

The Intergovernmental Panel on Climate Change: A Synthesis of the Fourth Assessment Report

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The World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC). The IPCC's primary goal was to assess scientific, technical and socio-economic information relevant for the understanding of climate change, its potential impact and options for adaptation and mitigation.

The purpose of the current paper is to provide a synthesis of the IPCC's Fourth Assessment Report (IPCC, 2007). Much of the material presented is drawn directly from the summaries for policy makers prepared by the IPCC's three Working Groups, namely:

- I. The Physical Science Basis (released February 2007);
- II. Impacts, Adaptation and Vulnerability (released April 2007); and,
- III. Mitigation (released May 2007).

It is emphasised that the understanding of anthropogenic warming and cooling influences on climate leads one down the risk management pathway when deciding on what strategies to adopt to mitigate the impact of human activities on climate change. This is because the conclusions of the Working Groups are all couched in terms that define the level of certainty with which they are proposed. In this context, much of the author's research into climate change focuses upon evaluating costs and managing risks (Stern, 2005).

There is substantial economic potential for the mitigation of global greenhouse gas emissions and there is growing evidence that decisions about macroeconomic policy, agricultural policy, multilateral bank lending, insurance practices, electricity market reform, energy security and forest conservation, for example, which are often treated as being apart from climate policy, can significantly reduce emissions.

The words of Dr Rajendra Pachauri, chairman of the IPCC (The Age, 11 Aug., 2007) are particularly relevant:

“Some Australian industries may be ‘discomforted’ by stronger action on climate change (and) the cost to the Australian economy was likely to be higher (than that to other countries) due to (Australia’s) dependence on fossil fuels. (However), over a period of time some of these measures would actually result in more jobs being created. Making deep emission cuts would shave (only) about 0.12 per cent a year off global economic growth to 2030. That would mean most people would keep getting richer (albeit) at a slightly slower pace, while greatly reducing the risk of catastrophic damage to the planet.”

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