

6.8 Government response to climate change

By the end of the twenty-first century the Earth's average temperature might be up to 5.8°C warmer than today, if greenhouse gas concentration continues to increase. But it is not just the temperature that might change — storms might be more extreme, sea levels might rise, and floods and drought might also become more frequent. Already governments are planning for below average rainfall levels to become more commonplace. Around Australia, all states are building desalination plants to help meet the future water needs of growing populations. It has also been predicted that the extreme weather that led to the Victorian bushfires on Black Saturday in February 2009 will be exceeded in coming bushfire seasons. The Australian government's response to climate change has altered to reflect the public's growing awareness of the potential impact of this global environmental threat and the dangers to be faced if political leaders do nothing to stop it.

The globe is warming

Ten of the hottest years since climate records began in the 1850s were between 1990 and 2008, with 1998 the hottest year on record. Sea levels have risen 10 to 20 centimetres over the past century; this is affecting many low-lying regions such as Papua New Guinea's Carteret Islands, which are slowly being covered by the sea. They and other low-lying island groups, such as the Marshall Islands and Kiribati in the Pacific, and the Maldives in the Indian Ocean, may eventually be entirely submerged.

Source 1 The Central Queensland city of Rockhampton was one of many cities to experience widespread flooding in January 2011.

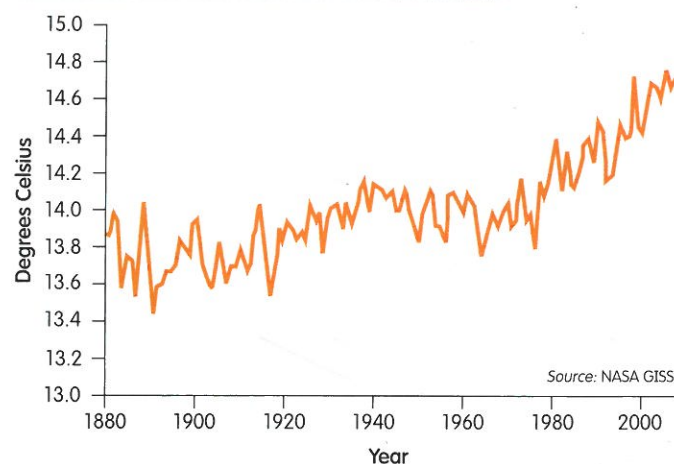


Kyoto and beyond

In 1997, representatives of 160 countries met in Japan to consider ways of reducing greenhouse gas emissions. Targets were to be set. Some demands were for a 15 per cent reduction by 2012, while some scientists argued for a 60 per cent reduction over the next century. Some countries, including China, claimed exemption from any targets because of their growing industrial development. Eventually a modest goal was set of a 5 per cent reduction from 1990 levels in six key greenhouse gases by 2012.

Initially, the Australian government was reluctant to accept these targets, arguing that they would have a negative impact on the Australian economy because of our high dependence on fossil fuels to produce the energy needed to power our industries.

Source 2 Average global temperatures, 1880–2007



Did you know?

As governments seek to keep temperature rises to less than 2 degrees above year 2000 levels, they have begun funding alternatives to using fossil fuels to create power. The US company First Solar and China's Guangdong Nuclear Solar Energy Development Company are working together to build the world's largest photovoltaic solar farm in Ordos, Mongolia. When complete, the 30-megawatt plant will be capable of powering 3 million Chinese homes.

The Kyoto Protocol was finally ratified (approved) by the Australian government in December 2007 and came into effect in March 2008. In ratifying the agreement, Australia committed to reducing greenhouse gas emissions by 60 per cent of year 2000 levels by 2050.

In 2007 more than 10 000 participants, including government representatives, non-governmental organisations and members of the press representing 180 nations, gathered at the Bali Climate Conference to develop the 'Bali Road Map', a document intended as a guide to reducing carbon emissions beyond 2012. When the US delegates suggested developing nations should take more responsibility for carbon emissions, frustration with the US boiled over, with a delegate from Papua New Guinea saying, 'If you cannot lead, leave it to the rest of us. Please get out of the way.'

Following the Bali conference, many people hoped for a stronger plan for cutting carbon emissions. At the United Nations Climate Change Conference in Copenhagen (2009), world leaders officially recognised the need to keep the global temperature rise to less than 2 degrees Celsius. However, the agreement did not contain specific commitments for reaching that goal. While UN Secretary General Ban Ki-moon called the agreement an 'essential beginning', US President Barack Obama acknowledged, 'This progress is not enough.'

At the yearly meeting of the United Nations Framework Convention on Climate Change (UNFCCC) in 2010, in Cancun, Mexico, the Executive Secretary, Christiana Figueres, expressed the need for countries to stop thinking only of themselves and finally accept the need to develop a substantial plan for reducing carbon emissions. She expressed both hope and frustration when she said,

Did you know?

In 2009 Australians overtook residents of the United States as the world's biggest carbon dioxide emitters per person, with the average Australian producing 20.58 tonnes of greenhouse gases per year, while the average American produced 19.81 tonnes. By contrast, the average Chinese person produced 4.5 tonnes, while the average Indian produced a little over one tonne.

Source 3 The Intergovernmental Panel on Climate Change (IPCC) has estimated that the sea could rise between 50 and 100 centimetres by 2100. This map shows the effects of a one metre sea level rise on our region if we do not work to repair the damage caused by industrialisation.

