

Geothermal energy boost

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GREENEARTH Energy, the company developing a geothermal energy site near Anglesea, is backing a major RMIT University geothermal research project.

Greenearth Energy is the industry partner in the \$1.12m project to develop a geothermal system to simultaneously produce clean electricity and drinking water.

The research project was launched yesterday by Victorian Energy and Resource Minister Peter Batchelor at RMIT's Bundoora campus.

"The partnership has received an Australian Research Council grant and given the importance of both renewable energy and drinking water to Victoria, it is important that industry, academia and governments work together to make advances in this area," Mr Batchelor said.

Professor Aliakbar Akbarzadeh is leading a team of researchers in developing an innovative system that combines fresh water production with electricity generation using entirely renewable sources.

"Our research focuses on the development of a dual geothermal system that can desalinate hydrothermal waters while generating renewable power," he said.

"While our dam levels may be low, Australia has billions of litres of hot, salty water stored in geothermal reservoirs between two to four kilometres underground," he said.

Prof Akbarzadeh demonstrated a concept machine yesterday that produced fresh water and enough electricity to power a panel of light bulbs from two cubic metres of salt water in 10 minutes.

The three-year research project will focus on further development and evaluation of the concept prototype.

Greenearth Energy managing director Mark Miller said the research outcomes, if successful, would be used to develop commercial systems for a range of applications, including producing power and water to service small and isolated communities off the main electricity grid.

It was hoped the units would produce 0.1MW of electrical power and 75,000 litres of water a day.

"The project could pave the way for the effective use of suitable hydrothermal waters, offering export opportunities through the commercial manufacture of small to medium-scale dual geothermal systems," Mr Miller said.

Greenearth Energy has secured \$32m in government grants to begin a pilot study into building a geothermal energy plant nine kilometres from Anglesea.

Geothermal energy is a renewable energy source generated from naturally occurring heat from hot rocks deep beneath the earth's surface.