A guide to managing biodiversity impacts under climate change

The release by the Natural Resource Management Ministerial Council of an action plan to help natural resource managers deal with the impacts of climate change on biodiversity is significant. It confirms we have accepted that real and possibly dramatic effects for Australia's biodiversity from climate change lie ahead, and that coordinated action will be needed to assist agencies to mitigate these effects.

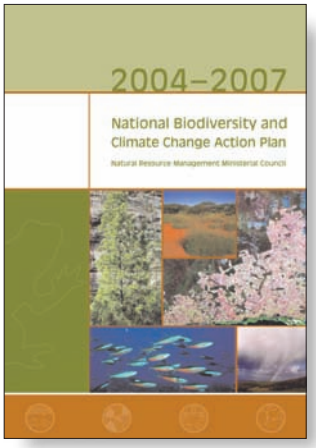
The Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2001b)[1] identified that natural resources and biodiversity conservation are likely to be strongly affected by climate change in Australia over the next 100 years, adding to the existing substantial pressures on these sectors.

The *National Biodiversity and Climate Change Action Plan (2004–2007)* explains how Australia could be affected by climate change and what we might do to help our species and ecosystems adapt to these impacts. This three-year plan is only a beginning. Programs will be reviewed in 2007 and a revised plan will be developed in light of new understanding and information.

The main intent of this initial plan is to:

- identify priority areas for research and monitoring, and improve understanding of potential climate change impacts on biodiversity to a point where specific strategies can be developed;
- use existing knowledge about the impacts of climate change and draw from ecological principles to review and amend current biodiversity conservation policies and strategies;
- improve communication about the impacts of climate change on biodiversity between researchers, resources managers and decision makers; and
- raise community awareness of the potentially significant and specific impacts of climate change on biodiversity.

1 Convened under the United Nations Framework Convention on Climate Change.



The action plan flags that significant changes to our biodiversity will occur. Natural Resource Management Ministerial Council

The action plan elaborates this approach and sets out specific objectives, strategies and actions that will be taken to reduce the impacts of climate change on native aquatic, semi-aquatic, marine, estuarine, coastal and terrestrial ecosystems, and to minimise the effect of alien invasive species on biodiversity in future climates. The development and implementation of these adaptation initiatives will complement government action to mitigate climate effects.

The actions promote *in situ* conservation of species and ecological communities to facilitate their natural adaptation, rather than the use of high-cost interventions such as translocation and captive breeding. Key strategies include promoting ecological connectivity to aid migration and dispersal of species, protecting refuges and creating specific management zones around important habitats.

Land and water managers, planners and policy-makers at national, state and territory, and local level will need to work together to integrate the strategies and actions outlined in the plan with broader biodiversity policies and programs including on-the-ground conservation activities.

More information:
About the Action Plan:
www.deh.gov.au/biodiversity/publications/nbccap/index.html

Renewable energy purchases are on target

The number of wholesale energy purchases that include the required amount of renewable source electricity is at an all time high, providing significant inertia to the renewable energy industry in Australia.

According to David Rossiter, the Renewable Energy Regulator, this year saw 99.9 per cent of the Renewable Energy Certificate quota set under the *Renewable Energy (Electricity) Act 2000* met through the submission of required Renewable Energy Certificates by companies, rather than by paying a shortfall charge.

'Under the Act, wholesale purchasers of electricity such as retailers and corporations are required to source Renewable Energy Certificates from renewable energy sources such as hydro, landfill gas, photovoltaic, bagasse and wind power stations,' he said.

'…they are legally obliged to contribute towards the generation of additional renewable electricity to reach the target of 9 500 000 megawatt hours by the year 2010.'

Those companies that choose not to submit the required number of Renewable Energy Certificates must pay the shortfall charge of $40 for each one megawatt hour Certificate not registered. The certificates are the units of trade for renewable energy transactions within the electricity market.

Mr Rossiter said the first three years of operation of the Act saw about 3.24 million Renewable Energy Certificates submitted, slightly above the 3.2 million mandated target.

'To remain on target over the next three years, over three times as many Certificates need to be surrendered. This tripling is a major challenge for the renewable energy industry but it looks well positioned to meet that test.'

Compliance on green energy targets is encouraging. istockphoto