

Taking a Stern view

While issues around climate change have been on the international political agenda for some time, they were recently exposed to the full glare of mainstream media attention with the release of a contested report on the effects of global warming and the opening of the Twelfth Conference of the Parties to the UN convention meant to address the problem. During September and October former American political contender, Al Gore, presided over the international release of his film *An Inconvenient Truth*, which paints a nightmarish picture of the planet's future, blighted with the scourge of uncontrolled, human-induced warming. In a less populist vein the release, in October, of the Stern Review, authored by former World Bank chief economist, Nicholas Stern made front page headlines (*UK Study warns of economic meltdown*, Business Day, 31 October 2006). The Review indicates that the scientific evidence for global warming is now overwhelming and concludes that ignoring climate change could lead to economic upheaval on a scale similar to that of the Great Depression. The economic modelling used in the Review estimates that if we do not take appropriate action, the overall risks and costs of the phenomenon will be equivalent to losing at least 5% of global GDP each year, now and forever. By appropriate action is meant limiting the concentration of greenhouse gases in the atmosphere to below 550 parts per million (ppm).

The Review mentions this figure because the weight of scientific opinion is that restricting such concentrations will limit average warming to around two degrees Celsius, which is regarded as the maximum manageable temperature increase. This target for temperature increase is included in European Union climate policy and is the foundation of a campaign to raise public awareness of the issues involved. Among a myriad of actions required to counter the phenomenon is the urgent reduction of human-induced greenhouse gas emissions. For example, the CO₂ emissions generated by fossil-fueled power stations. In this context it might be noted that the vast majority of our electricity is generated by the combustion of coal with a fairly low calorific value, which emits higher levels of CO₂ than better quality coal with a greater calorific value. Our higher grade coal is exported, earning the country large quantities of much needed foreign exchange.

What the Review (and many other warnings like it) highlights: global warming is going to occur.

The question is: Can humanity take sufficient action to limit the consequences of warming to manageable proportions for all aspects of our respective civilisations (social, financial and environmental) and the world's biodiversity?

Ironically, despite the Review's dire warnings certain NGO groupings have criticised Stern's conclusions for being too conservative and that concentrations of atmospheric greenhouse gas needs to be limited to under 450 ppm. Even these lesser concentrations would be more than double the value for the pre-industrial era.

The good news is that, if we take appropriate action now, there is still time to avoid the worst impacts of climate change on our planet.