



Committee Secretary  
Senate Standing Committee on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Dear Committee Secretary

**SENATE COMMITTEE INQUIRY INTO RECENT TRENDS IN AND  
PREPAREDNESS FOR EXTREME EVENTS**

The Department of Climate Change and Energy Efficiency (DCCEE) welcomes the Senate Committee on Environment and Communications' Inquiry into recent trends in and preparedness for extreme events.

There is a growing and robust body of evidence that climate change will exacerbate the frequency and intensity of extreme events. These increases are unlikely to be linear. Small shifts in average weather can result in exponential increases in the extremes we experience. This will make extreme events harder to predict and prepare for, and it also means that the cumulative impacts of extreme events will increasingly challenge Australia's national prosperity and well-being.

Australia is already exposed to extreme events such as flooding, heatwave, bushfires and drought. These events have large economic, social and environmental costs. The last decade in Australia has seen the Millennium Drought and Black Saturday bushfires, followed by 2010 and 2011 recording the highest two-year Australian-average rainfall total on record resulting in extensive and damaging flooding. In the first month of 2013 alone, we have witnessed an Australia-wide record-breaking heatwave, bushfire events, and extreme rainfall and flooding along the east coast which have impacted on many Australians.

In the future it is likely that maintaining the wellbeing of Australians through such events will pose even greater challenges. Projections of climate change indicate that Australia is very likely to face increased heatwaves, droughts, bushfires, storm surges and extreme rainfall events.

DCCEE is coordinating the delivery of climate change science in Australia, including science on extreme weather events in a changing climate. In 2009 the Government adopted the *Australian Climate Change Science Framework* (the Framework) which identified extreme events as a key challenge requiring a strong research effort at the regional level to deliver information that will inform important decisions over the next decade. In June 2012, the High Level Coordination Group of officials, established to oversee the delivery and implementation of the Framework, released *A Plan for Implementing Climate Change in Australia* that will implement the Framework.



DCCEE is also working with states and territories to agree roles and responsibilities for adaptation across different levels of government, and to progress nationally coordinated approaches to adaptation in the coastal zone.

Key documents that may assist the Committee in its consideration of the implications of climate change for extreme weather events include:

- CSIRO and the Bureau of Meteorology, 2007, *Climate Change in Australia – Technical Report* [www.climatechangeinaustralia.gov.au](http://www.climatechangeinaustralia.gov.au)
- IPCC, 2012, *Special Report for Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* [www.ipcc-wg2.gov/SREX](http://www.ipcc-wg2.gov/SREX)
- CSIRO, 2012, the *South East Australian Climate Initiative Synthesis Report* <http://www.seaci.org/publications/synthesis.html>
- Climate Commission, 2011, *The Critical Decade: Climate science, risks and responses* <http://climatecommission.gov.au/report/the-critical-decade/>
- *Australian Climate Change Science Framework* [www.climatechange.gov.au/publications/science/cc-science-framework.aspx](http://www.climatechange.gov.au/publications/science/cc-science-framework.aspx)
- *A Plan for Implementing Climate Change in Australia* [www.climatechange.gov.au/climate-change/national-framework-science/plan.aspx](http://www.climatechange.gov.au/climate-change/national-framework-science/plan.aspx)
- Australian Government, 2010, Australian Government Position Paper: *Adapting to a Changing Climate* [www.climatechange.gov.au/publications/adaptation/position-paper.aspx](http://www.climatechange.gov.au/publications/adaptation/position-paper.aspx)
- DCCEE, 2011, *Submission to the Productivity Commission’s Inquiry into Barriers to Climate Change Adaptation* [www.pc.gov.au/data/assets/pdf\\_file/0003/114744/sub057.pdf](http://www.pc.gov.au/data/assets/pdf_file/0003/114744/sub057.pdf)
- DCCEE, 2012, *In response to the Productivity Commission Draft Report “Barriers to Effective Climate Change Adaptation”* [www.pc.gov.au/data/assets/pdf\\_file/0010/118783/subdr163.pdf](http://www.pc.gov.au/data/assets/pdf_file/0010/118783/subdr163.pdf)

Yours sincerely

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