Cutting Edge Technology: Electricity From Sugar Cane Using Fuel Cell Technology

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Intelligent Energy Inc., a leading energy solutions business, today announces that it has successfully completed trials of its ethanol based fuel cell technology system. These trials show that sufficient electricity can be generated for a rural home from equipment little larger than a shoebox, using fuel derived from sugar cane.

Providing electricity to individual homes in rural communities is key to sustainable development in countries such as Brazil, which is the world's largest producer of bioethanol (35% of the global total). But it is equally applicable to the provision of distributed power throughout Latin America, large parts of which are presently experiencing difficulties in electricity supply and in which significant sections of the rural population do not have adequate power. Intelligent Energy is engaged in a partner program in Argentina, Brazil and Mexico which is focused on providing rural and urban electricity solutions.

Dr. Eduardo Torres Serra of CEPEL, Brazil's premier energy research laboratory, which is currently engaged in research aimed at rural and peri-urban electrification, witnessed the operation of Intelligent Energy's fully integrated ethanol-in to electricity-out system. He commented: "The Intelligent Energy system is at the cutting edge of technology, it is very compact and extremely impressive."

Making the announcement today, Intelligent Energy's Chairman, former Chairman of Shell, Sir John Jennings, said: "This successful demonstration is an important part of our expanding strategy to

accelerate market acceptance of fuel cell technology as an alternative power source. We are deeply committed to playing our part in changing the way the world both produces and uses energy in the drive towards increased energy independence, more affordable energy, more available energy and enhanced environmental sustainability."

The ethanol-based fuel cell system is one of a number of solutions for production of clean electricity using Intelligent Energy's proprietary MesoChannel(TM) Fuel Processor and Fuel Cell System. These solutions convert various fuels into hydrogen, from which electricity is produced. The fuels which may be used include light and heavy hydrocarbons (natural gas through to diesel), renewable fuels (such as ethanol, soy diesel and others) and decarbonized fuels (such as ammonia). The Intelligent Energy technology, which has been exhibited during the Democratic National Convention in Boston, also uses direct hydrogen and hydrogen generated by wind, solar and other renewable energy sources, at scales from a few watts to a few hundred kilowatts, for a wide range of applications.

Source: Intelligent Energy Inc.