

Climate – it's the pace of change that should concern us

It is not unusual for the earth's average temperature to rise or fall over tens of thousands of years. However, climate scientists consider it 'very likely' that global warming is now being accelerated by the high volumes of man-made carbon dioxide (CO₂) in our atmosphere. A survey of 928 peer-reviewed scientific papers demonstrated that three-quarters of the authors accepted this view, and none rejected it.

CO₂ forms part of the natural greenhouse effect which, like a blanket, keeps the planet warm enough, but not too warm, for life. However, ice core data shows that CO₂ levels are now the highest they have been in 650,000 years. Chemical analysis reveals that the majority of the 30% increase in CO₂ over the last 100 years is the result of burning coal, gas and oil.

What's more, the ten warmest years since detailed records began in 1861 have all occurred since 1995. Computer models offer no ready explanation for this accelerated pace of warming without man-made CO₂ being a factor.

Scientists predict that rapid climate change will cause global difficulties in adapting. However, energy saving is something positive we can all do to prolong the availability of finite natural resources which will help us to adapt. Reducing CO₂ emissions can be as straight-forward as insulating our homes, switching off lights and taking our foot off the accelerator.

For impartial advice on reducing your CO₂ emissions, contact the Energy Saving Trust free on **0800 512 012**.



Severe flooding could result from accelerated climate change

Notes for editors:

1. This article was produced by United Sustainable Energy Agency (USEA). This organisation was created by the merger of Milton Keynes Energy Agency & Thames Valley Energy Centre in May 2008.

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2. USEA works in partnership with local authorities throughout Bucks, Berks, Beds, Herts, Oxon, Hants and the Isle of Wight. In 2008, USEA was awarded a new contract with the Energy Saving Trust to operate an Energy Saving Trust advice centre for the South East. The centre provides impartial energy saving advice to the residents of Bucks, Berks, Oxon, Hants and the Isle of Wight. USEA also offers a free insulation price comparison service called Cocoon.
3. Under one of its mid-range estimates, the Intergovernmental Panel on Climate Change (IPCC) has projected a global average temperature increase this century of 2 to 3 °C. This would mean that the Earth will experience a larger climate change than it has experienced for at least 10,000 years. The impact and pace of this change would create difficulties for millions of people, and the ecosystems they rely on.
4. In 2004, the scientific journal *Science* presented a survey of 928 papers on climate change which had been written about in peer-reviewed journals between 1993 and 2003. It revealed that three-quarters of these papers either explicitly or implicitly accepted the view that human activities have had a major impact on climate change in the last 50 years, and none rejected it.
5. References:
IPCC Fourth Assessment Report - Summary for Policy Makers April 2007
The Royal Society Climate Change Controversies – A simple Guide April 2007
6. The information contained within this article is correct to the best of our knowledge, but is subject to change. USEA cannot in any way be held legally responsible for any advice given or any work carried out as a result of this information.

