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## **AUSTRALIA NEEDS OPTIONS FOR CLIMATE ADAPTATION - IPCC REPORT**

Australia is already experiencing impacts of recent climate change, to which some adaptation has occurred in sectors such as water, natural ecosystems and agriculture. However, significant vulnerability remains to droughts and extreme weather events.

These are two of the key findings of the latest report of the Intergovernmental Panel on Climate Change, released in Brussels (6 pm, Friday AEST) following a week-long process scrutinising the scientific input of climate researchers, including 200 Australian and New Zealand scientists.

The overarching Summary for Policy Makers details observed climate change impacts around the world, a wider range of future impacts, options and challenges for adaptation, and links with emission reductions and sustainable development.

The chapter on Australia and New Zealand concluded that the climate of the 21st century is virtually certain to be warmer with changes in extreme events. Coordinating Lead Author, CSIRO's Kevin Hennessy, said: "Heat waves and fires are virtually certain to increase in intensity and frequency.

"Floods, landslides, droughts and storm surges are very likely to become more frequent and intense, and snow and frost are very likely to become less frequent", Mr Hennessy said.

The main findings about potential impacts were:

- As a result of reduced precipitation and increasing evaporation, water security problems are projected to intensify by 2030 in southern and eastern Australia.
- Loss of biodiversity is projected to occur by 2030 in ecologically-rich sites including the Great Barrier Reef, Kakadu wetlands, the Queensland Wet Tropics, south-west Australia, sub-Antarctic islands and alpine areas.
- Ongoing coastal development and population growth, in areas such as Cairns and southeast Queensland, are projected to exacerbate risks from sea-level rise and increases in the severity and frequency of storms and coastal flooding by 2050
- Production from agriculture and forestry by 2030-2050 is projected to decline over much of southern and eastern Australia due to increased drought and fire.

Mr Hennessy said vulnerability in Australia is likely to increase in many sectors, but this depends on adaptive capacity.

"Most human systems have considerable adaptive capacity.

"The region has well-developed economies, extensive scientific and technical capabilities, disaster mitigation strategies, and biosecurity measures.

"However, there are likely to be considerable cost and institutional constraints to implementation of adaptation options. Some Indigenous communities have low adaptive capacity. Water security and coastal communities are the most vulnerable sectors.

"Natural systems have limited adaptive capacity: Projected rates of climate change are very likely to exceed rates of evolutionary adaptation in many species. Habitat loss and fragmentation are very likely to limit species migration in response to shifting climatic zones.

"Vulnerability is likely to be high by 2050 in a few identified hotspots. These include the Great Barrier Reef, eastern Queensland, south-western Australia, the Murray-Darling Basin, the alps and Kakadu wetlands," Mr Hennessy said.

Lead authors responsible for assessing the science were drawn from national and state research institutions and universities.

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The full summary for policy makers is available at [www.ipcc.ch](http://www.ipcc.ch)

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Contact: Kevin Hennessy – 0400 572 613 or refer to the Australian Science Media Centre website ([www.aussmc.org.au](http://www.aussmc.org.au)) for more detailed information on:

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