Climate Change: The Road from Rio to Copenhagen.

Before the Climate Change caravan goes to Copenhagen in December 2009 it may be worth recapitulating what has been achieved since it began its journey in Rio de Janeiro in January 1992. In Rio the Earth Summit, an immense gathering of organisations and governments, of scientists and activists, saw the formation of the United Nations Framework Convention on Climate Change, the UNFCCC, which produced, amongst many other things two that set it on its journey: The Kyoto Convention and the Kyoto Protocol.

The Kyoto Convention. Almost all the countries having recognised the problem of climate change signed the Convention which placed its initial emphasis upon the industrial nations and on another twelve nations whose economies were in transition towards industrial status to get them to reduce their own GHG (greenhouse gas) emissions and also to finance ways to help developing countries to do so without harming the economies of those countries.

The Kyoto Protocol. The Kyoto Protocol was adopted in Kyoto in December 1997. 184 Parties of the convention had ratified the Protocol by mid 2001 and it became a legal treaty. When "55 nations then producing 55% of GHG emissions had ratified it" the Protocol came into force in February 2005. Whilst it set up mechanisms to stimulate green investments it also set targets for GHG emissions.

Only Annex 1 countries – those 38 industrialised countries and those with their economies in transition - were set emission targets. They were to reduce GHG emissions to an average of 5.2% below 1990 levels between 2008 and 2012. It is these countries that were producing the most emissions but were also deemed best able to respond to climate change. The Kyoto Convention encouraged countries to recognise the problem and the Protocol committed its signatories to action. But is the Kyoto Protocol working?

Whilst the USA refused to sign and Australia declined to do so at the time, but has now done so, it means that some 40% of Annex 1 countries' emissions were not covered. The European Union was pressing for cuts not of 5.2% but of 8.0% on 1990 levels by 2010, with the United Kingdom going for 12.5% cuts. Note that the EU recommended cuts of 60%-80% by 2050. Some countries have made good progress whilst others have continued to increase emissions. That the USA is currently outside of the protocol and has increased its emissions by 12% on 1990 totals remains a huge problem. Noteworthy too is that the developing countries are excluded from setting targets. China is now the largest producer of GHG emissions, closely followed by the USA with Indonesia in third place.

Since the mid 20th century CO_2 levels have risen from about 280 ppm (parts per million) to over 380 ppm. When the other gases such as methane are included with their CO_2 equivalent values the figure rises to 430 ppm CO_{2e} . The annual rise is now over 2.5 ppm and so the GHG totals will soon be at 450 ppm.

The Kyoto Protocol expires in 2012 and at Copenhagen its successor from 2013 will have to be established. Few can doubt that time will be of the essence.

Sources: Maslin, Climate Change, A Very Short Introduction. 2004 Dow and Downing, The Atlas of Climate Change, 2006 www.unfccc.int/kyoto_protocol/items

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