



www.taxpayersalliance.com

FOR IMMEDIATE RELEASE

RESEARCH NOTE 37

THE CASE AGAINST AN 80 PER CENT MANDATORY TARGET FOR EMISSIONS CUTS

The Government have recently committed to increase their legally-binding pledge to cut greenhouse gas emissions from 60 per cent to 80 per cent of the 1990 level by 2050.¹ This will be included in the climate change bill, which will get its third reading on October 28th. Setting such a target would be a serious mistake. It would risk compelling a government to take economically disastrous actions – such as putting in place draconian green taxes and regulations – and do little to curb global emissions, and mitigate expected climate change.

Key points

- If the UK continues to improve its emissions intensity **at the rate it managed between 1990 and 2005**, then a **78 per cent** cut in the expected level of **GDP in 2050** would be required to bring emissions down to the target. This means that GDP would be nearly 4 per cent lower in 2050 than it was in 1990.
- The UK's 1990-2005 record was based on one-time gains from the 'dash for gas'. If we revert to the **average developed country performance**, then an **86 per cent cut** in cut in the expected level of **GDP in 2050** would be required to bring emissions down to the target. This means that GDP would be 38 per cent lower in 2050 than it was in 1990.
- For the UK to meet its target without sacrificing GDP in 2050, **emissions intensity cuts of around 5.8 per cent each year would be needed**. This is more than **twice the amount Britain managed between 1990 and 2005** and three and a half times the amount developed countries managed between 1993 and 2005. It would therefore require remarkable technological development. It is clear that politicians have not thought through how this might be achieved.

¹ Press Association, 'Britain to pledge legally-binding emissions cut', October 2008



- With the onset of the financial crisis, a range of other industrial countries are increasingly sceptical of aggressive action to cut emissions. In the absence of a global agreement, unilateral action to cut emissions in Britain would increase costs and lead to jobs and production moving abroad. This would export emissions, and would do little to reduce global emissions.

Comment from the TaxPayers' Alliance

Matthew Sinclair, Policy Analyst at the TaxPayers' Alliance, said:

"Politicians are making radical promises to cut emissions but don't appear to have thought through how these can be delivered without doing crippling damage to the UK economy. Those sacrifices would probably be in vain as it appears less and less likely that other countries will follow our example. Instead of putting in place regulations and taxes that hurt the economy we should put British creativity and innovation to work and develop the technologies that can deliver a safer, cleaner world."

To arrange broadcast interviews, please contact:

Susie Squire

Campaign Manager, The TaxPayers' Alliance

susie.squire@taxpayersalliance.com; 07974 691 865

To discuss the research, please contact:

Matthew Sinclair

Policy Analyst, The TaxPayers' Alliance

matthew.sinclair@taxpayersalliance.com, 07771 990 174

Compelling a massive cut in economic activity

Emissions of carbon dioxide, by far the most important manmade greenhouse gas, can be understood as the product of GDP and carbon intensity (the amount of CO₂ produced per unit of GDP). The following equation is, therefore, a simple way of understanding the challenge of cutting emissions:

$$\text{CO}_2 \text{ emissions} = \text{GDP} \times \text{Carbon Intensity}$$

If we want to bring down CO₂ emissions by 80 per cent by 2050 then either GDP or carbon intensity will need to fall. Clearly, the preferred option would be to reduce carbon intensity. Unfortunately, despite massive green taxes on a number of major emitting activities and high fossil fuel prices creating an incentive to increase efficiency,² reductions in carbon intensity have been quite modest so far:

- Over the twelve years between 1993 (when statistics for all OECD countries become available) and 2005 carbon intensity in developed countries fell by around 1.64 per cent each year.³
- Over fifteen years between 1990 and 2005, Britain cut its carbon intensity significantly faster, by around 2.57 per cent each year.⁴ A major factor in this strong performance has been an ongoing 'dash for gas'.

If we assume that the economy grows at a trend rate of 2.5 per cent and that the levels of carbon intensity improvement (cited above) continue, then, based on the simple equation above, a cut to 80 per cent below 1990 levels implies massive cuts in GDP by 2050:

- If the UK reverts to the developed country norm and emissions intensity falls at 1.64 per cent each year then an 86 per cent cut in the expected level of GDP in 2050 would be required to bring emissions down to the target. This means that GDP would be 38 per cent lower in 2050 than it was in 1990.
- If the UK maintains its recent performance and emissions intensity falls at 2.57 per cent each year then a 78 per cent cut in the expected level of GDP in 2050 would be required to bring emissions down to the target. This means that GDP would be nearly 4 per cent lower in 2050 than it was in 1990.

² Sinclair, M. *'The Burden of Green Taxes'*, TaxPayers' Alliance, August 2008

³ Energy Information Administration, *'International Energy Annual 2005'*, Table H.1gco2, October 2007

⁴ Ibid.

- For the UK to meet its target without sacrificing GDP in 2050, emissions intensity cuts of around 5.8 per cent each year would be needed.

Of these three options the most plausible is that the UK reverts to the developed country norm. While technological advance can be expected to continue to reduce emissions intensity there seems little reason to expect that the next fifteen years will significantly outperform the previous fifteen and the 'dash for gas' cannot be repeated. Without dramatic technological change, politicians would be likely to vainly try and meet the target by putting in place new taxes and regulations.

Unilateral action leads to exports of emissions

Steps taken to reduce emissions are likely to lead to increases in the price of fossil fuel energy. There are signs that European firms are already moving to avoid these costs:

- The Spanish company Acerinox S. A., the world's second largest steel producer, recently decided to expand investments in Kentucky in order to avoid the EU ETS. According to testimony to the United States Senate Committee on Environment and Public Works, Acerinox is now planning to invest €270 million in Kentucky, against just €41 million in Spain.⁵
- Business energy costs are already significantly affected by climate change policies, which make up 21 per cent of the average business electricity bill.⁶ In 2006, the Times reported that businesses were already attributing large numbers of job losses to spiralling energy costs:⁷

"In a debate on energy security and climate change, Tom Crotty, chairman of the chlorine producer Ineos ChlorVinyls, said that spiralling energy costs had led to the loss of 100,000 job losses over the past 18 months. Included in those losses were the closure of 13 glassmakers and 11 papermills. Ineos ChlorVinyls, which had to halt production temporarily last year because of higher energy costs, has 80 per cent of its costs tied up in energy. Mr Crotty said that energy policy had failed industry: "The true cost comes in lost business, lost jobs and lost income."

⁵ Inhofe, J. M. 'The Economics of America's Climate Security Act of 2007', May 2008

⁶ BERR, 'UK Renewable Energy Strategy: Consultation', June 2008, pg. 231

⁷ Buckley, C. 'Cool reception as Tories produce a policy on global warming', *The Times*, November 2006

Britain's emissions intensity is, in international terms, relatively low. This is partly the result of the UK economy specialising in activities that tend to produce relatively low emissions, but it is also a reflection of the relative energy efficiency of British industry. Exporting emissions to countries like China, with much higher emissions intensity, is likely to increase total emissions.

Table 5.2.1: Emissions intensity by country for the 25 largest emitters, 2000⁸

Country	Emissions intensity: tonnes of CO ₂ eq. / \$m GDP (PPP)
Ukraine	2,369
Russia	1,817
Iran	1,353
Saudi Arabia	1,309
Pakistan	1,074
China	1,023
South Africa	1,006
Poland	991
Australia	977
Turkey	844
Indonesia	799
Canada	793
India	768
South Korea	729
United States	720
Brazil	679
Argentina	659
Mexico	586
Spain	471
Germany	471
United Kingdom	450
Japan	400
Italy	369
France	344

Work commissioned by the Government suggests that much of Britain's limited success in cutting emissions may have come from exporting emissions to other countries. The report found that Britain's Consumer Emissions, those produced both in the UK and abroad providing goods for UK consumers, were 762.4 Mt of CO₂ in 2004:⁹

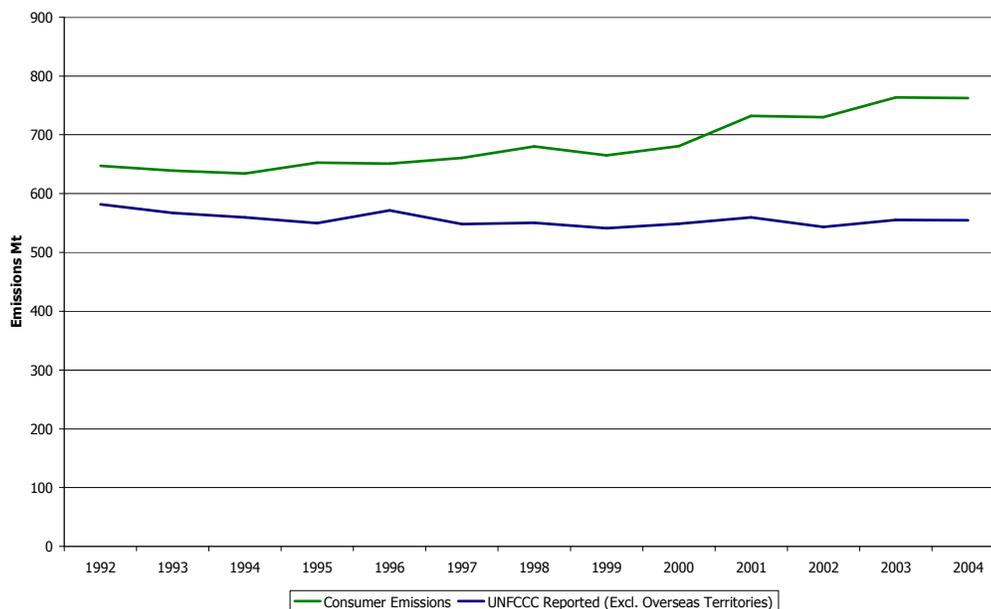
⁸ Baumert, K. A., Herzog, T. & Pershing, J. "Navigating the Numbers: Greenhouse Gas Data and International Climate Policy", Chapter 5, http://pdf.wri.org/navigating_numbers_chapter5.pdf, World Resources Institute

⁹ Stockholm Environment Institute & University of Sydney, 'Development of an embedded carbon emissions indicator', DEFRA, July 2008

- That is 132 Mt more than the producer emissions total that is generally quoted when discussing UK carbon dioxide emissions, a measure which does not include emissions exported to other countries.
- Emissions embedded in exports, the emissions that Britain has exported to other countries, have increased from 4.3 per cent of producer emissions in 1997 to 21 per cent in 2004.

Emissions exports are also creating a growing gap between the emissions reported to the UN and Consumer Emissions, as can be seen in the graph below:

Figure 5.2.1: UK Consumer Emissions and UNFCCC reported emissions¹⁰



Taking unilateral steps to cut emissions too often leads to pointless economic sacrifice as emissions, and jobs, are exported abroad.

¹⁰ Ibid. pp. 21-22

Other countries retreating from radical action to cut emissions

While Britain is strengthening its commitment to cut emissions, other countries are retreating from radical action:

- Significant change in US policy is unlikely, regardless of who wins the Presidential election. The strongest opposition came from the Senate, the composition of which is unlikely to change radically, and the financial crisis is thought to have made action less likely.¹¹
- The Polish Prime Minister has pledged to work with the Chinese to ensure that international action to reduce greenhouse gas emissions does not imperil their coal dependent economies.¹² The Polish foreign minister, Radoslaw Sikorski, has said that it is "still possible" Poland will veto EU climate plans.¹³
- In Canada, the Liberal Party were solidly defeated after pledging to introduce a new carbon tax, which was opposed by the Conservative government.¹⁴
- Italian Prime Minister, Silvio Berlusconi, has attacked the medium term EU target for 20 per cent cuts in emissions by 2020, saying: "We do not think that now is the time to be playing the role of Don Quixote, when the big producers of CO₂, such as the United States or China, are totally against adherence to our targets."¹⁵
- France currently holds the Presidency of the EU, but by January the Czech Republic will take over and the Czechs have promised to scale back environmental demands.¹⁶
- Germany is pressing for exceptions for heavy industry in EU climate plans as "this crisis changes priorities."¹⁷ Representatives of German business have called for a moratorium on European Union legislation that would impose higher costs on companies at a time when they are grappling with the fallout from the financial crisis.¹⁸

¹¹ Baldwin, T. & Bannerman, L. 'Climate policy will wither whoever wins U.S. elections', *The Times*, October 2008

¹² Baczynska, G. 'Coal nations may form alliance ahead of U.N. climate talks', *Reuters*, October 2008

¹³ Phillips, L. 'EU climate package must now be 'cost effective'', *EUObserver*, October 2008

¹⁴ Williamson, J. 'Green shift: a loser worldwide', *Financial Post*, October 2008

¹⁵ Waterfield, B. 'EU facing revolt over climate change target enforcement', *Daily Telegraph*, October 2008

¹⁶ Charter, D. & Watson, R. 'EU climate policy in disarray as Italy joins revolt', *The Times*, October 2008

¹⁷ Johnson, K. 'Meltdown has Europe backpedalling on climate caps', *Wall Street Journal Environmental Capital*, October 2008

¹⁸ Bryant, C. 'German industry calls for moratorium on EU climate bill', *Financial Times*, October 2008



If Britain presses ahead unilaterally, the damage to British industry is likely to be severe and cuts in emissions are unlikely to be meaningful as emissions are exported abroad. Even if the cost and potential for exporting emissions is ignored, given that Britain is projected to only produce around 1.2 per cent of global emissions by 2050, there is little point in us taking unilateral action.¹⁹

¹⁹ Hawksworth, J. *'The World in 2050: Implications of global growth for carbon emissions and climate change policy'*, PriceWaterhouseCoopers, September 2006