



Turbines spin gas into green power

In an Australian first, Western Water will use microturbine technology to produce electric and thermal energy from sewage gases at its Melton Recycled Water Plant. With grant contributions of \$75,000 from Sustainability Victoria and \$700,000 from the Vision for Werribee Plains project, the Western Water Board recently appointed Aquatec-Maxcon to build its new \$2 million Cogeneration Plant.

Managing Director John Wilkinson said the Aquatec-Maxcon proposal offers a microturbine supplied by US manufacturer Capstone. The microturbine was developed from aeronautical gas turbine technology to operate on natural gas, landfill gas or biogas from sewage.

"This is the first time in Australia this technology will be put to work turning the gases produced in sewer systems into electricity," Mr Wilkinson said.

With an external heat exchanger installed alongside the microturbine, the plant will also deliver heat energy for use in plant processes.

"Producing our own electricity from this renewable source and reusing exhaust heat will reduce costs and cut carbon dioxide emissions at the Melton Plant by 1100 tonnes per year initially and up to 2100 tonnes per year when fully operational," Mr Wilkinson explained.



Western Water received the 2009 savewater! Sustainability in Government Award for smart design and integrated water management supply servicing Eynesbury Township with Class A recycled water.

Western Water congratulates two other savewater! winners from our region: the Ecolinc Science and Technology Innovations Centre at Bacchus Marsh won the Educational Institutions Award and Bacchus Marsh College student Hannah Mossop won a Photographic Award. Visit www.savewater.com.au for further information.



James Stewart, Gisborne Golf Club's Course Superintendent, on the green with his awards.

Gisborne Golf Club: waterwise and green

Gisborne Golf Club's Course Superintendent James Stewart has been recognised with three awards for excellence, especially for his water conservation efforts.

Mr Stewart was recently chosen as the Victorian Golf Course Superintendents Association Apprentice of the Year for 2009. He was also this year's Runner Up for the Australian Golf Course Superintendents Association Graduate of the Year award, and was chosen from among 100 students at North Melbourne Institute of TAFE as 3rd year Apprentice of the Year in 2008.

Mr Stewart has converted the Club's turf to warm season grasses and upgraded the irrigation system to reduce wastage, conserving up to 50 million litres of water annually.

Western Water supplies 60 million litres of Class B recycled water to the Gisborne Golf Club each year for all their onsite irrigation, thereby conserving precious drinking water. Both Mr Stewart and Gisborne Golf Club Manager Gareth Scott are valuable contributors to Western Water's regular Recycled Water Customer Group meetings.

"Securing a reliable and high quality recycled water source means the Club can present a quality facility for the community to enjoy even through drought," said Mr Stewart.



In June 2009, the Victorian Government released the **Climate Change Green Paper** to encourage public debate on this important topic. Western Water and many other water industry representatives contributed to a detailed submission highlighting the challenges facing the water industry, particularly in the areas of security of water supply, population growth, electricity consumption and river health. All responses to the green paper may now be viewed at www.climatechange.vic.gov.au Drawing on these responses, the State Government is developing the **Climate Change White Paper** including details of new investment, policies and actions on climate change.

Pinkerton Forest's biodiversity boost

Western Water is working with local environment groups on biodiversity restoration around Pinkerton Forest on Melbourne's fast growing western fringe. The Pinkerton Forest Habitat Corridor is one of five initiatives funded in Round 3 of the Department of Sustainability and Environment's Vision for Werribee Plains grants program.

Pinkerton Forest is a significant remnant grassy woodland on Western Water's 690 hectare property at Melton Recycled Water Plant. Nearby is Bush's Paddock, a significant remnant grassland reserve. The Habitat Corridor project involves restoration of a degraded 12 hectare paddock at the Melton Recycled Water Plant to link these two important wildlife habitats.



(L to R) John Wilkinson, Managing Director Western Water; Frances Overmars, Pinkerton Forest Revegetation Coordinator; Don Nardella, Member for Melton; and Murray Ralph, native horticulturalist; collect eucalyptus seed in Pinkerton Forest.

Managing the sources of recycled water

Western Water recently hosted delegates from the Australian Water Association National Source Management Conference on a tour of the Melton Recycled Water Plant and the Eynesbury township as part of the inaugural three day conference held in Melbourne.

Source management here means controlling the quantity and quality of trade waste where it is produced. Trade waste can include pollutants, such as salts, fats, dyes and organic material, which can have an adverse effect on the safety of water corporation employees, on recycled water quality and on the environment.

Western Water completed over 400 trade waste source inspections across our service area in 2008/09. Where results indicate that pre-treatment at the source has been poorly maintained, Western Water works closely with the customer on improvements to protect the quality of recycled water.



recycledwater
bringing the region to life

Riddells Creek Recreation Reserve receives recycled water

During National Water Week (18-24 October), Western Water officially commissioned a new recycled water pipeline for Riddells Creek Recreation Reserve.

Western Water Chairman Terry Larkins joined Joanne Duncan MP, Member for Macedon, Macedon Ranges Shire Council (MRSC) Mayor John Letchford and other council representatives and community groups at the handover to MRSC on 16 October.

The project was completed with \$250,000 from the State Government's Small Towns Development Fund, \$80,000 from MRSC, \$45,454 as a Community Water Grant from the Federal Government, \$20,000 from the community and \$142,420 from Western Water.

Mr Larkins said the Riddells Creek project saves drinking water for its best purpose and ensures community sports and outdoor activities can be maintained year-round using recycled water.

"This new connection to recycled water will improve both the safety and sustainability of the ground and enable further plantings and landscaping otherwise not possible in this popular precinct due to drought considerations," said Macedon Ranges Mayor John Letchford.



(L to R) Michael Day (Riddells Cricket Club member), Graham Stewart (Chairman of Riddells Creek Recreation Reserve Committee of Management), Peter Cullen, (Vice President Riddell Cricket Club), Cr Joan Donovan (MRSC), Cr John Letchford (MRSC), Terry Larkins (Chairman Western Water), Cr Henry McLaughlin (MRSC), Joanne Duncan (Member for Macedon) and Nic Bovezza (Riddells Creek Football Club member) at Riddells Creek Reserve.