Taking a chemical load off the Great Barrier Reef

WWF Australia and the Organic Federation of Australia have welcomed the Queensland Government's recent announcement to protect the Great Barrier Reef by regulating the use of agricultural chemicals in the region. At the same time, the Australian Government has allocated $23 million to help local community and industry groups reduce and improve the quality of runoff from reef catchments.

WWF spokesperson Nick Heath described the Queensland Government's announcement as 'a turning point for the Great Barrier Reef'.

'I think if we can cut these pesticides, cut these fertilisers, save farmers money, we'll save the reef,' he said. 'It'll be more resilient before climate change comes through.'

Andre Leu, Chair of the Organic Federation of Australia, said the initiative creates an opportunity for the farming and research community to work with his organisation in implementing commercially proven methods to reduce pesticides and synthetic fertilisers.

'Organic systems have a proven track record in delivering high water quality

The Australian and Queensland governments want to see less fertiliser and chemical use in waterways along the Great Barrier Reef. iStockphoto

to catchments,' said Leu. 'In Europe several governments pay farmers in key water catchments to adopt organic systems to ensure the water quality.'

'Fertiliser and chemicals costs have doubled and tripled in the last year. Investing in organic research will help farmers reduce their inputs and benefit the whole farming industry as these techniques can be adopted without farmers having to be fully organic.'

The Australian Government funding – part of a $200 million Reef Rescue package – will support efforts of local catchment groups to reduce the amount of fertilisers, chemicals and sediments entering waterways that drain to the Great Barrier Reef.

Most of the $23 million will support efforts by farmers in the sugar, horticulture, grazing, cropping and dairy industries to improve farming methods. Projects will include the use of GPS-guided farming to reduce soil compaction and erosion, revegetation of cane drains, and more efficient application of fertilisers and herbicides.

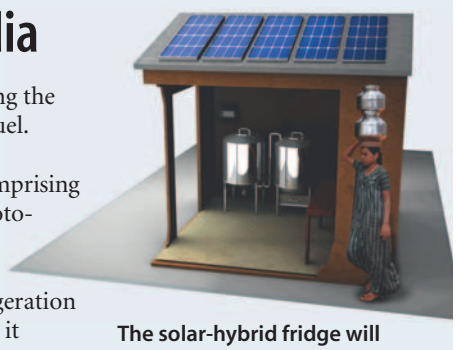
Land managers and landholders are also being supported to manage stock access to waterways to reverse instability and erosion.

Solar-hybrid fridge for rural India

A solar-diesel refrigerator that is a hybrid of conventional compressor-based refrigeration and thermoelectric materials (semiconductors that convert electricity into cooling and vice versa) is being developed by US-based Promethean Power for food storage in India's off-the-grid rural villages.

Traditional compressor-based cooling units that run on diesel generators cost about US$12 000, not including the ongoing cost of diesel fuel. While the cost of the Promethean fridge – comprising off-the-shelf silicon photo-voltaic panels, thermo-electric modules and a compressor-based refrigeration unit – would be similar, it would have no fuel costs and almost no maintenance costs.

Promethean has built a laboratory-scale 60-litre chiller and now plans to build a 500-litre prototype that it hopes to test in India in 2009.



The solar-hybrid fridge will make a difference to food quality in India's remote villages. Promethean Power

Low-carb building news

Energy efficient office buildings and factories will benefit tenants and owners in a low-carbon economy. iStockphoto/Sebastien Cote

The commercial property sector is integral to climate change mitigation, according to a new report, 'Commercial property and climate change: exposures and opportunities', from the Total Environment Centre.

The report reveals that while commercial property is one of the sectors most clearly exposed to climate change, it is also one of the sectors best placed to manage climate-related exposures. 'Energy efficiency upgrades will safeguard existing margins against rising costs and will ensure that individual buildings remain attractive to tenants,' says report author, Cameron Eren.

A separate report commissioned by the Australian Sustainable Built Environment Council's Climate Change Task Group, 'The second plank: building a low carbon economy with energy efficient buildings', claims Australia's building sector could cut the projected price of carbon trading permits by 14 per cent, and generate annual savings of $38 billion by 2050, by implementing energy efficiency measures.

In other green building news, the Green Building Council of Australia launched a Green Star Industrial PILOT rating tool – an extension of existing Green Star tools for offices and other commercial facilities – for warehouses and factories.