



**Association for the  
Conservation of  
Energy**

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## ECO and the Green Deal

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*Progress to date; the immediate outlook; and what needs to happen*

### Overview

The Energy Bill Revolution is an alliance of 180 charities, businesses, unions and associations campaigning to end fuel poverty. They are calling for:

- Home energy efficiency to be made a UK infrastructure investment priority;
- For all low income homes to be made highly energy efficient with 2 million low income homes brought up to Energy Performance Certificate Band C by 2020 and all 6 million low income homes brought up to EPC Band C by 2025;
- For carbon tax revenue to be used to provide long term funding.

This briefing assesses the impact of the Government's main energy efficiency policies and compares it against past performance and what needs to happen to effectively tackle fuel poverty and meet the recommendations of the Committee on Climate Change.

We find that the Energy Company Obligation (ECO) and the Green Deal represent a significant loss of momentum in the deployment of energy efficiency measures compared to previous energy efficiency programmes, especially when considering the large energy efficiency potential still available in the housing stock.

The recent cuts proposed to the ECO are set to exacerbate this loss of momentum, and the introduction of the Green Deal Home Improvement Fund is not enough to turn it around. This means that carbon targets recommended by the Committee on Climate Change will be missed and that fuel poverty will rise. Key findings are:



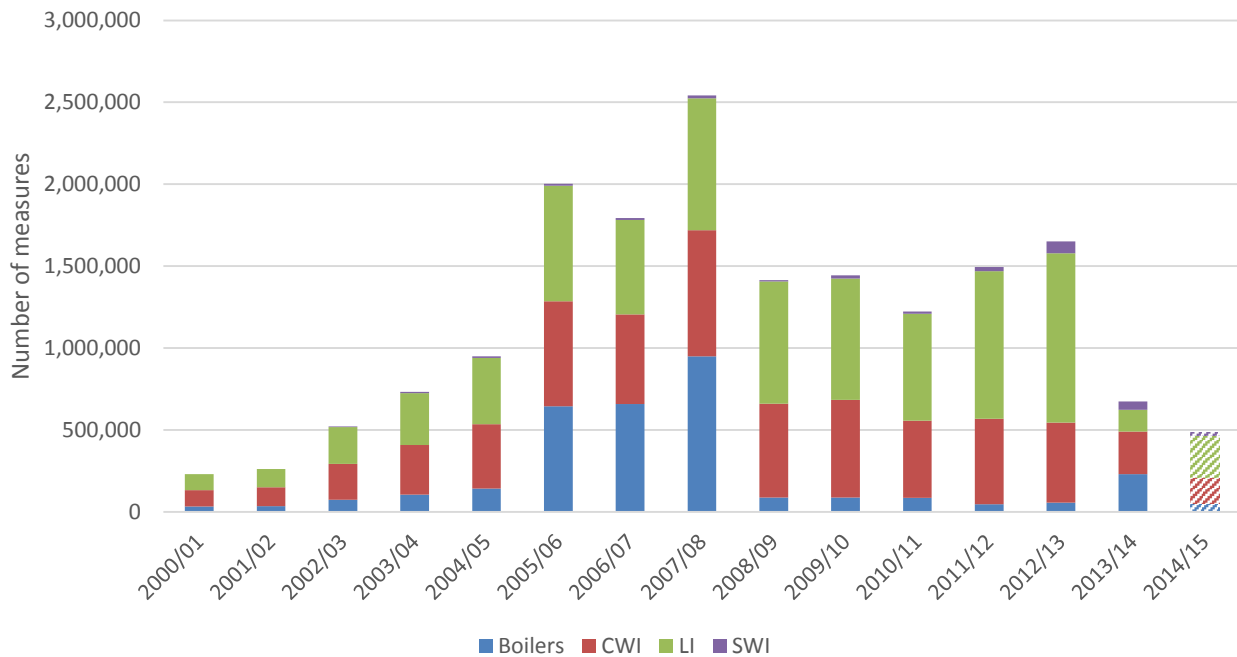


Figure 1: Major energy efficiency measures installed under major programmes to date, with predicted outcome for 2014/15

Overall totals including boilers peaked during 2005/6 to 2007/8, when EEC-2 ‘captured’ much of the boiler replacement market. The delivery of major insulation measures, excluding boilers, peaked in 2012/13, at the end of CERT and CESP, following steady growth and stability over 13 years<sup>2</sup>. Since then in the 12 months to March of this year, compared to the previous year, **the rate at which all major insulation measures are being installed has fallen sharply, for the first time, despite huge remaining potential.** This is shown in Table 2.

Table 2: Major measures installed in 2012/13, compared to 2013/14 and remaining potential

	Installed in 2012/13	Installed in 2013/14	Percentage change	Remaining potential <sup>3</sup>
<b>Boilers</b>	56,000	220,000	+290%	13,000,000
<b>Cavity wall insulation</b>	490,000	260,000	-46%	5,000,000
<b>Loft insulation</b>	1,030,000	130,000	-87%	7,500,000
<b>Solid wall insulation</b>	73,000	51,000	-30%	8,000,000

We find that between 2012/13 and 2013/14:

- Cavity wall insulation fell by 46% from 490,000 measures installed to 260,000;
- Loft insulation fell 87% from 1,030,000 measures installed to 130,000;
- Solid wall insulation measures fell 30% from 73,000 measures installed to 51,000.

Since the launch of ECO, Green Deal finance and Green Deal Cashback, over 98% of measures have been delivered by the ECO. We find that :

- 776,000 measures have been delivered by ECO;
- 11,000 measures by Green Deal Cashback;

<sup>2</sup> See Appendix, Figure 4, for the same chart excluding boilers.

<sup>3</sup> All figures for remaining potential from Ed Davey speech to Ecobuild conference (March 5 2014);

<https://www.gov.uk/government/speeches/edward-davey-speech-to-eco-build-conference-making-britains-homes-warmer-greener-and-cheaper-to-heat>

- 2,400 measures by Green Deal Finance.

In the next section we take a closer look at the immediate outlook for these policies and incentives to the end of the current financial year, taking into account the changes proposed to it.

### 3 ECO under proposed changes

Figure 2 takes ECO, the only major national programme, under the microscope. It looks at progress to date since its launch in January 2013 to the latest month for which official data are available, March 2014. The last, striped column shows the monthly delivery of major measures needed in the current financial year to meet proposed new targets. Without the proposed changes, the ECO would have had to continue delivering at approximately the level it delivered at in March. **As shown in the previous section, the ECO to date already represents a sharp downturn and loss of momentum compared to previous years. The proposed cuts to ECO are set to exacerbate the downturn even further.**

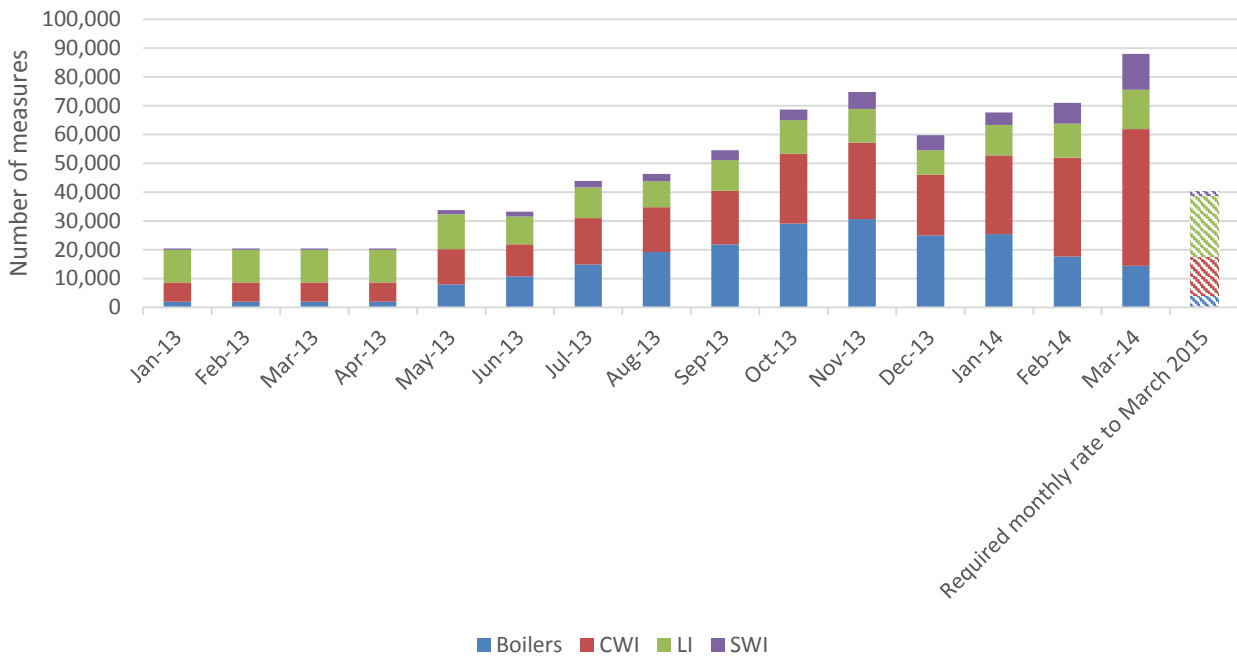


Figure 2: Progress under ECO to date, with likely result of proposed changes to ECO shown in last column

The main facts from looking at the ECO's three sub-obligations are:

Proposed changes	What's happened to date (to March 2014)	The outlook to March 2015
<p><b>Home Heating Cost Reduction Obligation (HHCRO) – main ECO support mechanism for fuel poor households</b></p> <p>Won't be cut.</p>	<p>All boilers delivered by ECO happen under the HHCRO. Obligated energy suppliers have principally been delivering boiler replacements to meet their targets. They are well ahead of schedule on this, which is why the level of boiler delivery can be seen winding down since November of 2013.</p>	<p>Just 4,000 boiler replacements are likely to occur each month to the end of March 2015. The average monthly rate to date under HHCRO has been 15,000. This reduction means that energy efficiency support for the fuel poor is being significantly scaled back.</p>

	Proposed changes	What’s happened to date (to March 2014)	The outlook to March 2015
<b>Carbon Saving Communities Obligation (CSCO)</b>	Won’t be cut.	Progress under CSCO, targeted at low income neighbourhoods, has been very slow to date.	CSCO is the only part of the ECO that needs to pick up the pace. It will need to more than double its average monthly delivery rate to meet its targets. This is likely to mean 19,000 loft insulations and 8,000 cavity wall insulations per month.
<b>Carbon Emissions Reduction Obligation (CERO)</b>	Target to be cut by 33%; further reduced by increased allowance for carry-over of carbon savings from CERT and CESP, and ‘carbon uplifts’ under the proposed ‘levelisation’ mechanism to account for energy companies’ varying performance to date. Effectively a 49% cut to the original target <sup>4</sup> .	From a very low base, CERO has picked up momentum – the rate of delivery seen in March was the level that would have been required for the subsequent 12 months: 43,000 cavity wall insulations, 6,000 loft insulations and 12,000 solid wall insulations per month.	Under the proposed cuts, it will need to deliver 6,000 CWIs, 1,400 LIs and 700 SWIs per month instead. In 2012, CERT and CESP were delivering 53,000 CWIs, 109,000 LIs and 6,400 SWIs per month

**Taken together, the number of major energy efficiency measures that are projected to be delivered this financial year under proposed changes are a lot lower than in 2013/2014, even allowing for full take up of the Green Deal Home Improvement Fund (GDHIF).**

Table 3: Measures installed in 2013/14, compared to 2014/15, highlighting maximum additional installations GDHIF could support

	Installed in 2013/14	Set to be installed under ECO in 2014/15	Maximum in 2014/15 if all of GDHIF expended on one measure	Likely outcome in 2014/15 if current GDHIF trend continues	Change on 2013/14
<b>Boilers</b>	220,000	50,000	168,000	50,000	-77%
<b>Cavity wall insulation</b>	260,000	168,000	260,000	168,000	-35%
<b>Loft insulation</b>	130,000	255,000	368,000	255,000	+96%
<b>Solid wall insulation</b>	51,000	15,000	34,000	34,000	-33%

We estimate the following impacts between 2013/14 and 2014/15 from ECO with the support of the Green Deal Home Improvement Fund:

- Boiler installations will reduce by 77% from 220,000 / year to 50,000;
- Cavity wall insulation will reduce 35% from 260,000 / year to 168,000;
- Loft insulation will increase 96% from 130,000 to 255,000;

<sup>4</sup> See <http://www.ukace.org/wp-content/uploads/2014/04/ACE-Consultation-Response-2014-04-The-Future-of-the-Energy-Company-Obligation.pdf>

- Solid wall insulation measures will reduce 33% from 51,000 to 34,000.

We estimate that there will be a reduction in major energy efficiency measures installed this year from a total of 661,000 measures last year to a total of 507,000 measures (down 23%). Compare to 2012/13, this is a fall of 69%.

It is difficult to predict the precise impact of the Green Deal Home Improvement Fund and the mix of measures installed may differ from that projected. But the trend is clear. This represents the second year in a row with a significant loss of momentum in the deployment of energy efficiency measures. It also means that **the ECO cuts are unlikely to be carbon neutral**.

The next section of this briefing compares what is set to be delivered against what is required to meet the recommendations of the Committee on Climate Change and in order to effectively tackle carbon emissions, and what needs to happen to effectively tackle fuel poverty.

## 4 What needs to happen...

### 4.1 ...on climate change

To meet the recommendations of the Committee on Climate Change (CCC) all remaining cavities and lofts should be insulated by 2015, and 2.2 million solid walls insulated by 2022. At present, as Figure 3 shows, we are very far off the right trajectory.

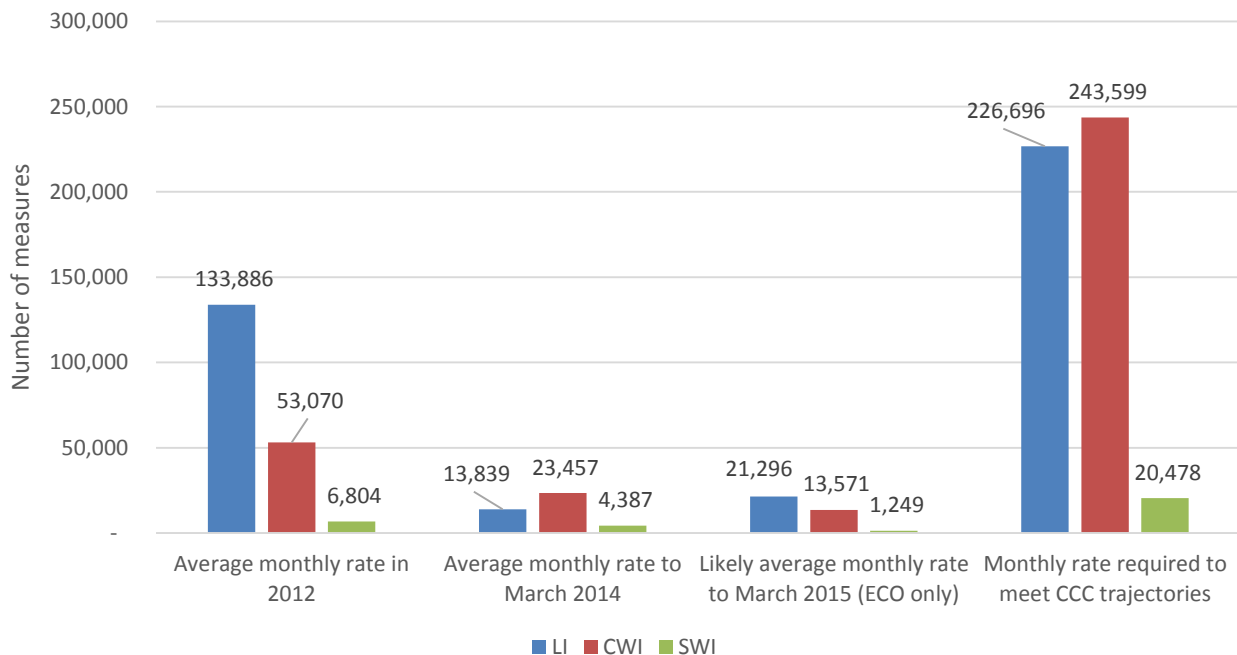


Figure 3: Monthly install rates, compared to what needs to happen to meet carbon budgets

The monthly rate of installations of major insulation measures<sup>5</sup> is far off the CCC’s recommended trajectory (shown by the last cluster of columns). **With cuts to the ECO as presently proposed, the**

<sup>5</sup> The rate at which efficient boilers are being installed (because most are installed without energy efficiency programme support) is broadly on track.

monthly rate of installations in the current financial year, compared to what must happen to meet carbon targets:

- **Is only 9% of what it needs to be for loft insulation;**
- **Is only 6% of what it needs to be for cavity wall insulation;**
- **And is only 6% of what it needs to be for solid wall insulation.**

Were the Green Deal Home Improvement Fund fully expended on each of these measures (to the exclusion of other measures), the rates would increase to 15%, 11% and 16% respectively, which is still insufficient. A step change in improving the energy efficiency of the housing stock is required.

## 4.2 ...on fuel poverty

The Energy Bill Revolution is calling for all low-income homes to be given free energy efficiency measures to upgrade them to an Energy Performance Certificate rating of Band C by 2025 – that means 5.9 million homes from now – and for 2 million low income homes to reach Band C by 2020. **Band C is a standard which is highly cost-effective, and achieving this standard for low income households has three important features<sup>6</sup>:**

- **Carrying out deep retrofits:**
  - ECO is largely a single measure programme, delivering an average of 1.2 measures to each household. Achieving Band C requires an average of 3.1 measures per household to be installed.
- **Including a much greater range and number of energy efficiency improvements:**
  - ECO has little measures diversity, with the four major measures examined here comprising 93% of all the measures delivered to date. To achieve Band C, they'd comprise only 39% of all the measures that need to be installed.
- **Helping low income households at an ambitious, but achievable rate:**
  - We estimate that the ECO will help 370,000 low income households in this financial year. To achieve Band C, approximately 500,000 low income households would need to be helped each year on average to 2025 but much deeper retrofits need to be achieved.

**We estimate that 1.6 million measures need to be installed each year on average in low income homes to meet the 2025 fuel poverty target set by the Energy Bill Revolution. This is a three-and-a-half fold increase from a maximum of 450,000 measures (not just major measures) likely to be installed in low income households this financial year.**

## 5 Conclusion

The Energy Company Obligation and the Green Deal represent a significant loss of momentum compared to previous energy efficiency programmes, especially when considering the energy efficiency potential still available in the housing stock. The cuts proposed to the ECO are set to exacerbate this loss of momentum, and the introduction of the Green Deal Home Improvement Fund is far from enough to turn it around. A real step change is needed in the delivery of energy efficiency improvements in the housing stock, as only a small fraction of the required measures are being delivered today. To tackle fuel poverty permanently, we need to achieve an Energy Performance Certificate rating of C in all low

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<sup>6</sup> See our report to Consumer Futures (now Citizens Advice), on 'Ending Cold Homes'; <http://www.ukace.org/wp-content/uploads/2014/03/ACE-Research-2014-03-Ending-cold-homes.pdf>

income homes by 2025. This means much deeper retrofits, encompassing a much wider range of measures, installing on average three measures per home instead of one. To achieve this, the number of energy efficiency measures that need to be installed in low income homes each year therefore needs to increase to on average 1.6 million measures / year.

The Energy Bill Revolution is an alliance of 180 charities and businesses campaigning to end fuel poverty by making home energy efficiency the UK's priority infrastructure investment. They are calling for:

- Home energy efficiency to be made a UK infrastructure priority
- All low income homes to be brought up to EPC Band C by 2025 and 2 million low income homes to be brought up to EPC Band C by 2020
- For carbon tax revenue to be used to provide long term funding.



## Appendix

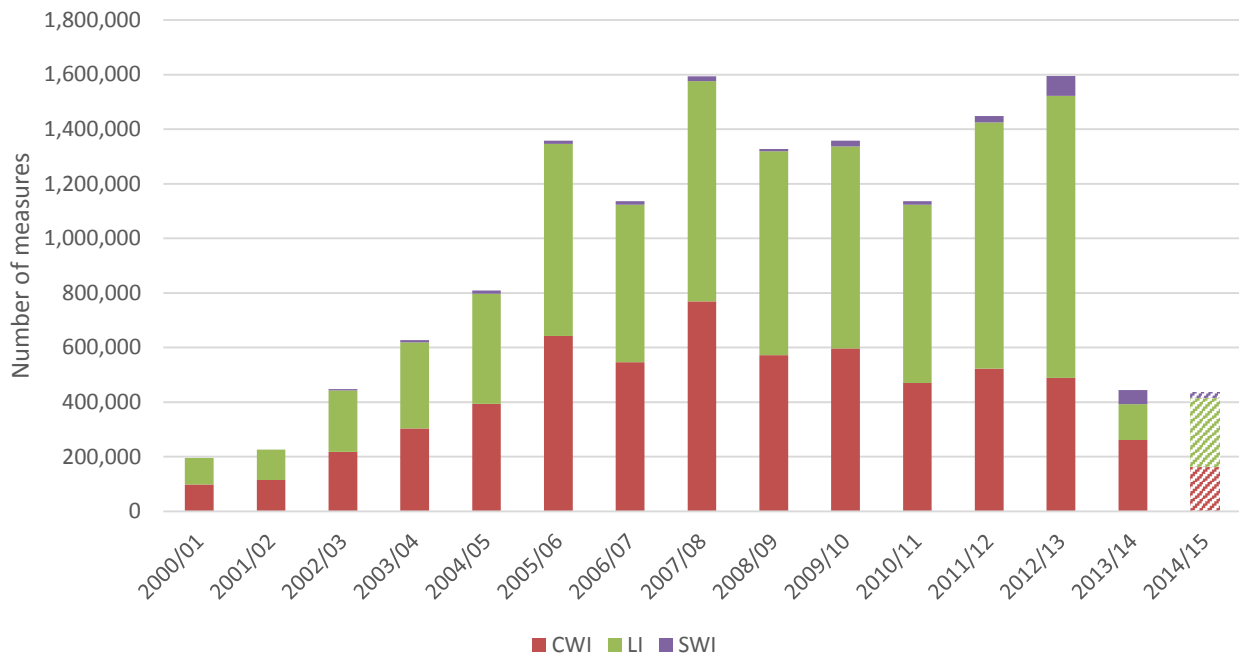


Figure 4: Major insulation measures delivered by major energy efficiency programmes since 2000