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**Micro power makes sense**

'Mega' solutions are not necessarily the best approach to large-scale environmental problems. In fact, as our story on page 4 demonstrates, the solution to one of South-East Asia's, and the world's, biggest vehicle pollution problems – the millions of two-stroke motorcycle and tricycle engines belching fumes into the atmosphere – can be as simple as a low-cost engine retrofit.

US non-profit company Envirofit adapted the engine retrofit kit from a similar one developed to reduce emissions from snowmobiles. The kit works by eliminating the carburettor and introducing fuel directly into the engine. This reduces fuel and oil consumption by 35–50 per cent and cuts engine emissions by as much as 90 per cent.

In the Philippines, where Envirofit has been working with government to introduce the kit, tricycle taxi drivers, microfinanciers and microbusinesses are benefiting financially from the invention.

Micro power of a different kind is discussed on page 18, 'From little things, big things grow'. Roots & Shoots is a global network of people willing to 'help the planet' established by the famous primatologist, Dr Jane Goodall. Most of the members are young people, including a growing number of young Australians, who each 'have the power to rise and meet the environmental challenges we face', according to the woman affectionately referred to as 'Dr Jane'.

School teams that have entered the 2007 International Solar Boat Challenge being held in Melbourne in November are a great example of young people being empowered to make more informed energy choices by taking a hands-on approach. As with the Roots &



Shoots program, having fun along the way is an important part of the process.

When it comes to the actions of many making an impact, the national Natural

Heritage Trust (NHT) program is an interesting example of how hundreds of thousands of volunteers on the ground can achieve together what would have been impossible in the past. Our 10-year report on the NHT shows that its real legacy has been the development of new approaches to community capacity building, and empowering more and more 'citizen environmentalists' to take local action.

In our Focus story on page 10, Max Berry, Mike Smith and Karlson Hargroves respond to a call made by the Prime Minister last year for Australia to become an 'energy superpower'. As the authors point out, a future energy strategy involving demand management, distributed supply and a portfolio approach offers a more sustainable alternative than the vision of a 'superpower' dominating the world's supply of coal and uranium. A valuable overview, the first of two parts.

Enjoy your reading.

**Mary-Lou Considine**  
Acting Managing Editor



CSIRO Land & Water

**Next, in issue 140**

While the media and various interest groups hotly debate the future of the Murray–Darling Basin and the priorities of those who rely on its flows, CSIRO has been spearheading a massive research effort to accurately estimate groundwater and surface water yields from the 18 catchment areas within the Basin. Exactly how much – or how little – water is there?