

## **Economic Growth Drives Global Warming**

Spring is here at last. As the gloom of winter finally gives way to bright sunshine, the UK's financial pundits are busy celebrating figures suggesting that the long-awaited economic recovery is also underway. But is this really such good news? For anyone concerned about climate change, the answer, sadly, is a resounding no.

Why? Because the figures tell us that stopping the growth of our economy is the only way to make any really significant impact on global warming. Since 2008 the UK has been experiencing its longest recession since records began. The economy has shrunk by 6%, we're deeply in debt, and unemployment could yet reach as many as 4 million. For some, this has brought financial hardship on a scale not seen since the 1930s. Yet from the point of view of greenhouse gas emissions it's been absolutely wonderful. In 2009, UK emissions of the main greenhouse gas, carbon dioxide, fell by 9.8% - from 533m tonnes in 2008 to 481m tonnes in 2009 - while overall output of the six main greenhouse gases fell by 8.6%.<sup>1</sup> As Friends of the Earth have pointed out<sup>2</sup>, this was a bigger reduction in one year than all the other years of Labour government put together. According to the Department for Energy and Climate Change, the main cause was a significant reduction in energy consumption as the economy contracted.<sup>3</sup> Unsurprisingly, by far the greatest falls in demand came from business and industry. Globally we have seen a similar, if less dramatic trend. The International Energy Agency estimated world CO2 emissions to have fallen by around 3% in 2009, despite the massive expansion of Chinese and Indian industry.<sup>4</sup> This was only the fourth recorded fall in the past 50 years - on average emissions have grown by 3% year on year.<sup>5</sup>

Historically, reductions in greenhouse gas emissions have always been associated with an economic downturn - such as the dip after 9/11 when many Americans temporarily stopped flying abroad. The other main driver has been the replacement of the most 'dirty' fossil fuel - coal - by 'cleaner' natural gas, as happened in Britain in the early 1990s. There is little evidence, as yet, of any significant impact on GHG outputs due to lifestyle changes such as consumers choosing to buy more energy efficient or 'green' products. In fact, research seems to show quite the opposite: when consumers take measures to improve household energy efficiency - such as fitting better insulation or buying a more fuel-efficient car - they then spend the money saved on more goods, services or

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1 DECC (2010) Energy Trends March 2010. London: Department of Energy and Climate Change.

2 Adam, D. (2009) 'UK greenhouse gas emissions drop by 8.6%'. The Guardian, Thursday 25 March 2010. Available online at <http://www.guardian.co.uk/environment/2010/mar/25/uk-greenhouse-gas-emissions-drop>

3 DECC (2010) Statistical Release March 2010. London: Department of Energy and Climate Change. Available online at [http://www.decc.gov.uk/media/viewfile.ashx?filepath=statistics/climate\\_change/1\\_20100325084241\\_e\\_@@\\_ghgnationalstatsrelease.pdf&filetype=4](http://www.decc.gov.uk/media/viewfile.ashx?filepath=statistics/climate_change/1_20100325084241_e_@@_ghgnationalstatsrelease.pdf&filetype=4)

4 IEA (2009) World Energy Outlook 2009. Paris: International Energy Agency. <http://www.worldenergyoutlook.org/index.asp>

5 Olivier, J.G.J., Van Aardenne, J.A., Dentener, F., Pagliari, V., Ganzeveld, L.N. and J.A.H.W. Peters (2005). Recent trends in global greenhouse gas emissions: regional trends 1970-2000 and spatial distribution of key sources. Environmental Science, 2 (2-3), 81-99.

IEA (2004). CO2 emissions from fuel combustion 1971-2004, 2006 Edition. Paris: International Energy Agency.

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travel. In fact, it seems possible that in some cases the increased energy demand caused by this 'rebound effect' may at times outstrip any savings made through improved efficiency.<sup>6</sup>

This leaves us with a very clear message: if we really want to achieve the cuts in greenhouse gas emissions required if we are to avoid catastrophic climate change, simply tinkering around with 'green consumerism' and individual behaviour change is unlikely to do the trick. What we must do is radically 'green' our energy supply while calling a halt to economic growth. The links between increasing GDP, debt, energy demand, fossil-fuel use and pollution are inescapable;<sup>7</sup> it's now blindingly obvious that economies cannot continue to grow indefinitely on a finite and seriously stressed-out planet. As the Sustainable Development Commission have pointed out,<sup>8</sup> it should be perfectly possible for the UK to have prosperity without growth – but only if we are prepared to overhaul our economic arrangements so that they favour the common interests of all over the desire for ever-increasing profits.

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6 UKERC (2007) The Rebound Effect: an assessment of the evidence for economy-wide energy savings from improved energy efficiency. London: UK Energy Research Centre. Available online at:

<http://www.ukerc.ac.uk/support/tiki-index.php?page=ReboundEffect&highlight=rebound%20effect>

7 Raupach, M. R., Marland, G., Ciais, P., Le Quere, C., Canadell, J. G., Klepper, G. and C. B. Field (2007). Global and regional drivers of accelerating CO<sub>2</sub> emissions. Proceedings of the National Academy of Sciences of the United States, 104 (24) pp. 10288–10293.

8 Jackson, T. (2009) Prosperity without growth? The transition to a sustainable economy. London: The Sustainable Development Commission. Available online at: <http://www.sd-commission.org.uk/publications.php?id=914>