

Sustainable Business Practices is pleased to present a review of recent activities from government, business and research centres on issues relating to business sustainability.

## Climate change and water – the drought debate

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change is due to be released this week. Some of the contents reported<sup>i</sup> to date include:

- The likelihood of man-made emissions being the cause of climate change has increased from 66% to more than 90% confidence
- A continuing global trend of more hot days and fewer cold days is rated more than 99% likely
- The reduction in rainfall due to global warming could be as much as 20% with greater loss in near tropical areas (most of Australia) and more rainfall in the tropics

It is tempting to characterise the drought as a direct consequence of climate change, as many also assert that the incidence of severe tropical cyclones is also directly linked to climate change. Events such as Hurricane Katrina exhibited behaviors directly related to high sea surface temperatures in the Gulf of Mexico which are an acknowledged consequence of warming. The continuing drought follows the pattern of reduced rainfall in sub-tropical and temperate climates as predicted by climate scientists.

In November when updating the Business Council of Australia response to climate change, BCA President Michael Chaney noted "I must say I am of the school that thinks of this issue in the same way I think of home insurance. I doubt if my house will burn down but I'm prepared to pay a premium just in case."<sup>ii</sup>

Prudent risk management requires that action be taken especially when the cost of acting is manageable but the consequences of inaction may be disastrous. For exposures that cannot be insured, and most consequences of climate change are in this category, the cost of action is in mitigation and adaptation strategies.

The Stern Review released in October 2006 noted that the cost of early action to combat climate change is much less than the cost of likely consequences.<sup>iii</sup>

The 2003 figures are January averages except for Brisbane which is the average for April 2003. The 2007 figures represent the following sources websites as at 29 January 2007. The figures for Adelaide represent South Para Reservoir only which represents 23% of total storage capacity. (Sources: SEQ Water, Sydney Catchment Authority, Water Corporation, Melbourne Water, SA Water)

## The National Plan for Water Security

The plan was launched by the Prime Minister on 25th January and outlines a "10 point plan to improve water efficiency and address over-allocation of water in rural Australia."

The current drought and CSIRO predictions that average inflows to the Murray Darling Basin (MDB) will reduce, provide additional catalysts for action. It has been reported that flows in the Southern part of the MDB for 2005-06 were less than 10% of the long term average.

The major focus of the plan is the Murray Darling Basin, where 85% of Australia's irrigation takes place. Irrigation accounts for 70% of total water use, so almost 60% of Australia's water is used by irrigators in the MDB. By modernizing irrigation infrastructure the plan targets savings by efficiency gains of 25% of total irrigation water use, amounting to 3,000GL per year of which 2,500 GL will be saved in the MDB.

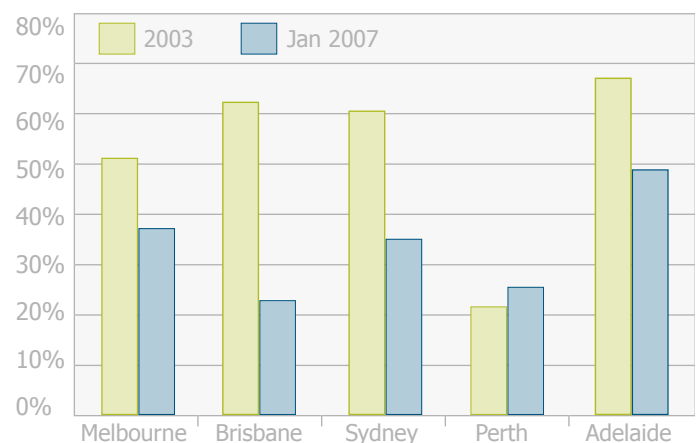
The plan also provides for the establishment of a Taskforce chaired by Senator Bill Heffernan to examine the potential for additional land and water development opportunities in northern Australia and completion of the bore-capping and piping programme in the Great Artesian Basin.

The plan is available from:

[www.pm.gov.au/docs/national\\_plan\\_water\\_security.pdf](http://www.pm.gov.au/docs/national_plan_water_security.pdf)

## Water storage levels

The following chart sets out the current water storage levels for some capital cities of Australia compared with 2003.



# Sustainable Business Update

## Current water restrictions

Brisbane:	Stage 4 restrictions from 1 November 2006
Sydney:	Stage 3 restrictions from 1 June 2005
Adelaide:	Stage 3 restrictions from 1 January 2007
Melbourne:	Stage 3 Restrictions from 1 January 2007
Perth:	Permanent restrictions
Canberra:	Stage 2 restrictions from 1 November 2006
Darwin:	No restrictions
Hobart:	Stage 1 restrictions from 18 December 2006

For water restriction levels in other Australian cities please refer to the Water Association of Australia's website at: [www.wsaa.asn.au](http://www.wsaa.asn.au)

## Desalination

The NSW Government proposal for a desalination plant to supplement Sydney's water supply has proceeded closer to implementation with the granting of concept approval for the desalination project in November 2006 together with project approval for the plant at Kurnell and the seawater intake and outlet infrastructure.

The planning approval had 82 conditions attached including full offset of greenhouse gas emissions by the requirement to use green energy.

More information on the NSW desalination proposal is available from:  
[www.sydneywater.com.au/ensuringthefuture/desalination/](http://www.sydneywater.com.au/ensuringthefuture/desalination/)

On the NSW Central Coast, Wyong Shire Council recently granted development approvals for emergency desalination plants as water storage levels in the region dropped to 11% of capacity.

In Perth, Australia's first seawater desalination plant began operating in November 2006. It is already "Perth's largest, single source of water supplying 17 per cent of the city's needs". In order to overcome some of the energy impacts associated with such a large-scale project, electricity for the plant will be produced from the Emu Downs Wind Farm.

More information on the Perth Seawater Desalination Project can be found at:  
<http://www.watercorporation.com.au/D/desalination.cfm>

## Water recycling

Queensland Premier, Peter Beattie, has announced that the proposed referendum on recycled water for South East Queensland has been abandoned and the state will proceed to use recycled effluent to supplement dwindling water supplies. With Brisbane storage levels at 23%

and reducing at 1% per month the Premier is quoted as stating, "The reality is at the moment we have no choice – we have to provide people with water." The Queensland plan proposes that more than 100 megalitres a day could be used to supplement existing water supplies.<sup>iv</sup>

The South Australian, Victorian and New South Wales Premiers have all ruled out the use of recycled water for drinking in the short term.

## Tiered pricing of water for Victorian business

It has been reported that the Victorian Government is considering the introduction of tiered pricing for commercial and industrial water users in a similar system to that applying for domestic users. Residential users pay 81c a kilolitre for the first 440 litres a day rising to \$1.55 a kilolitre for more than 880 litres per day. The proposed scale for non residential use will provide a sharper price differential between low and high water use. The draft plan is expected to be released by mid 2007.<sup>v</sup>

## References

- <sup>i</sup> Sydney Morning Herald, 27 January 2007 (p.1)
- <sup>ii</sup> BCA President's Address to Annual Dinner 13 November 2007 at [www.bca.com.au/Content.aspx?ContentID=99519](http://www.bca.com.au/Content.aspx?ContentID=99519)
- <sup>iii</sup> The Stern Review, January 2007 at [www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/sternreview\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm)
- <sup>iv</sup> Australian Financial Review 29 January 2007 (p.5)
- <sup>v</sup> Australian Financial Review 29 January 2007 (p.5)

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We would be pleased to receive any feedback you may have.

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