

NATIONAL SECURITY UPDATES

National Climate Change Action for Emergency Management

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Viewing emergency management issues through the lens of a changing climate was the challenge put to a workshop held at the Australian Emergency Management Institute in July 2009. The aim of the workshop was to further develop the National Climate Change Action Plan for the emergency management sector. The current predictions for climate change in Australia were presented along with the implications for emergency management. A discussion paper due out in December 2009 will report on some of the strategies that are being considered and implemented in the climate change adaptation space relevant to the emergency management field in Australia.

Climate Change in Australia

In March 2008, COAG referred to climate change as one of the greatest economic and environmental challenges of our age. The projections for Australia of the impacts of climate change include:

- "an increase in the severity and frequency of many natural disasters such as bushfires, cyclones, hailstorms and floods;
- "insured losses from weather related events totalling billions of dollars. The flow-on effect is a likely increase in premiums for natural disasters increasing under-insurance and putting added burden on governments and communities when disasters occur;
- "temperature rises combined with an ageing population are projected to see 3000-5000 more people die each year from heat-related illnesses by 2050. There are also expected to be around 79000 additional cases of food poisoning per year by 2050 and the threat from vector borne disease, eg Dengue Fever, will increase;
- "drought is likely to become more frequent and has the potential to disrupt electricity generation capacity and affect the reliability of electricity supplies; and,

- "significant coastal erosion and damage to infrastructure as a result of sea-level rises and storm surges. 711 000 addresses and many billions of dollars worth of assets are at risk from rising sea levels and changes in storm surge. By 2100 sandy beaches could have receded by up to 88 metres."

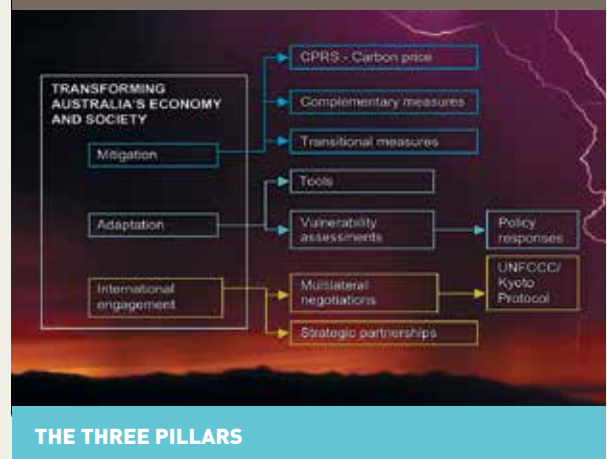
(Department of Climate Change, 2009).

The Australian Government has recognised the need to act on climate change and the Department of Climate Change (DCC) is tackling the issues facing the Australian community along three fronts (Figure 1):

- emissions reduction (climate change mitigation);
- adaptation (including research); and,
- international engagement.

Other government departments, such as Attorney-General's are looking at how the work in on these three fronts fits with their specific areas of interest. The focus of the July 2009 Workshop was climate change adaptation in emergency management.

FIGURE 1. The Australian Government's approach to meeting the challenge of climate change. Department of Climate Change, 2008



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The emergency management function will continue to be essential and “emergency management measures based on historic experience will not be adequate in a changing climate. The emergency management sector, including communities, will increasingly need information on emerging climate scenarios to enable climate change to be factored into the management of current and future disaster risks, and to inform preparation and response and recovery efforts. Some impacts from climate change are unavoidable, but implementation of appropriate adaptation strategies will lead to improvements in disaster resilience and reduction in disaster risk” (Attorney-General’s Department, 12 March 2009).

The adaptation agenda is very new in Australia and it has been informed by initial national risk assessments conducted by Department of Climate Change and CSIRO (CSIRO, 2006) and by the Prime Minister’s Science, Engineering and Innovation Council (PMSEIC, 2007). Further research in the Australian context specific to emergency management is planned through the National Adaptation Research Plan (NARP) for Disaster Management and Emergency Services (<http://www.nccarf.edu.au/national-adaptation-research-plan-emergency-management>) which is one of the projects of the National Climate Change Adaptation Research Facility (NCCARF). The NCCARF was established by the Australian government Department of Climate Change in late 2007. It is responsible for leading the Australian research community to generate biophysical, social and economic information needed to manage the effects of climate change. The facility is hosted by Griffith University (and seven others) in partnership with the Queensland Government.

The Workshop

The background to the July 2009 AGD workshop includes:

- Endorsement of the National Climate Change Adaptation Framework (Department of Climate Change, 2009) , by the Council of Australian Governments in April 2007, providing a basis for action on adaptation to climate change by Australian governments over the period 2007-2012. The Framework outlines the future agenda of collaboration between governments to address key issues on climate change impacts. It includes possible actions to assist the most vulnerable sectors and regions to adapt to the impacts of climate change;
- Agreement in November 2008, by the Ministerial Council for Police and Emergency Management - Emergency Management (MCPPEM-EM) to the development of an action plan, to implement the climate change adaptation strategies for the emergency management sector.

The context of emergency management functions for the purpose of this workshop were necessarily broader than emergency response activity .

Local, State and Territory and Australian Government agencies, NGOs, community and industry representatives came to the workshop to provide input into the Action Plan, including:

Ambulance Victoria	Department of Human Services, Victoria
Attorney General’s Department	Department of Health and Ageing
Australasian Fire and Emergency Service Authorities Council	Geoscience Australia
Australian Council of State Emergency Services	NSW Department of Environment and Climate Change
Australian Red Cross	NSW Fire Brigade
Australian Red Cross Blood Service	NSW State Emergency Management Committee
Bureau of Meteorology	Northern Territory Emergency Service
City of Greater Bendigo, Victoria	Office of the Emergency Services Commissioner, Victoria
Department of Climate Change	SAFECOM, South Australia
Department of Community Safety, Queensland	Tasmania Department of Police and Emergency Management
Department of Families, Community Services and Indigenous Affairs	WA Fire and Emergency Services Authority

¹Emergency management functions include disaster mitigation (for example, land-use planning, building codes, building levees), preparedness actions (for example, communications, whole of community and householder education, engagement and action), immediate response and relief activities and immediate and longer term community recovery. Treatment options emerging from the emergency risk management process are another way to conceptualise emergency management functions. These functions are carried out by a wide range of government (local, state and federal), non-government organisations, private industry and individuals and communities working in partnership.

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The Climate Change Action Plan

The workshop participants considered and made suggestions for possible future national action in the following four areas:

Leadership and Coordination;
Communications;
Awareness of the Risk Environment; and,
Reducing Disaster Risk through Appropriate
Development in the Built Environment.

Discussion included coordination issues, governance in emergency management, strategic communication at all levels, knowledge management, and the complex issues around land-use planning. Recent initiatives at the jurisdictional and agency level were shared and these will be included in a discussion paper to be released December 2009.

It is important to note that while the workshop focussed on adaptation, the importance of climate change mitigation measures (reducing carbon emissions) for all emergency services and other emergency management related agencies and jurisdictions was also emphasised (as in Thompson, 2008). Climate change mitigation and adaptation should not be seen as dichotomous.

The outcomes of the workshop included:

- progressing integration of the emergency management climate change issues with other climate change activities;
- stakeholder contribution to assist with the development of a proposed Emergency Management National Climate Change Action Plan; and,
- fostering linkages between the emergency management sector and other areas of government and non government sectors responsible for climate change policy, science, response measures and information.

The action plan resulting from the July 2009 workshop and broader jurisdictional consultation will be presented to the MCPPEM-EM members for its approval at its meeting in November 2009. Once endorsed it will be publicly available.

The discussion paper will be available through the EMA website late 2009.

Conclusion

The Climate Change Action Plan workshop considered the adaptation challenges to emergency management through a lens of increasing risks associated with the effects of climate change. While the projections regarding climate change will not alter emergency management philosophy, they will influence our

response to mitigation, and to continuous improvement in preparedness, response and recovery (including planning, coordination and communication and multi-agency & whole-of-nation responses). Climate change research being conducted will further enable an understanding of the increasing risks to communities which if not mitigated will require significantly greater response and community recovery capability. The management of the risks will require values based community engagement. It will also require political and administrative actions and processes that will enable the engagement (with the various emergency management functions) of many areas of land use planning and mitigation in order to instill awareness and action pertaining to the implications of extreme events.

References

Attorney-General's Department, *Draft AEMC Climate Change Action Plan*, Canberra, 2009.

Carnie, J. A., *Emergency Management Role of Public Health*, 15 July 2009, viewed 24 August 2009, http://www.health.vic.gov.au/agedcare/downloads/seminar_jul09/john_carnie.pdf.

CSIRO, 2006, *Climate change scenarios for initial assessment of risk in accordance with risk management guidance*.

CSIRO, 2005, *Climate Change is Real Fact Sheet*, viewed 24 August 2009, <http://www.csiro.au/resources/psrs.html>

Department of Climate Change, *Climate Change Adaptation Framework*, 3 March 2009, viewed 24 August 2009, <http://www.climatechange.gov.au/impacts/about.html>

Department of Climate Change, *Climate Change potential impacts and costs – National Fact Sheet*, 7 April 2009, viewed 23 September 2009, <http://www.climatechange.gov.au/impacts/publications/fs-national.html>

Department of Climate Change, *Projections*, 11 Dec 2008, viewed 24 August 2009, <http://www.climatechange.gov.au/impacts/projections/index.html>

NCCARF, <http://www.nccarf.edu.au/national-adaptation-research-plan-emergency-management>

PMSEIC Independent Working Group 2007, *Climate Change in Australia : Regional Impacts and Adaptation – Managing the Risk for Australia*, Report Prepared for the Prime Minister's Science, Engineering and Innovation Council, Canberra, June 2007.

Thompson, K, 4 February 2008, *Climate change creating major challenges for fire services*, viewed 24 August 2009, <http://www.nswfb.nsw.gov.au/page.php?id=779>