



## Press Release

### **Larger fuel cells cheaper to produce and easier to assemble**

**May 23, 2005:** AIM-quoted Ceres Power has succeeded in making its world-beating fuel cell four times larger.

It means that the fuel cell, which among other uses is destined for use in domestic boilers to generate electricity as well as heat, will become much cheaper to manufacture and dramatically simpler to incorporate into commercial products.

Ceres Head of Product Development Andrew Baker said: "Our development so far has used fuel cells the size of an After Eight mint. Now we can produce cells the size of a CD case, which produce 4 times as much power. This dramatic scale up in size should slash manufacturing costs and represents a key step towards using the cell in applications where greater outputs of electricity are needed."

Fuel cells generate electricity and heat when gas is passed over one surface and air over the other. Unlike most others, the Ceres cell is manufactured using low cost materials and cheap mass production techniques. It does not need platinum as a catalyst, and will run on natural gas as well as hydrogen.

The latest breakthrough follows the announcement last week of other recent technology firsts, when Ceres exceeded a clutch of key industry performance benchmarks unmatched by other companies in the sector.

The company has been described by the UK's Prime Minister as a "world leader", while the Energy Minister said it is "at the forefront of the race to make fuel cells a commercially viable technology."

Ceres was recently recognised as an industry leader through the award of the prestigious 2005 Gold Medal from the Institute of Materials, Minerals and Mining.

#### **For further information contact:**

Peter Bance, Chief Executive, Ceres Power Ltd:	+44 (0) 1293 400 404
Ian Foster, First City Financial Public Relations:	+44 (0) 20 7436 7486
	+44 (0) 7739 185 050

#### **Technical background follows:**

## **Larger fuel cells / technical background:**

Ceres Power's third generation solid oxide fuel cells are based on patented metal-supported thin ceramic layer technology. The inherent compatibility of the thermally matched metal and ceramic layers in the Ceres design has enabled much larger cells to be developed as stack components.

This successful quadrupling of the cell size has major commercial significance. The dramatic reduction in part count not only applies to the four-fold reduction in the number of cells in the stack but also to other components as a result of the simplified stack design. As a consequence, the projected manufacturing costs for materials, components, and assembly operations have been slashed and the expected stack manufacturing throughput rates significantly increased. Stack volume and weights based on the enlarged cells should make the Ceres technology attractive for a broader range of market applications where these parameters are critical.

The combined technological improvements and cost benefits from reduced part count and simplified stack design represent a major step towards mass market commercialisation.