



26 November 2008

## **Chairman's Address**

**At CFCL's Annual General Meeting held on Wednesday 26 November 2008**

### ***Introduction***

Good afternoon Ladies and Gentlemen, my name is Jeff Harding and I am the Chairman of Ceramic Fuel Cells. On behalf of the Company's Board I welcome you to our 2008 Annual General Meeting.

Before we formally open the meeting, I would like to provide an overview of the Company's progress. After the formal part of the meeting Managing Director Brendan Dow will give a more detailed presentation on the Company's activities.

Over the 2008 financial year the Company achieved all its operational and technical goals. This excellent progress has unfortunately been overshadowed by some recent financial challenges.

I will address those challenges in a moment, but first I want to re-cap our operational developments.

### ***FY08 Review***

The Company's first commercial product is a combined heat and power (CHP) unit. This is installed into gas domestic water and home heating units. It is connected to the existing natural gas network, providing electricity and heat for the home as well as exporting excess electricity to the electricity network. We will manufacture fuel cell modules, which our appliance partners will build into CHP units and market them to consumers and our utility partners.

### ***Markets***

As you are aware, we are in a period of unequalled concern about climate change and the need to reduce greenhouse gases. The time could not be better for the introduction of our product. Recently in Germany, legislation was announced that provides a subsidy of up to €3,300 (or about \$A6,500) for each fuel cell driven CHP unit installed. This is in addition to a German 'feed-in tariff', of about 5 Euro cents per kilowatt hour of power exported to the grid from CHP units. The UK Government has recently proposed a similar feed-in tariff.

The markets for domestic CHP products are large. Each year more than 6 million home heating units are sold in Western Europe alone. If we achieve a very conservative 1% penetration of this replacement market, we will generate over \$A400 million revenue per year. If we achieve 5% penetration we will generate about \$A2 billion revenue. We believe a 5% market penetration is highly achievable.

In addition we have the Japanese market, and in the future the North American markets for this product, as well as markets for other products that can be developed. The potential revenue streams for the Company are substantial.

### *Customers*

In July 2007, we extended our reach into Europe through product development agreements with leading utility companies E.ON and Nuon for the United Kingdom and Benelux markets, supplementing our existing partnerships with Gaz De France in France and EWE in Germany.

In January 2008 we signed an agreement with the Paloma group to enter the Japanese market. The Paloma Group, which owns the Rheem, Raypak and Solahart brands, serves more than 10 million homes in Japan and is the largest manufacturer of home heating units in North America. This is a very important partnership for the Company.

In February we announced a significant achievement, with our first volume order, for 50,000 units from our Dutch partner Nuon, based on agreed price and performance targets. We are confident of achieving these targets and we will provide further updates as we continue to develop products for the Dutch market.

### *Products*

During the financial year we continued to develop products with our utility and appliance partners. In November 2007 we met the rigorous European 'CE' safety standard for our NetGenPlus prototype units.

During the year we operated semi-integrated CHP units, where our NetGen units were connected to a boiler system. We have successfully met the requirements for that stage, and have now moved on to developing fully integrated units, where our fuel cell module is integrated 'inside' the boiler unit. These products are functionally very similar to the CHP products that will eventually be sold to households.

We are on track to finish our first integrated unit in Melbourne by the end of 2008 and then to deploy integrated units with our European partners in the first half of 2009.

### *Manufacturing and Supply*

To meet the demand from our utility customers, we are increasing our manufacturing capacity and building a commercial supply chain.

In late 2007 we completed a plant in the United Kingdom to make high quality ceramic powders using our proprietary processes. This plant produces ceramic powder that meets the high standards needed for the manufacture of our fuel cells.

In February 2008 we announced an investment of €12.4 million to build a large scale fuel cell plant in Heinsberg, Germany. The plant will have an initial capacity of 10,000 units, with options for substantial further expansion.

Early in 2008 we signed long term development and supply agreements with two leading global producers of advanced ceramics, CeramTec and HC Starck. They will supply fuel cells in larger volumes to our German plant.

We also worked with commercial suppliers to significantly reduce the size and cost of many other components of our fuel cell module.

### *Technology*

Our technology is maturing to meet the market requirements for reliable and highly efficient commercial fuel cell products. Since early 2006 the Company has built up significant experience from operating field trial units in six countries.

In 2008 we continued to make significant technical advances in fuel cell lifetime, power density and efficiency.

Notably, in September our NetGenPlus system achieved an industry first electrical efficiency of 50%, while exporting 1kW of power to the local grid. This is an important commercial target and underpins the significant value our unit can deliver to utilities and homeowners. The higher the electrical efficiency of a CHP unit, the more power the unit can generate from the same fuel – which means lower costs and lower emissions and potentially huge savings to consumers and our utility partners.

When we add in the heat that our unit captures and re-uses, the total system efficiency is up to 85%. This means that 85% of the energy of the gas supplied is used efficiently in the home.

To put this into context – in the European Union the current average efficiency from conventional power plants is half this, at 40%. Coal power plants are even less efficient. And other CHP technologies, while they re-use the heat, are very inefficient at generating power. A UK study has shown average electrical efficiency of other CHP units (such as small Stirling engines and internal combustion engines) at less than 10% - compared to 50% for CFCL's unit.

### *Finances*

In recent weeks the Company's significant achievements have been overshadowed by the impact on finances of the collapse of global financial markets. In particular on 17 October we announced that the Company expected to write down up to A\$13 million on one of our financial investments.

This announcement related to a €7 million credit linked note, which is rated 'AA negative watch'. Simply stated, the note is linked to a basket of borrowers. If a number of these borrowers default then the investment loses value. Because of the collapse of several US and European banks, including Lehman Brothers and two Iceland banks, we are advised there is a strong risk that the principal may not be recovered. The investment continues to pay interest in the meantime.

As background, in 2006, after the Company had raised funds from listing on the UK AIM market, an external financial advisor was retained to invest those funds in several currencies - Australian Dollars, British Pounds and Euros – to manage our future cashflow requirements. The money was put into a range of financial investments, which we were advised were all rated A or better by Standard & Poors and were all able to be turned into cash quickly.

As you are aware many US and European financial firms have collapsed and the global credit markets are in a severe downturn. This has caused two investments to be provisionally written down and has reduced the liquidity of the market for the other investments.

We are conducting a detailed review of the external advice we received about these investments, the quality of their credit ratings, and the management of our portfolio.

Our immediate priority is to secure funding to take us to the point where our cash flows are positive. Based on our current models we expect to be cash flow positive well under the initial 10,000 unit capacity of the Heinsberg factory.

Directors and management are pursuing several financing strategies. These include possible equity and debt options. We will keep shareholders updated as we implement these plans.

We are also looking at liquidating the remaining investments, depending on market conditions and pricing.

We are pursuing a range of strategic options for the UK Powder Plant to maximise the value of the plant and the associated intellectual property and to minimise our ongoing costs. In the meantime the plant continues to make powder for our fuel cells, and to make samples for other prospective customers.

In the short term we have cut costs, without endangering our immediate target of delivering fully integrated units to our partners. We appreciate that shareholders are keen to know the details of these plans. We will give further updates as soon as we're able.

## **Conclusion**

The market conditions could not be better for our environmentally positive products. There is very strong support in Europe and an environmentally aware President has been elected in the USA. Ceramic Fuel Cells is developing real products for large and growing global energy markets underpinned by these strong market and policy forces. Our prototype units have achieved an outstanding 50% electrical efficiency and over 85% total energy efficiency - more than twice as efficient as the current electricity grid.

Despite the financial markets the appeal of the Company's technology has not diminished. In fact there is a greater recognition of the need for clean energy solutions. Brendan Dow will give a few examples in his presentation later.

The Company's underlying technology and product development programs are going very well. In the meantime the Board and management are working hard to overcome the Company's short term financing challenges.

Thank you for your continued support as shareholders of Ceramic Fuel Cells.

Jeff Harding  
Chairman