simple measures already installed.

Aran Services	Tenure	Number of Installs	Eco Funding	Lifetime Savings £	Lifetimes CO2 (kg)
Loft insulation	Private rented	1	384.47	5670.00	23520
Loft insulation	Owner occupied	4	1781.28	47124.00	185690
Cavity wall	Owner occupied	13	7816.03	102900.00	435960
Loft insulation top ups	Private rented	1	697.70	630.00	2310
Loft insulation top ups	Owner occupied	11	2874.22	9240.00	34860

Polyramek	Tenure	Number of installs	Eco funding	Lifetime savings	Lifetime CO2 (kg)	Warmer streets	Winter warmth
Boiler installs	Private rented	1	1346.00	1380.00	713.16	1017.00	
	Owner occupied	5	1508.76	6420.00	33176.40	801.60	
Aran							
Boiler installs	Private rented						
	Owner occupied	5	1218.24	4500.00	23254.80		9526.05

Through the Winter Warmth process we have installed boiler replacement systems and other heating related measures in the last 2 years.

Kent Warm Homes Phase 3

From April 2017 the Warm Homes initiative will continue to take advantage of ECO funding (CERO/AWG) and wider partner funding to provide subsidised energy measures to residents across Kent and Medway

Warmer Streets Project

Warmer Streets was a £4m energy efficiency improvement programme using Green Deal Communities funding. The programme was led by Dartford Borough Council in partnership with Sevenoaks District Council and Kent County Council. It was initially due to run over a 12 month period but was extended for a further period and the project officially closed in September 2016.

The Warmer Streets Scheme offered residents funding towards different energy efficiency measures including loft insulation with a focus on External Wall Insulation for hard to treat properties – solid wall properties fall into this category. External Wall Insulation can be expensive to install, however the impacts it can have is making the home warmer and healthier to live in. In addition fuel bills are reduced. Kent and indeed Dartford has a high proportion of solid wall properties.

In an attempt to quantify the impacts of external wall insulation on household's energy consumption and the impacts these improvements have had on an individual's living conditions and health the Measurement, Monitoring and Evaluation project (MME) was established.

The MME project targeted Warmer Streets participants and a number of properties now have monitoring equipment installed and residents are completing a questionnaire on a regular basis. Data is still being collected.

The figures showing the installation of measures in Dartford via the Warmer Streets project are shown below:

Council Housing Stock	Main measure	Further measures installed
External wall insulation	88	0
Loft or rafter insulation (including loft hatch)	34	7
Cavity wall insulation		1

Owner occupied properties	Main measure	Further measures installed
Heating controls	0	9
External wall insulation	263	0
Cavity wall insulation	12	6
Gas fired condensing boiler	18	57
Hot water cylinder insulation	1	6
Loft or rafter insulation (including loft hatch)	67	76
Windows and doors	1	0
Cylinder thermostat	0	1

Privately rented stock	Main measure	Further measures installed
Heating controls	0	
External wall insulation	8	
Cavity wall insulation	0	
Gas fired condensing boiler	0	3
Hot water cylinder	0	1

insulation		
Loft or rafter insulation (including loft hatch)	7	1

In addition to works within the Dartford borough, the Warmer Streets scheme extended to offer insulation measures to other properties throughout Kent local authorities.

Collective Switching – Kent Energy Deal

A successful bid to the Department of Energy and Climate Change ‘Cheaper Energy Together’ fund provided support to develop the scheme which now operates across 5 local authority areas in Kent including Dartford. Dover District Council acts as lead for the Scheme.

Dartford has actively promoted Kent Energy Deal since April 2013 and takes part in 3 campaigns and auctions each year. Kent Energy Deal works in partnership with IChoosr who was successful in the tendering process. We promote the campaigns through our website, leaflets drops, drop in session, social media and attending different meetings. We offer an on line facility for people to register themselves and also a registration service for those residents without internet access who are often the most vulnerable residents.

The tables below show the number of registrants each auction, the number of switchers and the sum of saving per auction.

Dartford					
	Average saving	Sum of saving	Number of switchers	Registrants	Switching % rate
June 13	£83.90	£4614.35	55	686	8%
Nov 13	£105.96	£211.92	2	122	2%
Feb 14	£209.38	£17588.09	84	299	28%
June 14	£189.70	£189.70	1	50	2%
Oct 14	£221.72	£10642.46	48	144	33%
Feb 15	£280.97	£21354.02	76	282	27%
May 15	£263.44	£6322.57	24	159	15%
Oct 15	£246.20	£16741.59	68	229	30%
Feb 16	£297.95	£18476.38	65	202	32%
May 16	£320.87	£24706.71	77	250	31%
Oct 16	£152.47	£6556.39	43	191	23%
Total		£127404.18			

There are other people who registered and switched through Kent Energy Deal and some of these may also be within the Dartford Borough area but are not included in the above figures

Renewables and Innovative Technology

Solar Photo Voltaic Panels (Solar PV) – Dartford Borough Council

The Council has installed a number of Solar PV systems on Council properties in the Borough – both sheltered housing schemes and general housing stock. The aim of the Solar PV is to reduce the energy expenditure of the affected tenants and positively impact on their fuel poverty and to contribute towards meeting the Government targets.

We have 3 meter providers: Orsis, Passiv and ASL meters and all solar PV Systems are monitored by a Contractor. The data for our whole solar Estate:

	Production	CO2/kg	CO2/tonnes
Whole solar estate 1/4/14 – 31/3/16	359128.80	188398.97	188.40
Whole solar estate 1/4/16 – 31/3/17	350435.27	183838.34	183.84

Data supplied by Low Carbon Exchange

Council Sheltered Housing Accommodation Solar PV systems

Property	Production		Co2/KG		CO2/tonnes	
	1/4/15- 31/3/16	1/4/16 – 31/3/17	1/4/15 – 31/3/16	1/4/16 – 31/3/16	1/4/15 – 31/3/16	1/4/16 – 31/3/16
Mill Court	7852.823	9501.634	4119.59	4984.56	4.12	4.98
Warren Court	26273.018	25382.195	13782.83	13315.50	13.78	13.32
Lenderyou Court	21947.386	21164.609	11513.60	11102.95	11.51	11.10
Wardona Court	29070.057	28479.654	15250.15	14940.43	15.25	14.94
Thatcher Court	26661.11	20959.611	13986.42	10995.41	13.99	11.00
The Homestead	10542.74	9488.727	5530.72	4977.79	5.53	4.98
Total	122347.13	114976.43	64183.31	60316.64	64.18	60.32

Data supplied by Low Carbon Exchange

In addition to the solar PV at the Council's Sheltered Housing Accommodation, a number of LED sensors have also been placed at the sheltered housing units. The Council has installed a number of solar PV systems on Council housing stock in the Borough:

Road	Property numbers	Production 1/4/15 – 31/3/16	Production 1/4/16 – 31/3/17
Willow Road	73	109801.401	109821.447
Elm Road	5	2325.405	2273.005
Hawthorn Road	7	12224.14	12213.99
Maple road	2	2126.942	2095.41
Laurel Close	5	10276.81	10240.29
Beech Road	3	1150.937	1119.768
Cedar Road	1	2395.993	2370.035
Chestnut Road	6	3798.379	3721.706
Mead Road	2	1980.683	2273.128
Crusader Court	31	57566.581	54755.284
Olive Avenue	8	16222.53	17410.601

Data supplied by Low Carbon Exchange

A number of new Solar PV systems have been installed on Council Housing properties recently. Annual production data is not currently available, however here are the property numbers:

Road	Property numbers
Watchgate, Dartford	18
Axtane, Hook Green Road, Southfleet	6
Banbury Villas, Hook Green Road, Southfleet	14

National Energy Action (NEA) Technological Innovation Fund

The purpose of this short project was for National Energy Action (NEA) to test a variety of energy efficiency technologies in the home to show how they might help make homes warmer and more affordable to heat. For Kent residents (some of whom were Dartford residents) the technologies included a heating control device (Co Control) and a radiator fan (Radfan). Although there were 16 Kent residents who participated in these trials (4 from Dartford) some participants did drop out during the trial (2 from Dartford), but there were a variety of reasons these people could not continue with the project. The trial ends in April 2017 and a greater understanding of who can benefit the most from the devices has been learnt – including how the device has been used and what improvements could be made to the devices. The Dartford residents who took part in the trial lived in Council housing properties, were identified as vulnerable residents and also had to have WiFi access for the monitoring of the devices.

Other Issues to Be Reported on Through the Recent Department for Business, Energy and Industrial Strategy (BEIS) “Guidance to English Energy Conservation Authorities Issued Pursuant to the Home Energy Conservation Act 1995” January 2017.

A Fuel Poverty and Vulnerable People Living in Cold Conditions:

Dartford Borough Council has a part time (22 hours) Environmental Promotions Officer, part of whose duties is to reduce fuel poverty. The Officer is based within the Private Sector Housing Team and links with that team regarding improving energy efficiency for private households across the district. Dartford Council has its own Council housing stock and links are made to improve the thermal standards of the Council’s domestic properties

The county wide Kent Health and Affordable Warmth Strategy was outdated and had lapsed. Over the past 18 months Local Authority Officers across Kent have drafted, consulted on and published Developing Affordable Warmth a Fuel Poverty Strategy for Kent (Gravesham Borough Council acted as lead authority in their capacity of Chair of Kent Energy Efficiency Partnership Group). A workshop with partners including local authority, health, housing, voluntary and community groups was held in November 2016 to develop the action plan to move the strategy forward. A report of the workshop is now available and has been circulated.

Examples of current partnership work to reduce fuel poverty and health issues caused by living in a cold home include:

Winter Warmth funding from Public Health Kent – additional funding granted to Dartford to help residents with existing health conditions. A repayable assistance scheme is offered to people requiring boilers replacement and similar measures

Collective Energy Switching – an energy partnership of 5 Kent authorities (Dartford, Gravesham, Tonbridge and Malling, Dover and Tunbridge Wells). Auction rounds are held 3 times a year

Dartford officers are currently meeting with a range of health related agencies to develop links to promote support and advice available from the private sector housing team. Through use of the Better Care Fund (BCF), assisting people to remain in their own warm homes is currently an area where innovative projects are being considered. We have also been developing links with various organisations such as SGN and UK Power Networks.

With the changing focus on the next round of the Energy Company Obligation (ECO) starting in April 2017 around identifying and reaching fuel poor and vulnerable people living in a cold home the Council will be working to develop a Statement of Intent around the new Flexible Eligibility section of ECO. The Statement of Intent will focus on:

- People living in fuel poverty, particularly those not in receipt of benefits
- People living on a low income and vulnerable to the effects of living in a cold home using Nice guidelines to cover:
 - Cardio vascular problems
 - Respiratory problems
 - People with mental health issues
 - People with a disability
 - Those moving in and out of homelessness
 - People attending hospital due to a fall
 - People with suppressed immune systems (ie cancer treatment etc.,)
- Using existing EPC data
- Targeting lower super output areas (LSOA) to improve the energy efficiency of properties of our more vulnerable residents

We have started to log the enquiries that we receive around energy efficiency measures, boiler and general advice as Service Requests. For the period of this report the service requests show 25 people registered on collective switching and 54 calls received around insulation/boiler advice. The figures for energy advice are much higher than this and have not all been recorded. The Warm Homes Scheme provides a call centre and the enquiries for the Warmer Streets scheme were made directly to the Warmer Streets project.

B Smart Meters

Smart Energy GB has been contacted by the Chair of the Kent Energy Efficiency Partnership (KEEP) with a request to meet and explore ways in which Kent Councils can promote/support the roll out of Smart meters across the county and integrate with current schemes/projects. We anticipate being contacted once the programme for 2017 has re-launched.

Smart meters have been offered as part of the Collective Switching scheme and a number of residents who switched to SSE have had smart meters installed. The most recent auction (February 2017) won by First Utility offers a Universal Smart Meter facility.

C Minimum Energy Efficiency Standards in the Private Rented Sector

From 1 April 2016 private sector tenants are able to request consent from their landlords to carry out energy efficiency improvements to privately rented properties. The landlord will not be able to unreasonably refuse consent.

There are separate regulations requiring properties to be brought up to an E rating on an Energy Performance Certificate (EPC) which are effective from the 1 April 2018.

It is anticipated that at the September 2017 Landlord Forum the changes in the requirements around the Energy Efficiency standards will be raised.

D Boilers and Heat Pumps and other Innovations

Boiler installations:

Dartford Borough Council, like many other authorities in Kent offer the Winter Warmth facility to residents with long term health conditions to replace boilers. This is a relatively small pot of money which is provided by public health. We follow an application process which includes gas safety certificates being required for all works. The funding now available via Government schemes has reduced and we have used different referral routes for any boiler requests received.

Dartford Borough Council like many other local authorities has adopted the Building Control National Performance Standards, which among other things define service levels that constitute a 'fit for purpose' service.

The implementation of Building Regulations with regard to the installation of boilers has however, to a very large degree, been taken out of the hands of Building control Bodies, either private or public sector.

The bodies that run the 'competent persons schemes' are required to monitor the work of the scheme members – this is done on a sample basis. Dartford is able to produce a report on the different measures in the borough via the competent persons scheme.

Heat Pumps and other Renewables

In relation to heat pumps and new technologies again self certification is becoming more prevalent. It is possible for us to identify properties with new technology systems via the EPC data.

Battery/Energy Storage

The Council is currently considering a battery/energy storage project for some of the sheltered housing and council housing properties.

GLOSSARY:

Affordable Warmth: The ability to heat your home to an adequate level for household comfort and health, without developing a debt as a result

BRE: British Research Establishment: BRE is the world leading multi-disciplinary building science centre with a mission to improve the built environment through research and knowledge generation

Carbon Emissions Reduction Obligations (CERO): one of the obligations under ECO. Under the Carbon Saving Community Obligation, obligated suppliers must promote insulation measures and connections to district heating systems in areas of low income. The CSCO target has a sub obligation, which requires that at a set % of a supplier's CSCO must be achieved by promoting measures to low income and vulnerable households in rural areas or deprived rural areas.

Energy Company Obligation (ECO): A Government scheme to obligate larger suppliers to deliver energy efficiency measures to domestic premises in Britain. Suppliers achieve their obligations by delivering through three obligations

Energy Performance Certificate (EPC): provides a rating on the energy efficiency of households from A (most efficient) to G (least efficient) based on information about a property's energy use and typical energy costs. It also provides recommendations about how to reduce energy use and save money

Excess Winter Deaths (EWD): The difference between the number of deaths which occurred in winter (December to March) and the average number of deaths during the preceding four months (August to November) and the subsequent four months (April to July) . The data source is the General Registrar Office

Fuel Debt: Residents who are unable to pay their fuel bills due to the high cost of energy, energy inefficient housing and reductions in household income, are classed as in fuel debt.

Home Heat Cost Reduction Obligations (HHCRO): One of the obligations under ECO. Under the Home Heating Cost Reduction Obligations (also known as Affordable Warmth), obligated suppliers must promote measures which improve the ability of low income and vulnerable households (the affordable warmth group) to heat their homes. This includes actions that result in heating savings, such as the replacement or repair of a boiler

Housing Health and Safety Rating System (HHSRS)& Category 1 Hazard: A risk based evaluation tool to help local authorities identify and protect against potential risks and hazards to health and safety from any deficiencies identified in dwellings. Excess cold, mould and damp are amongst the 29 Hazards,. A Category 1 Hazard is one that has been assessed to be serious and in need of action being taken.

Lower Super Output Areas (LSOA): postcode specific areas of deprivation. Deprivation covers a broad range of issues and refers to unmet needs caused by a lack of resources of all kinds, not just financial. It is important to note that not every person in a highly deprived area will themselves be deprived

National Institute for Health and Care Excellence (NICE): An organisation that provides national guidance and advice to improve health and social care

Private Rented Sector (PRS): refers to the property market where homes are owned by private landlords and rented privately to domestic tenants