



**CERAMIC FUEL CELLS LIMITED**

*Clean power for your home*

# ASX *Half-year Report*

*Period ended 31 December 2009*

Lodged with the ASX under Listing Rule 4.2A.3

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## Results for announcement to the market

Half-year ended 31 December 2009

(Previous corresponding period: Half-year ended 31 December 2008)

	<b>Movement</b>	<b>%</b>		<b>\$</b>
<b>Revenue</b> from ordinary activities	Up	57.3	to	1,478,669
<b>Loss</b> from ordinary activities after tax attributable to members	Down	68.9	to	(10,134,838)
<b>Net Loss</b> for the period attributable to members	Down	68.9	to	(10,134,838)

<b>Dividend type</b>	<b>Amount per security</b>	<b>Franked amount per security</b>
Final dividend	None	Not applicable
Interim dividend	None	Not applicable
<p>No dividends were recommended, declared or paid during the period.            The Directors do not propose to recommend the payment of a dividend in respect of the period.            There is no dividend re-investment plan in operation.</p>		

### Brief Explanation of Revenue

Sales revenue of \$1,459k from field trials was 57% up on the previous corresponding period predominantly due to expansion of activity in Europe.

### Brief Explanation of Loss (and Net Loss)

The net loss for the period of A\$10,135K compares to a net loss in the previous corresponding period of A\$32,637K. The major reasons for this improvement were:

- Sales revenue up by A\$539K (57%);
- Operating expenses down by A\$1,028K (8.8%)
- Improvement of A\$30,387K arising from impairment charge on financial assets taken last year and partially reversed this year.
- Unfavourable turnaround in foreign exchange translation from A\$4,151K gain in the previous corresponding period to a \$4,121K loss in the current period due to the strengthening of the Australian dollar.

## ***Net tangible asset backing***

	<b><i>31 Dec 2009 cents</i></b>	<b><i>31 Dec 2008 cents</i></b>
Net tangible asset backing per ordinary share	<b>3.8</b>	<b>7.9</b>

## ***Control over other entities***

No control was gained or lost over any entity during the period.

## ***Associates and joint venture entities***

The company has no associates, nor has it formed any joint ventures with any other entities during the period.

## ***Compliance statement***

This report is based on accounts which have been subject to review.

CERAMIC FUEL CELLS LIMITED  
ABN 82 055 736 671



**CERAMIC FUEL CELLS LIMITED**

*Clean power for your home*

# *Statutory Accounts*

*For the half-year ended 31 December 2009*





**CERAMIC FUEL CELLS LIMITED**

*Clean power for your home*

# *Directors' Report*

*For the half-year ended 31 December 2009*

## DIRECTORS' REPORT

Your directors present their report on the consolidated entity (referred to hereafter as the Group) consisting of Ceramic Fuel Cells Limited and the entities it controlled during, and at the end of, the half-year ended 31 December 2009.

## DIRECTORS

The directors of Ceramic Fuel Cells Limited in office at the date of this report are:

- J Harding, *Chairman*
- B L Dow, *Managing Director*
- P Binks
- J P Dempsey
- R J Kennett
- R Rose (appointed 7 July 2009)

M B Dureau was a director from 8 December 2005 to the date of his retirement of 24 November 2009.

## PRINCIPAL ACTIVITIES

The principal activity of the Company during the half-year was the commercial development and demonstration of power generating products based on the Company's ceramic (solid oxide) fuel cell technology.

There were no significant changes in the nature of the activities of the Group during the half-year.

## DIVIDENDS

No dividends were recommended, declared or paid during the half-year and to the date of this report.

## REVIEW OF OPERATIONS AND ACTIVITIES

A summary of the financial performance of the Group for the six months ended 31 December 2009 is set out below:

	<i>Half-year</i>	
	<b>2009</b>	2008
	<b>\$000</b>	\$000
Revenue from continuing operations	<b>1,479</b>	940
Other income	<b>253</b>	1,433
Expenses		
Research & Product Development	<b>(5,497)</b>	(5,316)
General & Administration	<b>(4,432)</b>	(5,498)
Sales & Marketing	<b>(745)</b>	(887)
Net foreign exchange gain/(loss)	<b>(4,120)</b>	4,151
Impairment reversal/(charge)	<b>2,927</b>	(27,460)
Loss before income tax	<b>(10,135)</b>	(32,637)
Income tax expense	-	-
Loss for the half-year entirely attributable to members of Ceramic Fuel Cells Limited	<b><u>(10,135)</u></b>	<b><u>(32,637)</u></b>

## Overview

Ceramic Fuel Cells Limited is a global leader in developing high efficiency and low emission electricity generation products for homes and other buildings. The Company's solid oxide fuel cell (SOFC) technology converts gas into electricity and heat, without combustion or noise.

Ceramic Fuel Cells has achieved electrical efficiency of 60 percent, far higher than any other technology in the rapidly expanding market for small scale power and heating products. When heat is recovered from the electricity production process, total efficiency is up to 85 percent – twice as efficient as the average among current European power stations (and three times as efficient as some brown coal power stations). This very high efficiency can significantly cut carbon emissions from power generation.

## Energy Market Forces

Global energy markets are facing a transformation. Energy use is rising, requiring significant investment in new power generation and grid infrastructure. However greenhouse gas emissions from electricity generation must be reduced. These forces create a very large global opportunity for low-emission energy technology, like solid oxide fuel cells, which can be deployed using the existing natural gas and electricity infrastructure.

These market forces also encourage a move away from large centralised power stations towards 'distributed generation', where mini power stations are installed close to where the power is used. According to a PricewaterhouseCoopers 2008 survey, almost 40 percent of global utilities expect distributed generation, especially combined heat and power (CHP) technologies, to have the greatest impact on generation and supply over the next 10 years.

Market conditions are attractive for low emission energy products, with several large markets introducing policies to encourage small scale power and heating products which use natural gas, like Ceramic Fuel Cells' products:

<b>Policy</b>	<b>Germany</b>	<b>UK</b>	<b>France</b>	<b>Netherlands</b>	<b>Japan</b>	<b>USA</b>
<b>Capital subsidy</b>	✓	-	-	✓	✓	✓ (California)
<b>Feed in tariff</b>	✓	✓	✓	✓	-	✓ (California consulting now)
<b>Tax breaks</b>	✓	✓	-	-	✓	✓
<b>"mandatory" purchase (e.g. low emission targets for utilities or homes)</b>	✓	✓	-	-	-	
<b>Energy efficiency schemes</b>	✓	✓	✓	-	-	

Notably, from 1 April 2010 the United Kingdom Government will introduce a feed-in tariff for small low-emission electricity generators, including fuel cell products of 2kW or less. A feed-in tariff is a premium rate paid for electricity fed back into the electricity grid. Under the UK feed-in tariff, energy retailers are required to pay homeowners 10 pence for every kilowatt hour of electricity generated by the fuel cell product, plus an additional 3 pence for every kilowatt hour of electricity exported to the local power grid. The tariff lasts for ten years, and is available for the first 30,000 micro power and heating products installed, with a Government review when 12,000 units have been installed.

This feed in tariff can help United Kingdom customers who install Ceramic Fuel Cells' products generate an economic return faster, whilst significantly reducing carbon emissions.

In Australia, all States and Territories (except Tasmania) have introduced or are planning a feed-in tariff for small generators, however presently these tariffs are restricted to a few technologies (mainly solar PV). The Federal Government also has policies to support the deployment of renewable energy technologies. The Company is putting its case to Australian State and Federal governments that in order to quickly reduce emissions from electricity generation, these policies should be expanded to support low emission small generators, including high efficiency fuel cell power generators.

### **Customers and Products**

The first products to be powered by the Company's fuel cells will be small scale units for homes and other buildings that produce one to two kilowatts of power as well as heat for hot water or space heating.

In order to cater for different markets and customers, the Company is developing two products in parallel: integrated combined heat and power (m-CHP) units, as well as a modular generator product called BlueGen. Both products use the Company's Gennex fuel cell module and share many 'balance of plant' components, allowing the Company and its partners to create different products and customer offerings from the same core technology platform.

### ***Integrated mCHP***

During the half year the Company continued to develop fully integrated mCHP products with its European utility and appliance partners:

<i>Market</i>	<i>Utility customer</i>	<i>Appliance partner</i>
Germany	EWE AG	Bruns Heiztechnik
United Kingdom	E.ON UK	Gledhill Building Products
France	GdF Suez	De Dietrich Remeha

In these partnerships, Ceramic Fuel Cells supplies its Gennex fuel cell modules to appliance partners, which integrate them with high efficiency boilers into single integrated units to convert natural gas into power, hot water and space heating for homes. The appliance manufacturer or the utility then sells or 'leases' the mCHP unit to the homeowner.

The product development projects are typically conducted in several stages, with a project review at the end of each stage. In 2008-09 the Company and its partners successfully completed the first stage of each project, where CFCL fuel cell units were connected to boilers and operated as 'semi integrated' units.

During the second half of 2009 the next phase of these projects was completed, when Ceramic Fuel Cells 'Gennex' fuel cell modules were integrated with boilers into fully integrated units.

The first integrated mCHP units were installed with appliance partners in Germany, the United Kingdom and France before Christmas 2009. At February 2010 two units are installed in the United Kingdom, three units in Germany and one unit in France.

The functionality and performance of these integrated units will be tested to the requirements of a commercial product. The Company then plans to build and deploy an increasing number of units with its partners during 2010-11.

In February 2009 the Company and its United Kingdom energy partner E.On agreed the profile of a future volume order for mCHP units. Subject to Ceramic Fuel Cells meeting agreed price and performance targets, E.On UK will place a minimum order of 100,000 units from 2012-2018 in order to retain exclusivity for Ceramic Fuel Cells' mCHP products in the UK market.

### **BlueGen**

In parallel with the integrated mCHP product, in 2009 the Company developed a modular 'go to market' product called BlueGen. BlueGen uses the same Gennex fuel cell module to convert natural gas into power and heat for hot water. It is ideal for customers and markets that do not need space heating, or already have an adequate space heating solution.

A BlueGen unit is about the size of a dishwasher and can be installed inside or outside the home, connected to existing natural gas, electricity and water supplies. One BlueGen unit can provide about double the power the average home needs – excess power can be exported to the grid – plus hot water for an average family's needs.

During the second half of 2009 the Company received its first orders for BlueGen units. VicUrban, the Victorian Government's sustainable urban development agency, will install three BlueGen units in high profile housing development sites in Melbourne.

In late 2009 the first BlueGen unit was installed at a VicUrban sales office in the Aurora Housing Development in northern Melbourne. The Company and VicUrban are currently finalising safety approvals and arrangements to connect the unit to the power grid and begin generating and exporting power from the unit. The second BlueGen unit will be installed in VicUrban's Sustainable and Affordable Living Centre in Dandenong, in mid 2010. The third BlueGen unit will be installed in another VicUrban site later in 2010. Origin Energy, one of the largest energy retailers and distributors in Australia, has joined in the demonstration project as VicUrban's selected energy retailer. Origin Energy will buy back excess electricity generated by the VicUrban BlueGen units.

Another large energy retailer and distributor, Energy Australia, has also ordered a BlueGen unit for a showcase sustainability house in the Sydney suburb of Newington. The Company expects to deliver the BlueGen unit to Energy Australia by the end of March 2010.

In November 2009 the Company appointed Neco, one of Australia's leading green retailers, to distribute BlueGen units in Australia. The non-exclusive agreement gives Neco the right to market, sell, install and service BlueGen units in Australia. Neco is currently preparing its BlueGen product offering and a range of purchase options. The Company is also working with Neco to establish the BlueGen product service and support infrastructure.

In November 2009 the Company also received an order for a BlueGen unit from Paloma in Japan. Paloma is a leading global home heating manufacturer and owner of the Rheem, Solahart and Raypak brands. The BlueGen unit has been shipped to Paloma and will be installed in Paloma's office in Sapporo, Japan, by the end of March 2010. Japan is an important market for fuel cells. There are more than 2,000 home fuel cell systems installed in Japan – the highest of any country in the world. Almost all of these fuel cell systems use hydrogen. There is increasing interest in products like Ceramic Fuel Cells' which can use natural gas to generate power with far higher electrical efficiency.

BlueGen orders continued in early 2010, with orders from EWE in Germany (three units), Kiwa Gas Technologies and Gasterra in The Netherlands (one unit), RheinEnergie in Germany (one unit), E.ON Ruhrgas in Germany (one unit) and Alliander in Germany (one unit). Some of these early BlueGen customers are among the largest energy companies in Europe. Having these customers evaluate and validate the BlueGen product is an important indication of the potential for the product to be widely deployed in many markets. The Company expects to deliver BlueGen units to these customers in Q2 2010. During the second half of 2009 the Company began the process of obtaining relevant safety approvals for BlueGen. In early August 2009 the Company successfully underwent European 'CE' safety approval for the prototype BlueGen demonstration units.

The Company expects to obtain full CE approval for the BlueGen product by the end of March 2010. Local approvals in Australia and other markets will follow the CE approval. The Company is familiar with the demanding and rigorous CE requirements and process, having obtained CE approval for each of its prior field trial units since early 2006.

As at February 2010 the Company has received orders for 12 BlueGen units, from 8 customers in four countries. The Company has received very strong interest from prospective BlueGen customers and sales partners in many other markets around the world. The Company's current focus is to sell BlueGen products in markets where it already operates or has experience - Europe, Australia, and Japan. As the BlueGen product matures, the Company will expand into other large global markets.

### **Manufacturing and Supply Chain**

During the half year the Company finished building a fuel cell stack manufacturing plant in Germany. This plant is one of the first in the world for the volume production of solid oxide fuel cell stacks. The plant is located in an existing 4,200m<sup>2</sup> building in the Industriepark Oberbruch, 40 minutes' drive from Dusseldorf in the North Rhine-Westphalia region of Germany.

The plant will manufacture fuel cell stacks which are the core of the Company's Gennex fuel cell module. This module in turn goes inside the Company's BlueGen product and the integrated mCHP products developed by the Company's appliance partners. From February 2010 the Heinsberg plant will make all the fuel cell stacks to be used in products to be shipped to customers.

The plant was officially opened in October 2009 by Dr Jens Baganz, State Secretary for the Ministry of Economic Affairs and Energy of the State of North Rhine-Westphalia, before more than 100 invited guests, including Government representatives and key customers, suppliers, investors and media.

The plant has a design capacity of up to 10,000 fuel cell stacks per year. The production capacity of the plant will be scaled up over time to match demand from customers. To meet future demand the plant can be expanded to a capacity of up to 160,000 fuel cell stacks per year in the same building. The Company also holds an option over a nearby parcel of land for future 'greenfield' expansion.

The total investment in the plant is 9.5 million Euros, including state of the art automated manufacturing equipment such as furnaces, ink skid works and robotic assembly units. During the half year the Company continued to work with leading global suppliers to establish the supply chain for the Heinsberg plant. In particular the Company continues to work with fuel cell component suppliers in Germany to reduce fuel cell unit costs whilst maintaining commercial performance targets. In parallel the Company continues to manufacture fuel cell components in its Melbourne plant, to ensure a supply of high quality cells.

### **UK Powder Plant**

During the half year the Company's ceramic powder plant in Bromborough, United Kingdom, continued to make high quality ceramic powders using the Company's proprietary technology.

The plant makes zirconia powder for use in the Company's pilot manufacturing plant in Melbourne. Zirconia is a key input into the Company's fuel cell components, and is also used in a wide range of other products and applications.

In 2009 the Company received its first order from an external customer, for high quality zirconia powder to be used in a biomedical application. The Company is providing samples to other prospective customers looking to buy ceramic powders for a range of applications.

### **Technology**

In the first half of 2009 the Company achieved significant breakthroughs in the performance of its fuel cell technology, meeting or exceeding commercial targets. Notably, in February 2009 the Company achieved electrical efficiency of 60 percent while exporting electricity to the grid. So far as the Company is aware this is the highest electrical efficiency ever achieved, worldwide, from any small scale technology – including other fuel cell technologies – that convert hydrocarbon fuels into electricity.

For example, a 2007 study of other microgeneration technologies by the UK Carbon Trust, based on a trial of 70 units (including Stirling engines and internal combustion engine) found average electrical efficiencies to be less than 10 percent. A Japanese Government-sponsored trial of Polymer Electrolyte Membrane (PEM) fuel cell home units showed average electrical efficiency of about 30 percent. The next best publicly reported result from another solid oxide fuel cell company is an electrical efficiency of 45 percent while exporting electricity to the grid.

Since February 2009 the Company has repeatedly achieved peak electrical efficiency of 60 percent in several different units. The Company believes that achieving the industry's highest electrical efficiency is a compelling competitive advantage in the very large emerging market for products that generate electricity in homes and other buildings.

During the second half of 2009 the Company focused on increasing the reliability and robustness of the fuel cell stacks (particularly to increase the number of times the fuel cell stack can 'thermal cycle', or turn on and off) and to extend the lifetime of the fuel cell stack. The Company will continue to focus on these areas in 2010.

The Company has individual fuel cells that have been generating power in a test station for 22,000 hours (over two and a half years) and a complete fuel cell stack that has been operating for 17,520 hours (from February 2008 to February 2010).

As at the date of this report the Company had been granted 148 patents in international markets for inventions.

## **Risk management**

During the half year the Company continued to manage the key risks facing the Company. The key technical risk for the Company (and for all fuel cell companies) is to consistently make fuel cells that work reliably, in real world conditions, for a long time. As discussed above, the Company has exceeded commercial targets for fuel cell electrical efficiency, and the Company's focus now is to improve the reliability, robustness and lifetime of its fuel cell stacks.

On the manufacturing side, the Company is also managing the risk of scaling up its capacity, through its plant in Germany and through its partnerships with commercial suppliers. Scaling up manufacturing is critical to enable the Company to make the transition from expensive 'hand made' units to cheap volume manufactured products, generating commercial revenues and margins. Making fuel cell stacks at the volume plant in Germany will improve consistency and quality and, as volumes increase, will deliver lower unit costs. The Company's focus on the manufacturing side is now to ensure its suppliers – including for fuel cells and other components - can meet quality and performance requirements whilst quickly cutting costs.

During the last half year a strong focus has been on the Company's commercial risks. This will continue in 2010.

The Company needs to sell products to generate revenue. There is a risk that appliance partners may take a longer time to develop products, and that utility customers may take longer to buy products in volume. The Company is taking several steps to mitigate this risk, most notably developing the BlueGen product that can be sold into additional markets and to different customer segments, not necessarily through utility companies. For instance in Australia the Company has appointed Neco to market and sell BlueGen products.

In order to sell products the Company will have to provide certain warranties and after-sales support. When a product is first introduced into the market, it is often not possible to test the product for all faults, or to test it for its full expected lifetime. Therefore there is a risk that it will cost the Company more to support early products than the revenue received for those products. The Company is also taking several steps to mitigate this risk, including by identifying early customers who will pay premium prices, building an internet-based support system to remotely monitor product performance and diagnose and correct faults and deploying products in a managed, phased approach close to the Company's (or its' local partners') support centres.

The key financial risk for the company is to ensure that it has adequate liquidity to continue its operations. To address this risk Management and the Board actively monitor the Company's forecast cashflow position.

## **Operating Results**

During the half-year the Company's 'Revenue from continuing operations' increased from A\$0.9m to A\$1.5m. This was due to the expansion of the development and field trial projects being undertaken in Europe and Japan.

Other income earned during the period fell from A\$1.4m to A\$0.3m. This is due to the reduction in interest income arising from the completion of the sale of the portfolio of financial securities which had been previously impaired.

Expenditure on Research and Product Development during the period was A\$5.5m which was inline with the comparable period last year.

Expenditure on Sales & Marketing of A\$0.7m was 16% lower than the prior period. This was principally due to the restructuring of the activities in Europe during the period. Two additional senior business development staff have been added to the European business during the second quarter.

Expenses relating to the General and Administrative functional area were 19% lower and reduced from A\$5.5m to A\$4.4m. This is principally due to:

- Reduced expenses in relation to the employee share option plan – A\$0.6m;
- Lower depreciation charges relating to the powder plant in the UK – A\$0.1m; and
- Other general cost reductions – A\$0.4m.

The current period includes a net foreign exchange loss of A\$4.1m compared to a gain in the prior period of A\$4.2m. These gains and losses arise predominantly from the translation of foreign currency cash and investments to Australian dollars. The Group's policy is to not hedge this foreign currency translation risk (other than the 'natural' hedge of holding cash in the same currency as expected expenditure). The translation loss in the current period has arisen from the appreciation of the Australian dollar against the pound sterling and the euro.

During the half-year the Company disposed of the remaining financial securities that it had held. These securities had been previously treated as impaired and had been written down to a fair value of A\$4.3m at 30 June 2009. They were sold during the period for an amount greater than this which has given rise to a gain of A\$2.9m (refer to Note 6(b) to the Consolidated Financial Statements).

### **Financing Activities**

The Company has completed the construction of its new plant in Germany for the manufacture of its fuel cell stacks. The plant was opened in October 2009 and in December the company entered into a sale-and-leaseback transaction for certain of the equipment located in the plant. The transaction involved the sale of equipment with a cost of €3.1m to the German banking group Commerzbank. The equipment is being leased back over 7 years with an initial upfront lease payment of 50% of the value of the equipment. The net amount of the funding - €1.5m (A\$2.4m) – is shown as a borrowing in the Consolidated Statement of Financial Position.

Also in December 2009, the Company received a regional development grant of €1.4m from the Government of North Rhine Westphalia. Details in relation to this grant are included in Note 8 to the Consolidated Financial Statements.

### **MATTERS SUBSEQUENT TO THE END OF THE HALF-YEAR**

No matter or circumstance has arisen since 31 December 2009 that has significantly affected, or may significantly affect:

- (a) the Group's operations in future financial periods, or
- (b) the results of those operations in future financial periods, or
- (c) the Group's state of affairs in future financial periods.

**AUDITOR'S INDEPENDENCE DECLARATION**

A copy of the auditors' independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 12.

This report is made in accordance with a resolution of the directors.



.....  
Jeff Harding  
Chairman

Melbourne  
18 February 2010

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## Auditor's Independence Declaration

As lead auditor for the audit of Ceramic Fuel Cells Limited for the half year ended 31 December 2009, I declare that to the best of my knowledge and belief, there have been:

- a) no contraventions of the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Ceramic Fuel Cells Limited and the entities it controlled during the period.



Chris Dodd  
Partner  
PricewaterhouseCoopers

Melbourne  
18 February 2010



**CERAMIC FUEL CELLS LIMITED**

*Clean power for your home*

# *Interim Financial Report*

*For the half-year ended 31 December 2009*

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This interim financial report does not include all the notes of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the annual report for the year ended 30 June 2009 and any public announcements made by Ceramic Fuel Cells Limited during the interim reporting period in accordance with the continuous disclosure requirements of the *Corporations Act 2001*.

A copy of this interim financial report may be obtained from the company's website: [www.cfcl.com.au](http://www.cfcl.com.au)

## **Consolidated Statement of Comprehensive Income**

*For the half-year ended 31 December 2009*

	<i>Notes</i>	<i>Half-year</i> <b>2009</b> \$	<b>2008</b> \$
<b>Revenue from continuing operations</b>	3	<b>1,478,669</b>	940,150
Other income	4	<b>253,336</b>	1,433,145
Research & Product Development		<b>(5,496,831)</b>	(5,316,716)
General & Administration		<b>(4,431,616)</b>	(5,498,133)
Sales & Marketing		<b>(744,797)</b>	(886,886)
Net foreign exchange gain/(loss)		<b>(4,120,556)</b>	4,150,974
Impairment reversal/(charge)	6(b)	<b>2,926,957</b>	(27,459,991)
<b>Loss before income tax</b>		<b>(10,134,838)</b>	(32,637,457)
Income tax expense		-	-
<b>Loss for the half-year entirely attributable to members of Ceramic Fuel Cells Limited</b>		<b>(10,134,838)</b>	(32,637,457)
<b>Other comprehensive income</b>			
Exchange differences on translation of foreign operations		<b>119,171</b>	215,514
Changes in the fair value of financial assets		-	3,898,009
<b>Other comprehensive income for the half-year, net of tax</b>		<b>119,171</b>	4,113,523
<b>Total comprehensive income/(expense) for the half-year entirely attributable to members of Ceramic Fuel Cells Limited</b>		<b>(10,015,667)</b>	(28,523,934)
		<i>Cents</i>	<i>Cents</i>
<b>Earnings per share for loss attributable to the ordinary equity holders of the company</b>			
Basic and diluted earnings per share	9	<b>(0.98)</b>	(9.47)

*The above consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.*

## Consolidated Statement of Financial Position

As at 31 December 2009

	Notes	31 December 2009 \$	30 June 2009 \$
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and cash equivalents	5	24,106,447	25,527,144
Trade and other receivables		972,061	452,479
Inventories		426,595	80,092
Financial assets	6(a)	-	4,253,041
Other		544,995	352,105
<b>Total Current Assets</b>		<b>26,050,098</b>	<b>30,664,861</b>
<b>Non-Current Assets</b>			
Plant and equipment		20,831,016	20,275,958
Intangible assets		1,000	1,000
<b>Total Non-Current Assets</b>		<b>20,832,016</b>	<b>20,276,958</b>
<b>Total Assets</b>		<b>46,882,114</b>	<b>50,941,819</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Trade and other payables		1,815,316	817,544
Borrowings	7	295,228	-
Provisions		1,002,075	843,125
Deferred revenue (including government grants)	8	2,320,226	258,111
<b>Total Current Liabilities</b>		<b>5,432,845</b>	<b>1,918,780</b>
<b>Non-Current Liabilities</b>			
Provisions		476,760	533,099
Borrowings	7	2,154,458	-
<b>Total Non-Current Liabilities</b>		<b>2,631,218</b>	<b>533,099</b>
<b>Total Liabilities</b>		<b>8,064,063</b>	<b>2,451,879</b>
<b>Net Assets</b>		<b>38,818,051</b>	<b>48,489,940</b>
<b>EQUITY</b>			
Contributed equity		230,415,020	230,415,020
Reserves		3,965,974	3,503,025
Retained losses		(195,562,943)	(185,428,105)
<b>Total Equity</b>		<b>38,818,051</b>	<b>48,489,940</b>

The above consolidated statement of financial position should be read in conjunction with the accompanying notes.

## Consolidated Statement of Changes in Equity

For the half-year ended 31 December 2009

	Contributed equity \$	Reserves \$	Retained earnings \$	Total equity \$
<b>Half-year 2009</b>				
<b>Balance at 1 July 2009</b>	230,415,020	3,503,025	(185,428,105)	48,489,940
Loss for the half-year			(10,134,838)	(10,134,838)
Exchange differences on translation of foreign operations		119,171		119,171
<b>Total comprehensive income/(expense) for the half-year</b>	-	119,171	(10,134,838)	(10,015,667)
<b>Transactions with owners in their capacity as owners:</b>				
Contributions of equity, net of transaction costs	-	-	-	-
Employee share options – value of employee services	-	343,778	-	343,778
	-	343,778	-	343,778
<b>Balance at 31 December 2009</b>	230,415,020	3,965,974	(195,562,943)	38,818,051

Total comprehensive income/(expense) for the half-year is entirely attributable to members of Ceramic Fuel Cells Limited.

### Half-year 2008

<b>Balance at 1 July 2008</b>	199,583,570	(1,378,867)	(143,252,253)	54,952,450
Loss for the half-year			(32,637,457)	(32,637,457)
Changes in the fair value of financial assets		3,898,009		3,898,009
Exchange differences on translation of foreign operations		215,514		215,514
<b>Total comprehensive income/(expense) for the half-year</b>	-	4,113,523	(32,637,457)	(28,523,934)
<b>Transactions with owners in their capacity as owners:</b>				
Contributions of equity, net of transaction costs	-	-	-	-
Employee share options – value of employee services	-	921,976	-	921,976
	-	921,976	-	921,976
<b>Balance at 31 December 2008</b>	199,583,570	3,656,632	(175,889,710)	27,350,492

Total comprehensive income/(expense) for the half-year is entirely attributable to members of Ceramic Fuel Cells Limited.

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

## **Consolidated Statement of Cash Flows**

*For the half-year ended 31 December 2009*

	Notes	Half-year 2009 \$	2008 \$
<b>Cash Flows from Operating Activities</b>			
Receipts from customers (inclusive of goods and services tax)		1,026,105	1,630,012
Payments to suppliers and employees (inclusive of goods and services tax)		<u>(8,212,741)</u>	<u>(9,033,450)</u>
		<b>(7,186,636)</b>	<b>(7,403,438)</b>
Grant receipts		2,220,798	-
Other receipts		<u>83,462</u>	<u>37,061</u>
<b>Net cash inflow (outflow) from operating activities</b>		<b><u>(4,882,376)</u></b>	<b><u>(7,366,377)</u></b>
<b>Cash Flows from Investing Activities</b>			
Proceeds from sale of plant and equipment		500	310
Payments for plant and equipment		<u>(3,206,254)</u>	<u>(5,207,170)</u>
Decrease/(increase) in security deposits		-	<u>(956)</u>
<b>Net cash inflow (outflow) from investing activities</b>		<b><u>(3,205,754)</u></b>	<b><u>(5,207,816)</u></b>
<b>Cash Flows from Financing Activities</b>			
Net proceeds from financial assets		7,087,174	2,451,526
Proceeds from issue of shares		-	-
Share issue costs		-	-
Proceeds from borrowings		2,449,686	-
Foreign exchange gains/(losses) on inter-company loans		<u>(1,243,252)</u>	<u>-</u>
Interest received		<u>271,163</u>	<u>1,227,671</u>
<b>Net cash inflow (outflow) from financing activities</b>		<b><u>8,564,771</u></b>	<b><u>3,679,197</u></b>
<b>Net decrease in cash and cash equivalents</b>		<b>476,641</b>	<b>(8,894,996)</b>
Cash and cash equivalents at the beginning of the half-year		<b>25,527,144</b>	<b>12,650,750</b>
Effects of exchange rate changes on cash and cash equivalents		<u>(1,897,338)</u>	<u>910,557</u>
<b>Cash and cash equivalents at the end of the half-year</b>	5	<b><u>24,106,447</u></b>	<b><u>4,666,311</u></b>

*The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.*

## **Notes to the Consolidated Financial Statements**

*For the half-year ended 31 December 2009*

### **Note 1. Basis of Preparation of Half-Year Report**

This general purpose financial report for the interim half-year reporting period ended 31 December 2009 has been prepared in accordance with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Act 2001*. Accounting Standard AASB 134 is fully compliant with International Financial Reporting Standard IAS 34 *Interim Financial Reporting*.

This interim financial report does not include all the notes of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the annual report for the year ended 30 June 2009 and any public announcements made by Ceramic Fuel Cells Limited during the interim reporting period in accordance with the continuous disclosure requirements of the *Corporations Act 2001*.

The accounting policies adopted are consistent with those of the previous financial year and corresponding interim reporting period.

The financial report has been prepared on a going concern basis.

#### **Future funding considerations**

The Group is in the commercialisation stage of its fuel cell technology. Over the life of the Group it has incurred substantial operating losses and is yet to become cashflow positive at an operational level. The Directors are mindful of this and continue to closely monitor the level of the Company's cash resources. Potential sources of future funding may include, but are not limited to:

- generation of sales revenue through developing and selling pre-commercial and commercial products;
- disposing of non-strategic assets;
- securing debt financing for new assets, either in part or in whole; and
- further issues of equity.

The Directors continue to monitor the Group's detailed financial plans and will take appropriate measures to maintain funding for the Group's operations.

## Notes to the Consolidated Financial Statements

For the half-year ended 31 December 2009

(continued)

### Note 2. Segment Information

#### Primary reporting format – geographical segments

	<i>Australia</i>	<i>Europe</i>	<i>Inter-segment eliminations</i>	<i>Consolidated</i>
	\$	\$	\$	\$
<b>Half-year 2009</b>				
Segment revenue	<u>170,264</u>	<u>1,386,661</u>	-	<u>1,556,925</u>
Unallocated revenue and other income				<u>175,080</u>
Total revenue and other income				<u>1,732,005</u>
Segment result	<u>(8,447,200)</u>	<u>(669,119)</u>	-	<u>(9,116,319)</u>
Unallocated revenue less unallocated expenses				<u>(1,018,519)</u>
Profit/(loss) before income tax				<u>(10,134,838)</u>
Segment assets	<u>23,103,812</u>	<u>27,014,786</u>	<u>(27,353,947)</u>	<u>22,764,651</u>
Unallocated assets				<u>24,117,463</u>
Total assets				<u>46,882,114</u>
Segment liabilities	<u>2,287,465</u>	<u>27,058,683</u>	<u>(21,282,085)</u>	<u>8,064,063</u>
Unallocated liabilities				-
Total liabilities				<u>8,064,063</u>
<b>Half-year 2008</b>				
Segment revenue	<u>154,065</u>	<u>798,147</u>	-	<u>952,212</u>
Unallocated revenue and other income				<u>5,572,057</u>
Total revenue and other income				<u>6,524,269</u>
Segment result	<u>(9,562,084)</u>	<u>(1,187,439)</u>	-	<u>(10,749,523)</u>
Unallocated revenue less unallocated expenses				<u>(21,887,934)</u>
Profit/(loss) before income tax				<u>(32,637,457)</u>
Segment assets	<u>22,003,688</u>	<u>24,442,549</u>	<u>(26,968,112)</u>	<u>19,478,125</u>
Unallocated assets				<u>11,836,981</u>
Total assets				<u>31,315,106</u>
Segment liabilities	<u>4,162,624</u>	<u>12,382,196</u>	<u>(12,580,206)</u>	<u>3,964,614</u>
Unallocated liabilities				-
Total liabilities				<u>3,964,614</u>

## Notes to the Consolidated Financial Statements

For the half-year ended 31 December 2009

(continued)

	<i>Half-year</i>	
	<b>2009</b>	<b>2008</b>
	\$	\$
<b>Note 3. Revenue</b>		
<b>From continuing operations</b>		
<i>Sales revenue</i>		
Field trial income	1,459,429	930,759
Powder sales income	19,240	-
Licensing income	-	9,391
Total revenue from continuing operations	<u>1,478,669</u>	<u>940,150</u>

### Note 4. Other Income

Interest income	175,080	1,420,773
Sundry income	77,756	12,062
Net gain on disposal of plant and equipment	500	310
Total other income	<u>253,336</u>	<u>1,433,145</u>

### Note 5. Cash and Cash Equivalents

The amount of cash and cash equivalents at 31 December 2009 includes an amount of €1,800,000 (A\$2,884,153) which is held in a CFCL Group bank account pledged to support a bank guarantee issued in relation to a government grant received during the current reporting period (refer to Note 8 Deferred Revenue). The cash in this bank account is not available for use by the CFCL Group.

	<b>31 December</b>	<b>30 June</b>
	<b>2009</b>	<b>2009</b>
	\$	\$

### Note 6. Financial Assets - Investments

#### (a) Unlisted Securities

##### Current assets

Financial assets	-	4,253,041
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##### Non-current assets

Financial assets	-	-
	<u>-</u>	<u>4,253,041</u>

Investments include the following revaluation surplus/(deficit) (transferred to equity) as at reporting date:

Unlisted, interest-bearing securities denominated in:		
Australian dollars	-	-
European euros	-	3,501,883
UK pounds sterling	-	751,158
	<u>-</u>	<u>4,253,041</u>

## Notes to the Consolidated Financial Statements

For the half-year ended 31 December 2009

(continued)

### Note 6. Financial Assets – Investments (continued)

#### (b) Impairment Charge Reversal

During the period the company disposed of all of its securities for total net proceeds of approximately \$6.6 million. The fair value of these financial assets was approximately \$4.3 million as at 30 June 2009. After taking into account foreign exchange movements, approximately \$2.9 million of impairment charges recognised in prior reporting periods was reversed in the current period.

### Note 7. Borrowings

In December 2009 the Group entered into a sale-and-leaseback transaction for certain equipment located in the Group's plant in Germany. The transaction involved the sale of equipment with a cost of €3,057,698 (A\$4,899,372) to the German banking Group Commerzbank. This equipment is included within the non-current asset, plant and equipment, in the balance sheet. The equipment is being leased back over 7 years with an upfront lease payment of 50% of the value of the equipment. Accordingly, the net funding received in December 2009 was €1,528,849 (A\$2,449,686).

	<i>Half-year</i>	
	<i>2009</i>	<i>2008</i>
	\$	\$
Commitments for minimum lease payments in relation to non-cancellable finance leases are payable as follows:		
Within one year	432,713	-
Later than one year but not later than five years	1,730,850	-
Later than five years	829,366	-
Commitments not recognized in the financial statements	<u>2,992,929</u>	-
Future finance charges	(543,243)	-
Recognised as a liability	<u>2,449,686</u>	-
Representing lease liabilities:		
Current	295,228	-
Non-current	2,154,458	-

### Note 8. Deferred Revenue

In December 2009 the Group received a regional development grant of €1,386,000 (A\$2,220,798) from the Government of North Rhine Westphalia in Germany. The funding requires the company to meet certain requirements as to expenditure on construction of the Group's plant in Germany and the creation of jobs. The Group has met the requirement in relation to expenditure on the plant. At the half-year balance date the full amount of the grant has been treated as deferred revenue and will be brought to account in future periods in line with the satisfaction of the obligations.

## Notes to the Consolidated Financial Statements

For the half-year ended 31 December 2009

(continued)

	<i>Half-year</i> <b>2009</b> <b>Cents</b>	<i>2008</i> <b>Cents</b>
<b>Note 9. Earnings Per Share</b>		
Basic and diluted earnings per share	<b>(0.98)</b>	(9.47)
	<b>Number</b>	<b>Number</b>
<b>Weighted average number of shares</b>		
Weighted average number of shares used as the denominator in calculating basic and diluted earnings per share	<b>1,029,873,280</b>	344,745,674
	<b>\$</b>	<b>\$</b>
<b>Earnings used in calculating basic and diluted earnings per share</b>		
Loss attributable to the ordinary equity holders of the company	<b>(10,134,838)</b>	(32,637,457)

There were no results from discontinued operations, nor net losses attributable to outside equity interests, to be taken into account in determining earnings used in calculating basic and diluted earnings per share.

### Information concerning the classification of securities

All options issued will be anti-dilutive until such time as the Group generates profits, rather than losses, hence all options have been excluded from the calculation of diluted earnings per share.

## ***DIRECTORS' DECLARATION***

In the directors' opinion:

- (a) the financial statements and notes set out on pages 14 to 22 are in accordance with the *Corporations Act 2001*, including:
  - (i) complying with Accounting Standards, the *Corporations Regulations 2001* and other mandatory professional reporting requirements; and
  - (ii) giving a true and fair view of the consolidated entity's financial position as at 31 December 2009 and of its performance for the half-year ended on that date; and
- (b) there are reasonable grounds to believe that Ceramic Fuel Cells Limited will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the directors.



.....  
Jeff Harding  
Chairman

Melbourne  
18 February 2010

## Independent auditor's review report to the members of Ceramic Fuel Cells Limited

### Report on the Half-Year Financial Report

We have reviewed the accompanying half-year financial statements of Ceramic Fuel Cells Limited, which comprise the statement of financial position as at 31 December 2009, and statement of comprehensive income, statement of changes in equity and statement of cash flows for the half-year ended on that date, other selected explanatory notes and the directors' declaration for the Ceramic Fuel Cells Limited (the Consolidated Entity). The Consolidated Entity comprises both Ceramic Fuel Cells Limited (the Company) and the entities it controlled during that half-year.

#### *Directors' responsibility for the half-year financial report*

The directors of the Company are responsible for the preparation and fair presentation of the half-year financial report in accordance with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Act 2001*. This responsibility includes establishing and maintaining internal control relevant to the preparation and fair presentation of the half-year financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

#### *Auditor's responsibility*

Our responsibility is to express a conclusion on the half-year financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2410 *Review of an Interim Financial Report Performed by the Independent Auditor of the Entity*, in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the financial report is not in accordance with the *Corporations Act 2001* including: giving a true and fair view of the Consolidated Entity's financial position as at 31 December 2009 and its performance for the half-year ended on that date; and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*. As the auditor of Ceramic Fuel Cells Limited, ASRE 2410 requires that we comply with the ethical requirements relevant to the audit of the annual financial report.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. It also includes reading the other information included with the financial report to determine whether it contains any material inconsistencies with the financial report. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

While we considered the effectiveness of management's internal controls over financial reporting when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls.

**Independent auditor's review report to the members of  
Ceramic Fuel Cells Limited (continued)**

Our review did not involve an analysis of the prudence of business decisions made by directors or management.

*Independence*

In conducting our review, we have complied with the independence requirements of the *Corporations Act 2001*.

*Conclusion*

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half-year financial report of Ceramic Fuel Cells Limited is not in accordance with the *Corporations Act 2001* including:

- (a) giving a true and fair view of the Consolidated Entity's financial position as at 31 December 2009 and of its performance for the half-year ended on that date; and
- (b) complying with Accounting Standard AASB 134 *Interim Financial Reporting* and *Corporations Regulations 2001*.



PricewaterhouseCoopers



Chris Dodd  
Partner

Melbourne  
18 February 2010