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PRESS RELEASE -

11 August 2009 – SOFC stack exceeds expectations. SOFCpower /HTceramix operate their new, larger size SOFC stack platform stably at 53% electrical efficiency.

SOFCpower-HTceramix have demonstrated their new larger stack design (F-design) at 1.75 kW power operating with 70% fuel utilization. Under these conditions the electrical efficiency reached 43% and the specific power density was of 440 mW/cm², exceeding the company's performance objectives and confirming the cost targets for mass production of lower than 1000€/kW installed.. The same stack was also operated at part load conditions, achieving higher than 50% electrical efficiency at 1.4 kW and even 53% electrical efficiency at 750 W. This result was achieved with only 20 repeat elements stack, each producing ca. 90 W, using a nitrogen/hydrogen fuel mixture. Even higher stack efficiencies in the range of 60% can be reached by the same stack, if fed with steam reformed natural gas.

The result was assessed by experts of the European FP6 project Flame-SOFC project in which frame this stack development is pursued. The project aims at the development of 2 kW micro-CHP units, and HTceramix works very closely with the Swiss Federal Institute of Technology EPFL on the stack development.

With a power turn-down ratio of 3:1, this test series is an impressive illustration of solid oxide fuel cells ability to provide extremely high electrical efficiencies in very small and versatile power units. This constitutes the base for the realization of smart generators for smarter grids in a near future, providing electric power, heat and cold where it is needed and utilized.

SOFCpower is a leading SOFC manufacturer and has a pilot manufacturing plant in 2008 in Trento (IT). SOFCpower's mission is to develop and commercialize stacks and energy generating units to be integrated into SOFC systems.

HTceramix SA is a leading-edge technology dynamic developer of solid oxide fuel cells. HTceramix mission is to develop and support the integration of Swiss quality fully integrated SOFC generators to system integrators. Based in Yverdon, Switzerland, HTceramix was founded in 2000 using technology developed over 10 years at the Swiss Federal Institute of Technology (EPFL) and is a 100% subsidiary of SOFCpower.

For more information, please contact

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