ZERE Energy and Biofuels, Inc. Receives Funding from The International Copper Association

ZERE's patent pending technology for Biomass-to-Energy with Zero Emissions Receives additional funding for prototype

SAN FRANCISCO BAY AREA, CA (August 24, 2011) Following a selective technology proposal process, ZERE Energy and Biofuels, Inc. (www.zerechp.com) has been selected to receive funding from the International Copper Association, Ltd. (ICA) to support research pertaining to the design, build, and test of a 6 kW biomass-to-energy prototype system using copper oxide for oxygen extraction.

"ZERE has an innovative early-stage, near-zero emission technology for biofuels combustion," said ICA Director of Technology, Hal Stillman. "A key element of this technology is the use of copper-based materials in a cyclical atmospheric oxygen extraction process. The ICA recognized the potential of this technology to contribute to low carbon energy production and has provided ZERE initial funding toward completion of a 6kW prototype to validate the technology. The ICA may provide additional funding to ZERE for its pilot following the demonstration of this prototype."

The ZERE system will oxidize methane gas, cellulosic biomass, and/or agricultural waste streams as fuel, with a solid-state oxygen carrier (copper oxide) in a fluidized bed reactor. The system will output steam for dairy/food processing or will be driven into a turbine for power/heat generation and alternatively, syngas suitable for biofuels. Waste CO₂ will be inherently captured, liquefied, and sold as an additional revenue stream to bottlers. ZERE's technology takes carbon out of the environment using existing biocarbons (crop waste and methane) and without emitting NO_x, SO_x, or particulate to the atmosphere.

"We are honored to have the support of the International Copper Association to bring research forward to prototype system scale for ZERE's biomass waste-to-renewable energy and biofuels technology," said Laura Draxler, CEO, ZERE Energy and Biofuels. "This is an acknowledgement of our technology and the value it represents for food processing, distributed energy generation, and biorefinery integration, as well as CO₂ capture and liquefaction for bottlers and/or sequestration, among other applications."

The ICA is an alliance of forward-thinking companies in the copper industry. The ICA's mission is to defend and grow markets for copper, based on its superior technical performance and its contribution to a higher quality of life worldwide. One of the ICA's primary focus areas is applying copper to meet the global need for sustainable, low carbon energy.

"We feel that the ZERE Energy and Biofuels technology has technical merit and, if further developed, should be attractive in many types of energy applications," said ICA Director of Technology, Hal Stillman.

About ZERE Energy and Biofuels, Inc.

ZERE Energy and Biofuels, Inc. (Zero Emissions Renewable Energy) formerly Clean EnGen Group, LLC, is a privately held business and was formed in 2008. ZERE's mission is to deliver profitable zero-emission energy and biofuels from green waste and to provide distributed scale electricity to the grid. ZERE has demonstrated its technology at Stanford, has a patent pending for its core technology, and two additional patents to be filed this month. ZERE was a Cleantech Open 2009 semi-finalist and awarded runner up in the renewable energy category. For additional information, please visit the ZERE web site at www.zerechp.com.

About International Copper Association, Ltd. (ICA)

The International Copper Association increases awareness and usage of copper by communicating the unique attributes that make this sustainable element an essential contributor to the formation of life, to advances in science and technology, and to a higher standard of living throughout the world. The ICA's 38 members represent a majority of the world's refined copper output and are among the largest copper producers, fabricators, and wire and cable companies.