



**CERAMIC FUEL CELLS LIMITED**

*Clean power for your home*

22 May 2009

## **Ceramic Fuel Cells launches modular generator product**

### **Signs MoU with VicUrban**

Melbourne-based clean energy company Ceramic Fuel Cells Limited (ASX/AIM: CFU), a global leader in fuel cell development, today officially launched a new modular generator product.

The new unit – called BlueGen – is a ‘mini power station’ for homes and other buildings. It produces low emission electricity and hot water, reducing greenhouse gas emissions and saving on home energy bills.

About the size of a dishwasher, the BlueGen unit converts natural gas to electricity and heat via ceramic fuel cells.

The Company plans to make the BlueGen product available in Victoria from early 2010. The Company is in discussions with potential local manufacturing partners. The Company is also in discussions with potential purchasers of the BlueGen product in other markets including Europe and North America.

Compared to Victoria's current brown coal electricity generators, each BlueGen unit can reduce carbon dioxide emissions by up to 75% - or 18 tonnes per unit, per year.

The BlueGen product is being officially launched today by the Premier of Victoria, John Brumby, at Ceramic Fuel Cells' head office in Melbourne. During the launch Managing Director Brendan Dow will demonstrate a working BlueGen unit, connected to a hot water unit producing electricity and hot water.

Victorian Premier John Brumby will say today at the BlueGen launch: "Innovation is vital to Victoria's response to climate change. Local innovations like Ceramic Fuel Cells' technology will help to play an important part in reducing the carbon intensity of Victorian homes and businesses. Ceramic Fuel Cells' technology is a great example of local business delivering sustainable, 'green' jobs and exports for our State."

"Importantly, our units are far more efficient and produce far less carbon dioxide and other emissions than traditional electricity generators like coal-fired power stations," said Ceramic Fuel Cells' Managing Director Brendan Dow. "If our units replaced just 7% of Victoria's electricity from brown coal, the State would achieve the Federal Government's target of a 5% reduction in carbon dioxide emissions, well before 2020. Currently, coal-fired power stations produce 95% of Victoria's electricity."

Ceramic Fuel Cells has signed a Memorandum of Understanding with VicUrban to showcase the BlueGen units in VicUrban housing developments. Subject to agreeing final terms, Ceramic Fuel Cells will install the first BlueGen unit in VicUrban's Sustainable and Affordable Living Centre in Dandenong to be opened towards the end of 2009, and will install up to three more demonstration units in other VicUrban developments next year.

VicUrban is the Victorian Government's sustainable urban development agency. One of Victoria's largest residential land developers, VicUrban has a diverse portfolio of projects including house and land developments in metropolitan Melbourne and regional Victoria.

VicUrban's current portfolio of projects includes over 50,000 new homes over the next 20 years. VicUrban is a leader in demonstrating sustainable technologies for homes, to encourage broader market awareness and commercial take up of innovative and energy saving products.

Pru Sanderson, CEO of VicUrban explained their long standing commitment to sustainable energy. "Our Aurora project in Epping, which now has over 1000 residents, was the first 6 star energy efficient community in Australia. VicUrban is delighted to be partnering with a Victorian business to help promote a product which could become the next generation of sustainable energy technology in Australian homes" Ms Sanderson said.

The Company's modelling of the Victorian market shows that widespread deployment of the BlueGen product has significant potential benefits:

- The BlueGen units can generate electricity more than twice as efficiently as the current Victorian power grid, at a cost of up to 40% cheaper than the current average retail electricity price, which could save up to \$1,100 off the average home's annual energy bill.
- When mass produced, the BlueGen products are forecast to cost around \$8,000 each with a payback period of seven years and a product lifetime of 15 years.
- The BlueGen unit produces up to 75% less carbon dioxide emissions than Victoria's current coal-fired generators – saving up to 18 tonnes per unit per year.
- Over the course of a year each 2kW BlueGen unit can produce up to 17,000 kilowatt hours of power – more than twice the electricity needed to power an average Victorian home.
- The unit also produces heat, to make up to 200 litres of hot water a day, enough to meet the hot water needs of the average Victorian home.
- The unit has an overall efficiency of up to 85%, compared to about 25% efficiency of Victoria's current coal-fired power stations.
- The BlueGen unit also uses up to 95% less water than Victoria's current coal-fired power stations to generate the same amount of electricity.

Mr Dow says his company's technology could play a big part in reducing Victoria's greenhouse gas emissions. "Victoria's greenhouse gas emissions have increased by 6% since 2000 and the State's energy demands are forecast to increase by 50% by 2030," he says. "By 2050, Victoria is targeting a 60% reduction in greenhouse gas emissions from 2000 levels. We believe our technology will play an important part in the future of electricity production."

Rupert Posner, Director of The Climate Group, said: "Ceramic Fuel Cell's clean domestic power station is proof of the new jobs that can be created by a low carbon economy. There is a whole host of existing and emerging technologies that will enable us to make substantial cuts in greenhouse gas emissions at low cost and maintain, indeed enhance, our quality of life."

Dr David Brockway, Chief of CSIRO's Energy Technology division, said: "CSIRO is delighted that a technology that originated in CSIRO research has now progressed to the stage where it has been converted into a combined heat and power system. This is a major achievement for an Australian company and CSIRO congratulates Ceramic Fuel Cells on this success."

In addition to its modular BlueGen product, Ceramic Fuel Cells continues to develop fully integrated micro CHP products with some of the world's leading utility and appliance partners in Europe and Japan, including E.ON, GdF/Suez, EWE and Paloma (maker of the Rheem and Solahart brands). The BlueGen product is an additional offering for market segments that may not require a fully integrated product.

---

From this afternoon (Melbourne time) a presentation of the BlueGen launch will be available at [www.cfcl.com.au/news](http://www.cfcl.com.au/news), and a webcast interview with Managing Director Brendan Dow will be available at [www.cfcl.com.au/webcasts](http://www.cfcl.com.au/webcasts).

Specifications of the BlueGen product are also available at [www.cfcl.com.au/BlueGen](http://www.cfcl.com.au/BlueGen)

**For further information please contact:**

**Ceramic Fuel Cells**

Andrew Neilson

Tel: +613 9554 2300

Email: [inquiries@cfcl.com.au](mailto:inquiries@cfcl.com.au)

**AIM Nomad and Broker  
Nomura Code Securities**

Juliet Thompson, Chris Golden

Tel: +44 (0) 207 776 1200

**Australia Media enquiries**

Richard Allen

Oxygen Financial Public Relations

Tel: + 613 9915 6341 or 0403 493 049

**About Ceramic Fuel Cells Limited:**

Ceramic Fuel Cells Limited is a world leader in developing solid oxide fuel cell technology to provide highly efficient and low-emission electricity from widely available natural gas and renewable fuels. The company is developing micro combined heat and power and distributed generation units that generate electricity and heat for homes and other commercial buildings. Ceramic Fuel Cells is developing products with leading appliance partners and utility customers in Germany, France, the United Kingdom and Japan. Headquartered in Melbourne, and with operations in the UK and Germany, the Company is listed on the London Stock Exchange AIM market and the Australian Securities Exchange (code CFU).

[www.cfcl.com.au](http://www.cfcl.com.au)