

# Thermal Comfort in Older Houses

17<sup>th</sup> June 2014

Transition Cambridge Renewable Energy Group



## Reasons to improve the thermal performance of your home

<b>To reduce carbon emissions</b>	We need to reduce carbon emissions to avoid climate change: here in the UK our homes are responsible for a quarter of all our greenhouse gas emissions.
<b>Because our gas supplies are at risk</b>	Most of us use gas to heat our homes. Nearly half our gas is imported and nearly half is used for home heating. Gas prices are high now. If there is a supply problem, such as if Russia shuts off the pipelines across the Ukraine to Europe, well then the price could really rocket.
<b>Because our homes aren't designed for central heating</b>	More than half of the housing stock was built before 1965 and was not designed with central heating in mind. In those days we did not expect nice warm homes – back in 1970 the average temperature would have been 13.7C – now it is 17.7C <sup>1</sup>
<b>Because we will be more comfortable afterwards (and our homes may be worth more)</b>	<p>Reducing heat loss makes us more comfortable. Even when the actual air temperature is no higher than before we feel warmer because the walls and floors don't feel cold. Parts of your home which are a bit cool in the winter become usable all year.</p> <p>Research by DECC shows that improving the energy performance rating of your home can increase its value significantly, though this depends on market factors. At the moment there is no clear trend in the East of England<sup>2</sup>.</p>

<sup>1</sup> House temperatures estimated by modelling and reported in the UK housing energy fact file 2013 published by DECC

<sup>2</sup> <https://www.gov.uk/government/publications/an-investigation-of-the-effect-of-epc-ratings-on-house-prices>

## This is a good time because there is extra finance available

Both the Green Deal Home Improvement Fund and the Cambridgeshire Solid Wall Insulation fund are available now but limited in budget – it's first come first served so don't delay. Go to our Green Deal FAQ for more information. You can find the page at [www.transitioncambridge.org/faqs](http://www.transitioncambridge.org/faqs).

## What do you need to look out for?

<b>Every house is different</b>	The older your house is, the more likely it has been extended or remodelled and is not the same as the ones next door. Plus your heating pattern is different. You need a thorough survey of your home to find out where your heat is going and where the most savings can be made. A Green Deal Assessment is a good place to start.
<b>Badly designed or fitted insulation can cause damp</b>	Insulation often fixes draughts too but reducing ventilation increases the risk damp and mould. If there are gaps in the insulation they are likely places for condensation. You must use a reputable installer, and ideally get a 25 year guarantee for the work. (Green Deal installers should do this for all solid wall insulation).
<b>Conserving period features.</b>	For windows – you could install thin double glazing into the existing frames or add secondary glazing in a variety of ways – or add curtains or shutters. For external insulation, stone panels or tiles can be refitted in some circumstances. Eaves may have to be extended and there are different ways of doing this. For internal insulation, cornicing can be reconstructed; it may be possible to move fire mantles and hearth forward. It may be appropriate to use thinner insulation in some places.

## **Links:**

<b>Transition Cambridge Energy Group Advice Pages</b>	<a href="http://www.transitioncambridge.org/faqs">http://www.transitioncambridge.org/faqs</a>
<b>Action on Energy</b>	<a href="http://www.actiononenergy.net/">http://www.actiononenergy.net/</a>
<b>Green Deal Home Improvement Fund</b>	<a href="https://www.gov.uk/green-deal-energy-saving-measures/get-money-back-from-the-green-deal-home-improvement-fund">https://www.gov.uk/green-deal-energy-saving-measures/get-money-back-from-the-green-deal-home-improvement-fund</a>
<b>Natural Building Technologies</b>	<a href="http://www.natural-building.co.uk/">http://www.natural-building.co.uk/</a>
<b>Jim Ross at CAR</b>	<a href="http://www.carltd.com/node/565">http://www.carltd.com/node/565</a>
<b>Advice from English Heritage on upgrading older houses</b>	<a href="http://www.english-heritage.org.uk/professional/advice/advice-by-topic/climate-change/energy-efficiency/">http://www.english-heritage.org.uk/professional/advice/advice-by-topic/climate-change/energy-efficiency/</a>
<b>Green Deal providers and installers</b>	<a href="http://gdorb.decc.gov.uk/consumersearch">http://gdorb.decc.gov.uk/consumersearch</a>

## **Other Events you may be interested in:**

### **Thursday 26th June: Sustainable Girton Low Energy Light Bulb Evening**

19:00 Girton Baptist Church 103 High St, Girton, Cambridge CB3 0QQ

Sustainable Girton invite you to our Low Energy Light Bulb Evening. Low Energy Light Bulb have come a long way since the early days so come and see for yourselves: What do the latest light bulbs look like? How bright are they? How fast do they come on? How much money do they save?

### **Thursday 3rd July: The joys and challenges of long distance cycling**

19:30-21:00 CB1 cafe, 32 Mill Road, CB1 2AD

Ever thought of heading off on a cycling holiday, or cycling across continents to visit friends? Come and hear from three people who've done exactly that - they'll tell us about their experience of cycling to Lebanon, Norway and from Lands End to John O'Groats (our oldest cyclist is over 70 - so it's never too later to do this!).

### **Sunday 14<sup>th</sup> Sep and Saturday 20th Sep: Open Eco Homes**

Cambridge Carbon Footprint invite you to visit homes in and around Cambridge, to meet householders who are saving energy, see their homes and ask about what they have done. Details at [www.openecohomes.org](http://www.openecohomes.org)

## **About Transition Cambridge:**

Transition Cambridge (TC) is a network of volunteers in Cambridge, part of the Transition Network. TC aims to promote community resilience to the twin challenges of rising energy prices and climate change. TC projects include:

- Household Energy forums – question and answer sessions similar to this one but focussed on a different topic such as heat pumps or wood stoves
- Community Supported Agriculture (Cropshare)
- Wildlife wanderings
- Romsey Community gardens
- Greeniversity (skillshare)

TC has a weekly newsletter with events and news from TC and other organisations with similar aims. For more information go to [www.transitioncambridge.org](http://www.transitioncambridge.org)