

Changes to insulation statistics methodology

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Introduction

A consultation document was published alongside the insulation statistics release in June 2012 outlining proposed changes to the methodology used to produce the estimates. The changes outlined in the June 2012 release were subsequently implemented in the publication released in September 2012. This document outlines the changes made, the rationale behind them and the impact on estimates of the number of homes with insulation measures. The September 2012 publication which contained the first estimates based on the new methodology can be found at the following link:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49406/6472-stats-release-estimates-home-ins-jul2012.pdf

Any enquiries regarding this note should be sent to us at:

EnergyEfficiency.Stats@decc.gsi.gov.uk

Changes to previous methodology

The most significant revision was to the number of properties with cavity wall insulation, which results from changes to the way the 2008 cavity wall insulation baseline is constructed.

Previously cavity wall insulation figures for England and Scotland were taken from the EHS and SHCS respectively. Figures for Wales were derived using the number of dwellings in Wales and assuming the same percentage coverage as England. A limitation to using the housing surveys alone to estimate the number of properties with cavity wall insulation is that there is likely to be an under reporting of the number of properties of cavity wall construction which have cavity wall insulation. This under reporting is mainly a result of properties with cavities which are filled when built which means when the property survey is carried out there are no visible signs of the property having cavity wall insulation. When a property has its cavity walls filled after it has been built the insulation material is injected through holes made in the wall – over time these injection holes fade, and this is another possible cause of under reporting within the housing surveys.

These issues meant that a significant number of cavity wall properties built since 1996 (1992 for Scotland) were being classified as uninsulated as no visible signs of insulation were present)

despite building regulations meaning these properties would have either been insulated during construction or would have been built using materials which achieved the same thermal conductivity level.

The key changes to the 2008 baseline are:

- 10.0m properties are now estimated to have cavity wall insulation compared to 8.7m previously an increase of 1.3m properties.
- The number of solid wall properties increases slightly from 7.8m to 7.9m.

The new methodology continues to use figures from the EHS and SHCS, but also includes figures from the LiW survey for the first time. The 2008 baseline is now constructed using the housing surveys combined with information from building regulations and assumptions made for RdSAP calculations to help categorise properties more accurately and avoid some of the under reporting described above.

Other changes include:

- The ten per cent assumption which was outlined above for professional loft insulation top-ups on existing insulation of over 125mm has been applied to CESP and Warm Front installations, previously this was only applied to CERT installations.
- House building data for England has been revised back to June 2007, to include house building completions certified by independent approved inspectors, in addition to data from local authorities and the National-Building Council. DCLG took the decision to revise their data back to June 2007 as the share of the building control market reported by approved inspectors has been increasing.

Estimates of dwelling stock will now be revised each year based on the latest available dwelling stock data from DCLG. This means estimates will now take into account other causes of changes to the dwelling stock, rather than just new builds, such as demolitions and conversions. New build information will continue to be used as a proxy for the change to the dwelling stock for the latest estimates until the annual dwelling stock information is available. It will also be used to inform the quarterly figures between the annual dwelling stock estimates.

Impact on estimates of home insulation levels in Great Britain

The tables below show the difference between the quarterly estimates of homes with different types of insulation by comparing the estimates produced based on the new methodology (September 2012 publication) with estimates produced using the previous methodology (June 2012 publication).

Table 1: Homes in Great Britain with cavity wall insulation (Thousands)

	June 2012 publication	September 2012 publication	Difference
April 2008	8,700	9,980	1,280
July 2008	-	10,160	-
October 2008	9,040	10,330	1,290
January 2009	9,230	10,530	1,290
April 2009	9,420	10,710	1,290
July 2009	9,630	10,930	1,300
October 2009	9,800	11,110	1,300
January 2010	9,980	11,280	1,300
April 2010	10,140	11,440	1,300
July 2010	10,270	11,570	1,310
October 2010	10,380	11,690	1,310
January 2011	10,530	11,830	1,310
April 2011	10,730	12,040	1,310
July 2011	10,850	12,160	1,310
October 2011	11,020	12,330	1,310
January 2012	11,180	12,490	1,310
April 2012	11,380	12,700	1,310

Explanation of difference

Baseline

- 1. Reallocation of data from housing surveys in line with RdSAP/Building Regulations so all properties built post 1995 (1992 in Scotland) are assumed insulated.
- 2. Using Living in Wales housing survey data for April 2008.
- 3. Prorating across all categories to match DCLG published dwelling data (instead of the difference between survey data and DCLG estimates all being applied to not insulated, as was done in the past).

Times series

1. Revisions to DCLG dwelling stock estimates to include house completions certified by independent approved inspectors.

Table 2: Homes in Great Britain with loft insulation (thousands)

	June 2012 publication	September 2012 publication	Difference
April 2008	9,860	10,090	230
July 2008	-	10,270	-
October 2008	10,180	10,430	240
January 2009	10,330	10,580	250
April 2009	10,630	10,870	250
July 2009	10,840	11,090	250
October 2009	11,300	11,550	260
January 2010	11,550	11,810	250
April 2010	12,150	12,400	250
July 2010	12,320	12,580	250
October 2010	12,510	12,770	260
January 2011	12,860	13,120	260
April 2011	13,220	13,480	260
July 2011	13,430	13,690	260
October 2011	13,710	13,970	260
January 2012	14,080	14,340	260
April 2012	14,460	14,720	260

Explanation of difference

Baseline

- 1. Using Living in Wales housing survey data for April 2008.
- 2. Improved allocation of Scotland data now derived from actual data from the Scottish House Condition Survey loft depth for April 2008).
- 3. Prorating across all categories to match DCLG published dwelling data (instead of the difference between survey data and DCLG estimates all being applied to not insulated, as was done in the past).

Times series

- 1. Change to approach for number of new build flats which have a loft (now take 60% of flats as having a loft based on the EHS).
- 2. Now apply 10% top up from 125mm or above assumption to CESP and Warm Front top ups, in addition to CERT.
- 3. Revisions to DCLG dwelling stock estimates to include house completions certified by independent approved inspectors.

Table 3: Homes in Great Britain with solid wall insulation (thousands)

	June 2012 publication	September 2012 publication	Difference
April 2008	65	65	0
July 2008	-	66	-
October 2008	70	70	0
January 2009	72	72	0
April 2009	74	74	0
July 2009	79	79	0
October 2009	82	82	0
January 2010	88	88	0
April 2010	94	94	0
July 2010	97	97	0
October 2010	99	99	0
January 2011	101	101	0
April 2011	102	102	0
July 2011	111	111	0
October 2011	117	117	0
January 2012	123	123	0
April 2012	128	132	5

Explanation of difference

Baseline

• No difference – though uncertainty now included.

Times series

1. New CESP data covering January 2012 to June 2012 caused revision to April 2012 estimate.