

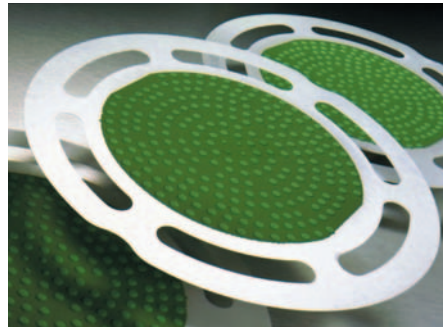
Domestic fuel cell power unit launched

Melbourne-based company Ceramic Fuel Cells Limited (CFCL) has generated interest from international markets with a micro Combined Heat Power Unit, in which a 1 kW fuel cell power generator drives a domestic hot water system, returning excess power to the grid when demand is low.

The technology may be heralding the approaching reality of cleaner, stand-alone, independent power generation – a move away from the centralised electricity era.

Ceramic Fuel Cells is completing a commercialisation of its CHP unit which carries patented flat plate Solid Oxide Fuel Cell (SOFC) technology, enabling efficient conversion of a range of hydrocarbon fuels into electricity, without combustion, in a virtually silent device. The by-products of the process are heat, water and a significantly lower carbon dioxide (by up to 60%) output than traditional generators.

The SOFC technology works by passing a methane-rich gas across an anode on one side of a ceramic electrolyte whilst passing air across a cathode on the other side of the fuel cell. This gives rise to an electro-



CFCL's power generator runs on solid oxide fuel cell technology.

chemical reaction that produces electricity and heat. Higher voltage and power can be achieved by stacking multiple fuel cells on top of one another to form fuel cell stacks and by grouping stacks in parallel on a common gas manifold.

There was strong interest in CFCL's micro unit at the recent Hannover Fair in Germany, where the company was part of the Hydrogen and Fuel Cells Group exhibit. According to CFCL, the concept of generating electricity at either individual houses or blocks of home units is already

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being evaluated in several European countries, especially Germany and the UK. Field trials involving several hundred systems using various technologies from a number of suppliers are in progress.

Fuel cells are emerging as a particularly attractive option for these applications because of their continuous base load supply capability, and potential for high efficiency and low emissions.

CFCL debuted on the ASX during the first week of July, with the IPO raising \$15 million. Executive Chairman Julian Dinsdale said the listing would be the catalyst for commercialisation of the fuel cell technology as discussions in Europe are now in progress with potential cell manufacturing joint venture partners and manufacturers of appliances that could incorporate fuel cells.

More information:
<http://www.cfcl.com.au/>

Funding challenge for lucrative national parks

A first-ever study of visitation to Australia's protected areas, conducted by the Sustainable Tourism CRC and the Tourism and Transport Forum Australia, shows that they generate huge revenues, but that greater investment is urgently needed to maintain and manage them adequately.

The report found that there are 80 million visits to conservation areas each year, with 90% of those being by Australians. Tourism provides significant economic benefits to both regional areas and the national economy – the Cape Tribulation section of the Daintree National Park alone brings in \$100 million per annum in visitor expenditure to the Port Douglas region. 39.5% of jobs in the area rely on tourism, compared to the national average of 6.0%.

The Australian Conservation Foundation (ACF) is supporting requests by the CRC and the Tourism and Transport Forum for immediate Federal and State funding assistance for a truly representative parks system.

With the launch of 'A Natural Partnership: Making National Parks a Tourism Priority' in early June, ACF's then President, Peter Garrett, said that 'While the principle role of national parks is conservation, recent research shows that Australia's unspoilt nature is also a key driver for international and domestic tourism, earning the Australian economy billions of dollars every year.'

'It is now clear to us that the tourism industry and conservation organisations, like ACF, have a shared objective in ensuring the completion of a national system of National

Parks and effective management of that system,' he said.

Christopher Brown, Managing Director of Tourism and Transport Forum Australia, said 'Our national parks are facing a funding crisis despite their popularity.' 'There is a need for a massive capital injection to help fund conservation programs, build interpretive centres and visitor facilities, and allow full international marketing of parks.'

He reflected the organisation's view that investment shortfalls could be met by private sector investment, saying 'Considering the shrinking nature of State Budgets and the growing need for parks investment, such rescue funds, will only come from sensible and sensitive partnerships between the public and private sector to ensure the protection,



Silver snow daisies above Lake Albina, Kosciuszko National Park.

promotion and growth of the National Estate.'

'The tourism industry does not want to turn National Parks into theme parks. Rather, we recognise that we have a responsibility to take pressure off taxpayers to fund park management alone, and want to develop innovative approaches...'

More information: www.ttf.org.au