

In Brief

Grey water recycling without buckets

A Canberra company has developed a domestic grey water recycling unit that can recycle 660 litres of water a day, reducing the amount of water purchased by a typical household by 50–60 per cent.

Perpetual Water has supplied 130 units for domestic installation, as well as units for the National Water Commission, NSW surf life-saving clubs and the ACT Prison. The company plans to launch its technology overseas later this year.

Company founder John Grimes said he thought there had to be a better way to reuse household water after he found himself carting buckets of dirty bath water to the garden during water shortages in Canberra a few summers ago.

He pulled together a team of experts in water treatment, chemistry and entrepreneurialism. Within two years they had installed their first 'Perpetual Water – Home' recycling unit.

Grey water from washing machines, showers and baths is collected and treated via a system of flocculation and then filtered – using Perpetual Water's patented technology. Recycled water from the unit is suitable for flushing toilets, watering gardens, washing cars and filling water features, but not drinking.

General Manager Craig Richmond says the system is based on biological treatment methods, largely adapted from septic tank systems, which use bacteria to break down contaminants.

'A big problem is that these systems are easily disrupted by common household chemicals and changes in water concentration,' he says.

'Our purification process does away with these problems – the water is sterilised, filtered and looks and smells just like tap water.'

The unit is completely automatic, and



The grey water recycling units are convenient for the average home – compact and completely automatic. Perpetual Water

once installed requires little maintenance, except for an annual check by an authorised technician.

A smaller laundry unit will be launched later this year and a much larger one will eventually be available for use in apartment blocks and multi-residential facilities.

More information:
Perpetual Water, www.perpetualwater.com.au

Oz 'carbon aid' for Asia-Pacific forestry

Australian scientists are training foresters in Asia-Pacific countries to measure carbon storage in trees, enabling these nations to gauge their contribution to achieving carbon targets and to participate in carbon trading markets.

Leaders at the recent APEC (Asia Pacific Economic Cooperation) meeting in Sydney announced the goal of 'increasing forest cover in the region by at least 20 million hectares' by 2020.

If the goal is reached, APEC claims the additional trees would store 'approximately 1.4 billion tonnes of carbon, equivalent to around 11 per cent of annual global emissions [at 2004 levels]'.
Using the Australian Greenhouse Office's National Carbon Accounting Toolbox (NCAT), local foresters in China, Indonesia, Vietnam, Papua New Guinea and the Philippines will learn how to



The ensis joint venture is providing technical training for Asia-Pacific forestry agencies to measure carbon storage in trees such as those in this teak plantation. ensis/ Khongsak Pinyopusarek

assess carbon sequestration in native forests and plantations.

This will allow them to establish forest-based carbon trading or offset projects, which should benefit their longer term national economic outlook, according to Dr Trevor Booth from ensis, a joint venture between Australia's CSIRO and New Zealand's Scion forest research agencies.

Booth says that tropical deforestation accounts for almost 20 per cent of greenhouse gas emissions and that reforestation projects are 'no regrets' actions that can be undertaken now to significantly reduce future carbon dioxide emissions – 'particularly in the next 20 years while high-tech solutions are developed'.

Weaning native birds from 'strange fruit' habit

Australia's Weeds CRC has developed a web-based tool to help gardeners and land managers choose native plants to replace weeds with fleshy fruit, such as camphor laurel and lantana, which have become an accessible food source for native birds. Weeds CRC project researchers say that while weeds greatly modify bird habitat by contributing to changes in fire regimes, vegetation structure and seasonal food availability, they have also become a ready food source for some bird species. The web-based tool provides replacement native plant species for target weeds and native plant trait databases for NSW, SA, Tasmania, Victoria and south-western WA. The tool can be found at www.weeds.crc.org.au/projects/project_3_2_3_1.html