

Australian Government

**Department of the Environment and Heritage
Australian Greenhouse Office**

Australia's Approach to Adaptation and Lessons Learned

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Adaptation: a challenge for all

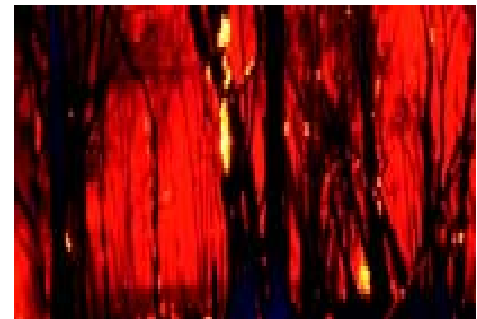
- All countries are grappling with the same issue
 - determining the nature of local impacts;
 - how best to respond to these impacts.
- There is a clear benefit in sharing research and experiences on climate change impacts and possible response measures

Australia's National Climate Change Adaptation Programme

- Goal is to commence preparing governments, industries and communities for the unavoidable consequences of climate change by:
 - Advising Government on policy issues – including key risks and opportunities
 - Building capacity to support development of effective and targeted strategies
 - Engaging stakeholders and providing targeted and scale-relevant information and tools

Potential climate changes in Australia include:

- More frequent and intense cyclones and severe weather events
- Changes in rainfall
 - Drought and flooding
- Increased temperatures
- Ocean warming



Risk and Vulnerability – identifying priorities

- The vulnerability of systems to climate change is influenced by:
 - The nature and extent of the impacts
 - The sensitivity to those impacts
 - Adaptive capacity to those impacts
- Prioritising adaptation action requires the identification of vulnerable systems, their coping capacity, and the consequences should those systems fail
- Australia's Climate Change Risk and Vulnerability Report, released in July 2005 as first step in identifying priorities
 - <http://www.greenhouse.gov.au/impacts/publications/risk-vulnerability.html>

Australia's vulnerability

- Many natural, human and economic systems/activities are vulnerable to potential impacts:
 - Water resources
 - Agriculture/forestry
 - Fisheries
 - Electricity supply
 - Transport infrastructure
 - Human health
 - Urban and coastal communities
 - Tourism
- Uncertainties remain about timing, location and magnitude

Potential adaptation responses

- Agriculture
 - Drought resistant crops and animal breeds
 - Improved water use and efficiency through better soil management
 - Diversification of crops
- Fisheries
 - Reduction of other human pressures on fisheries
- Forestry
 - Species selection
- Tourism
 - Improved infrastructure

Potential adaptation responses

- Water management
 - Water use efficiency
 - Dams
 - Storm water management
- Salinity
 - Desalination plants and water recycling
- Health
 - Land use planning
 - Building and settlement design
 - Insect control measures
- Mining
 - Larger tailings dams

Key lessons

- Integrate climate change impacts and adaptation considerations into national sustainable development strategies
- Include in risk assessment of all projects, and key policies and programmes
- Build on existing planning mechanisms and infrastructure (mainstream adaptation)
- Integration at the beginning reduces costs and can produce multiple benefits
- Work with partners/stakeholders

Next steps

- Continue to promote awareness
- Develop and share tools
- Continue to work to fill knowledge gaps – including local impacts and cost effectiveness of response measures
- Implement actions with clear multiple benefits

Thank You

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