

Energy Efficiency in Wells

How energy efficiency benefits residents and businesses in
Wells constituency



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**Association for the
Conservation of
Energy**

Key Points

Everyone is worried about their energy bills, and for some people keeping their home warm is not affordable. The only long term solution is to stop wasting fuel and leaking warmth from our homes by improving insulation and ensuring everyone has a modern heating system.

It can be expensive to heat and power our homes, particularly for those living in rural areas without a gas connection.

- 35,000 of the 46,000 households in Wells constituency are connected to mains gas and typically pay around £1,300 a year for gas and electricity. The remaining 11,000 households in the area have to use other heating fuels which are more expensive. An oil-heated home can spend as much as £2,400 a year on heat and power¹.
- 3,800 homes in Wells constituency have been given the very worst energy ratings of F or G, and therefore waste hundreds of pounds worth of fuel every year. In fact Wells residents are 50% more likely to live in these very inefficient homes than those elsewhere in the country².
- Around 4,900 households in the area are classified as 'fuel poor'³. This means they can't afford to keep their homes warm due to a combination of low incomes and high energy bills.

Significant upgrades to the efficiency of homes in Wells constituency have been made in recent years.

- Energy efficiency schemes have helped to insulate 9,000 lofts and 7,000 cavity walls in the area since 2005. At the same time more than 11,000 efficient boilers have been installed⁴.
- 2,182 solar photo-voltaic systems have been installed, enabling homes and businesses to generate their own electricity⁵.

These improvements generate a wide range of benefits for the area.

- Wells constituency residents spend around £72 million on energy bills every year⁶. Cutting fuel bills means less money leaving the local economy and more spent in local shops and businesses.
- Many of these vital improvements are delivered by local businesses and tradespeople. An ambitious UK energy efficiency programme would support 8,400 jobs in the South West⁷.
- Cold homes have been shown to be damaging to both physical and mental health. For every £1 invested in renovating cold homes the NHS saves 42 pence in reduced hospital admissions and GP visits⁸.

There are still huge opportunities to improve the efficiency of homes in Wells constituency further⁹.

- 31% could benefit from cavity wall insulation.
- 65% could improve the level of insulation in their lofts.
- Two thirds of homes could upgrade to more efficient heating systems.

Despite this potential, Wells constituency has missed out on funding for improvements in recent years.

- Half as many improvements per household made compared to the rest of the country¹⁰.
- Current national policy commitment would see just 350 homes helped each year to 2020¹¹.
- Those in need of more significant works, common in rural areas, would miss out.

There are 34,000 homes in Wells constituency that have an energy efficiency rating of D or worse². Upgrading the energy efficiency of these homes would present a huge opportunity to cut bills, improve residents' health and well-being and boost the local economy. To make this happen and unlock the benefits to the constituency, action is needed both locally and nationally.

The story so far

The cost of gas and electricity is 30% higher than it was in 2010 and double what it was 10 years ago¹². To combat these historically high prices, a local army of unsung heroes have been fighting to keep bills in check and make sure everyone can afford to keep their homes warm in the winter.

In the last 10 years Wells constituency has seen activity in improving insulation, replacing inefficient heating systems and developing renewable energy technologies. We estimate that since 2005 more than 29,000 significant works have been undertaken to improve the energy performance of homes in the area.

Table 1: Estimated number of common efficiency improvements made to homes in Wells constituency since 2005⁴

Lofts insulated	8,900
Cavity walls insulated	7,000
Efficient boilers installed	11,000

New insulation technologies such as cladding for solid walls have also greatly benefitted older homes which would otherwise still be leaking heat.

In addition Wells constituency residents and local businesses have taken advantage of incentives that enable them to generate their own electricity and low carbon heat.

Table 2: Low carbon technologies installed in Wells constituency since 2010⁵

	In homes	For businesses
Low carbon	148	84
Solar photovoltaic	2,121	61

National policies have played an important role at the local level. Charities in the area have been able to access funds to provide low income households with the heating upgrades they desperately need, and incentive schemes have encouraged people to try newer technologies like solar panels. The dedication of local businesses and charities, combined with national funding and incentive schemes, have been pivotal in the progress made so far in the constituency.

The WISH project: helping residents reduce energy waste and stay warm

The Warmer Improved Somerset Homes (WISH) project, run by the Centre for Sustainable Energy (CSE), is a one-stop shop for energy efficiency advice. They provide advice to people struggling with their bills and help to connect them to the available funding for help with bills and energy efficiency improvements. They have a well-developed referrals mechanism that helps them reach vulnerable households across Wells, having trained 242 frontline staff in 20 organisations over the past two years.

The scheme has provided advice to more than 1,000 households over the two years it has been running. Of these, 86% have reported better understanding of their energy use and fuel bills, 63% have reported improved physical wellbeing, 94% are less anxious about their fuel bills and energy use, and 63% feel better able to use their heating controls.

However, Lisa Evans, the programme manager of WISH, says: “We only have two caseworkers covering the whole of Somerset and with the demand we could probably do with a lot more. What’s more, with the changes to government funding regimes, we now have to rely heavily on charitable trusts, which can be very time-consuming for both the householder and our staff. This means we struggle to take on any more cases.”



WISH
Warmer Improved
Somerset Homes

Real benefits for Wells constituency

It is easy to see the benefits of reducing your energy bills and having a warmer, cosier home, but the impact of improving energy efficiency in Wells constituency goes much further.

Well maintained homes

Energy efficiency works are a vital part of maintaining your home. Cold homes often become damp which can lead to mould and further complications in the long run. Insulated wall cladding will tackle damp permanently and can rejuvenate the appearance of a home.

Keeping money in the local economy

We estimate that Wells constituency residents spend approximately £72 million annually on domestic energy bills⁶. Money spent on fuel is mostly taken out of the local economy, so cutting bills means that households have more money to spend in local shops and businesses.

Creating skilled jobs

Economic modelling has shown that an ambitious UK energy efficiency programme would create 8,400 jobs in the South West⁷. Energy efficiency works rely

on skilled tradespeople and small-scale contractors. This means that these jobs are spread across all communities and not just concentrated in a few industrial areas.

Improving health and wellbeing

Cold homes have been shown to be damaging to both physical and mental health. Children living in cold homes are significantly more likely to suffer from respiratory problems such as asthma and bronchitis. It has been shown that for every £1 invested in renovating cold homes, the NHS saves 42 pence in reduced hospital admissions and GP visits⁸.

Business productivity

Energy costs can be a significant overhead for businesses. Improving the efficiency of commercial buildings, vehicles and equipment can cut waste and add to the bottom line. Helping businesses to identify these opportunities can boost productivity and make local businesses more competitive.

Improving local energy resilience

It is easy to take basic services like gas and electricity for granted, but our energy security has become a significant concern in recent years. A more efficient housing stock and local generation will make Wells constituency more resilient to future energy price shocks or interruptions to supply and can take the strain off local energy infrastructure.

J&J Crump & Son – South West Installer of the Year

Colin Anderson is the Business Development Manager of J&J Crump & Son, a family business that has been providing insulating homes and upgrading heating systems since the 1980s. They currently employ 16 staff in their South West office and have undertaken energy efficiency works in Wells constituency. Colin says: “You can make a real difference to people’s lives, it’s very satisfying when people report back that our work has made their homes more comfortable and saved them money.”

Although J&J Crump & Son are currently planning on expanding, they have had difficult times recently and were employing twice as many people a year ago. “Recent policy changes have been disastrous for businesses like ours. We had to work hell for leather when funding was available, but when it stopped abruptly we had to lay people off.”

“It would be great to see a more steady approach to energy efficiency—cash-strapped local authorities need help to take a lead on improving the housing locally.”



Untapped potential

Whilst a promising start has been made to modernise heating systems and insulation in Wells constituency, there are huge opportunities still remaining and many households that have yet to benefit.

Mendip Council's latest report on energy efficiency identified huge opportunities to improve the District's housing stock.

Table 3: Estimated number of homes in Wells constituency that could benefit from basic energy efficiency measures based on Mendip Council's most recent report⁹

Could improve the level of insulation in their lofts	29,900
Could benefit from cavity wall insulation	14,300
Could improve the efficiency of their heating systems	30,800

Despite the significant potential, under the most recent national scheme, the Energy Company Obliga-

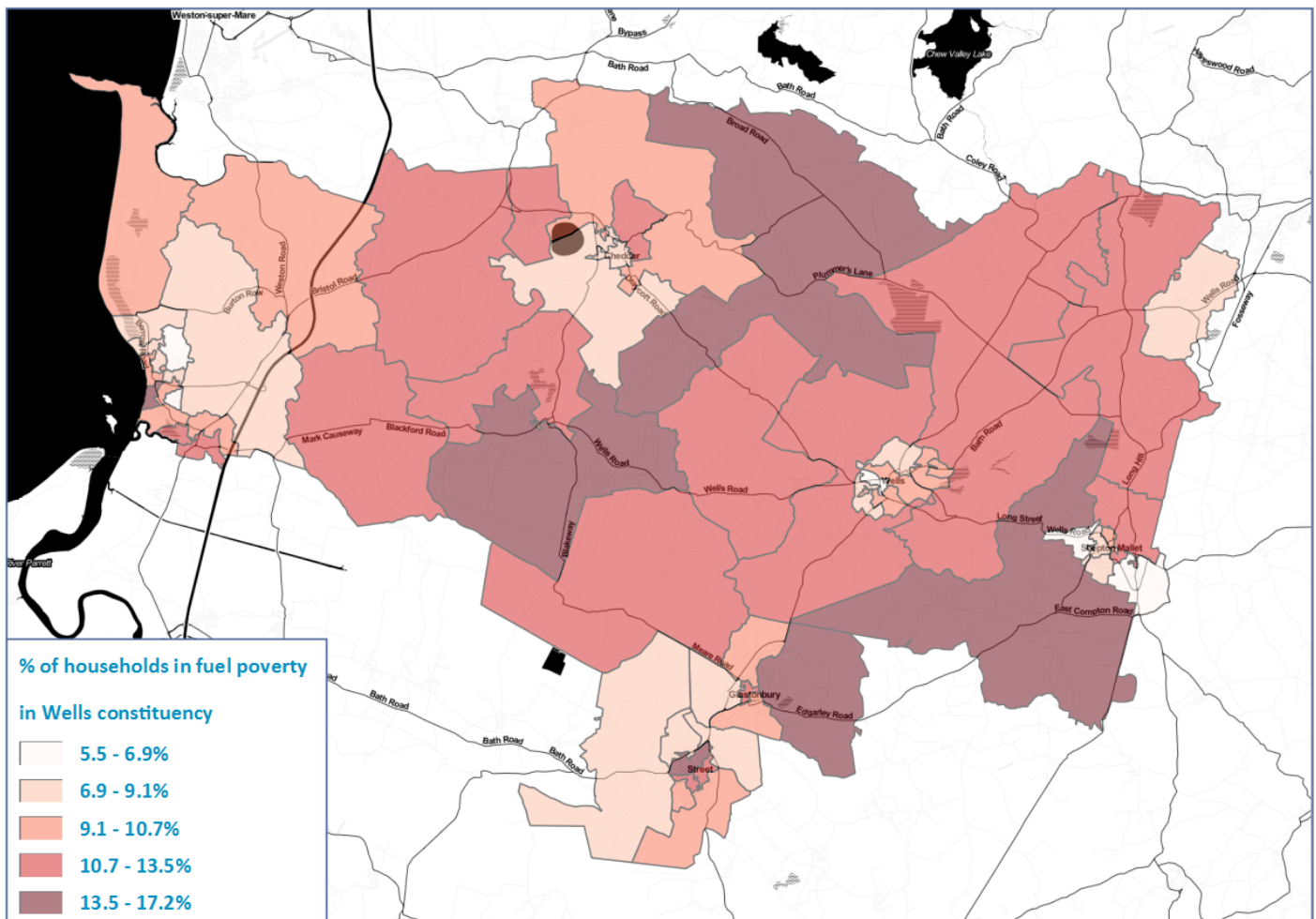
tion, residents in the area missed out on their fair share of works. The number of improvements per household in Wells constituency is only half the national average.

Local charities and installers have found that changes to national energy efficiency schemes in the last few years have meant that funding for low income households is harder to get hold of and support for making costlier upgrades is no longer available.

Looking to the future, current national policy commitments would see just 350 homes receive low cost improvements in Wells constituency each year and those in need of more significant works, common in rural areas, would miss out altogether¹¹.

There are 34,000 homes in the area with an energy efficiency rating of D or worse⁴. Upgrading the energy efficiency of these homes would present a huge opportunity to cut bills, improve residents' health and well-being and boost the local economy. To make this happen, action is needed both locally and nationally.

Figure 1: Map showing severity of fuel poverty in the area. Homes in the darkly shaded areas are more likely to find keeping their homes warm unaffordable. High resolution data can be used to identify opportunities and target those in need³



With thanks to

- Lisa Evans, Warmer Improved Somerset Homes Programme Manager
On Somerset County Council website:
www.somersetccc.org.uk/wish-project
On Centre for Sustainable Energy website:
www.cse.org.uk/projects/view/1219
- Colin Anderson, Business Development Manager, J&J Crump & Son
www.jjcrump.com

More to explore

- Nearest Super Home is in Woolavington by Bridgwater
www.superhomes.org.uk/superhomes/somerset-bridgwater-woolavington-hill
- Nearest certified Passive House is in Compton Dundon, Somerset
www.passivhausbuildings.org.uk/viewproject.php?id=413
- Transition Wells Energy Group
www.transitionwells.org.uk
- Avalon Community Energy Coop
www.avaloncommunityenergycoop.co.uk



Notes

- ¹ Based on an average electricity bill in Wells of £680 and on-gas properties spending an additional £607 per year on gas. These estimates are based on 2015 DECC lower super output area (LSOA) [domestic gas](#) and [electricity consumption data](#) and fuel tariffs from 2015 DECC [regional fuel price data](#). Off-gas residents assumed to spend an additional £1,704 on oil annually, the national average expenditure for oil-heated properties from the [DECC Living Cost & Food Survey](#)
- ² 2015 DECC LSOA-level [household energy efficiency ratings data](#)
- ³ 2015 DECC constituency and LSOA level [fuel poverty data](#)
- ⁴ Delivery of measures 2005-2012 derived from a sample of [4,809 homes in the South West](#), adjusted to reflect the number of off-gas properties in Wells Constituency. Delivery of measures after 2012 based on Constituency-level 2015 DECC [Green Deal & Energy Company Obligation \(ECO\)](#) statistics
- ⁵ 2015 DECC [Feed-in Tariff \(FiT\)](#) and [Renewable Heat Incentive \(RHI\)](#) statistics
- ⁶ Derived estimate based on average bill data (described in end note 1) with household number data from 2015 DECC [meter data](#) and [regional statistics](#)
- ⁷ Verco & Cambridge Econometrics, 2012, [Jobs, growth and warmer homes](#)
- ⁸ Department of Health, 2009, [On the state of public health: Annual report of the Chief Medical Officer 2009](#)
- ⁹ Estimates derived from [Mendip District Council 2013 HECA Report](#)
- ¹⁰ Based on constituency level 2015 DECC [GD & ECO statistics](#); average number of measures delivered per household in Wells is 55% the rate for Britain as a whole
- ¹¹ Based on Wells Constituency receiving a fair share of the [Autumn Statement pledge](#) to deliver low cost energy efficiency measures to 200,000 homes each year during this Parliament
- ¹² 2015 DECC [domestic energy price statistics](#)