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Submitted to the Committee on Ways and Means

U.S. House Representatives
Washington, DC

Hearing on Energy Tax Incentives Driving the Green Job Economy
April 14, 2010

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to submit this statement for the hearing record regarding energy tax incentives driving the green job economy.

Micro-combined heat and power (micro-CHP) technologies can greatly improve energy efficiency in a majority of homes in the US while creating thousands of new green energy jobs across America. Micro-CHP systems utilize the concept of cogeneration to provide heat and electricity to residential buildings. Micro-CHP systems replace a homes' boiler or furnace, and create electricity by running an efficient, state-of-the-art generator, recapturing the heat created from the generator engine to heat the home. Because it is so efficient, homeowners will now be able to achieve drastic energy efficiency improvements in their homes, as well as reduce their energy costs and reduce pollutant emissions all at the same time. Adoption of micro-CHP systems brings about benefits not only to the homeowner, but also to utility corporations and society as a whole.

Energy efficiency continues to be the most cost-effective, and the most immediate way to reduce the burden of rising energy and environmental costs as well as our energy-related carbon footprint. How effective is micro-CHP at addressing improvements in home energy efficiency and emissions reductions? Roughly speaking, micro-CHP can, for most homes, double the fuel efficiency of electrical power generation. A micro-CHP system will utilize over 90% of the fuel input to create heat and power for a home, a vast increase over the efficiency of central power generation. Micro-CHP can reduce total energy consumption and carbon emissions in the home by over one-third. Wide-spread adoption of micro-CHP can make better use of our significant natural gas reserves, can limit the need for new central power plants, and it can provide an important resource in meeting peak electricity demands and energy security needs during grid outages.

But, just as important, micro-CHP can be efficiently applied to nearly all existing homes. In contrast to other green home energy strategies, there are very few application and siting restrictions. This has already been demonstrated in many homes in the Northeastern US where homeowners use a lot of fuel to heat their homes, and pay very high prices for electricity. There is also great opportunity for broad deployment of Micro-CHP. A recent EIA (Energy Information Administration) report stated that 20% of US homes have a heating system that is greater than 25 years old. Each of the three to four million central heating systems installed or replaced across the US this year alone are candidates for conversion to micro-CHP. Ten years of large scale application of micro-CHP can transform the residential energy sector.

The resulting jobs and benefits by the creation of a robust micro-CHP industry in the United States are numerous. Micro-CHP systems are sold, installed, serviced, and maintained by small business companies – primarily small plumbing, HVAC, and electrical companies throughout the US that are modifying their businesses to include micro-CHP as an additional offering, and moving into the emerging green economy. Manufacturers already established in the US are adding engineering, manufacturing, sales, customer service, training, and support positions. And, US manufacturers have created tremendous expertise and are already exporting manufactured micro-CHP systems and components to other parts of the world. It is expected that in excess of

10,000 jobs could be created over 10 years as a direct result of the creation of a solid micro-CHP industry in the US, with many more indirect jobs as manufacturing increases.

The challenge to fulfilling the energy promise of micro-CHP has several dimensions. The first major challenge is education and awareness. Breaking with traditional thinking is not easy when there are millions of individual decision-makers involved and the issues are complex. Another major challenge is achieving product production and delivery efficiency. Volume is needed to drive the economics to where they need to be.

The federal government can assist the emerging micro-CHP industry by leveling the playing field with regard to incentives now provided for other transforming home energy technologies such as solar and geothermal. Such incentives will bring attention to micro-CHP as an alternative and boost the adoption rate. Indeed, today's informed customers now routinely look for these incentives to validate their forward looking decisions and the commitment they are poised to make.

HR 2328 – a bill that is pending before this Committee that will provide a 30% tax credit similar to solar and geothermal-- will create thousands of jobs. With this limited commitment from the federal government, micro-CHP is poised to transform home energy. The states have taken the lead in providing favorable interconnection and net metering rules for micro-CHP in the home. The federal government should build upon the work already done by the private sector and the states by providing support for the practical energy efficiency strategy called micro-CHP.

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