

<u>Journalists at WREF/ASES:</u> Cool Energy CEO Sam Weaver is available as a resource re power conversion using solar, biomass and waste heat recovery. Contact him on his mobile phone on Tues., May 15 & Weds. May 16 at (303) 588-5148.

For Immediate Release

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Colorado Renewable Energy Power Generation Company - Cool Energy, Inc. - Developed New Stirling Engine Technology that Recovers and Converts Waste Heat into Usable Electricity for Untapped \$15 Billion U.S. Market

BOULDER, CO; May 14, 2012 – <u>Cool Energy Inc</u>. (<u>www.coolenergyinc.com</u>), a clean energy power generation corporation with headquarters in Boulder, Colorado, has developed a new use for the 200-year-old Stirling engine. The company's novel approach to an existing technology can recover and convert waste heat that would otherwise be lost and turn the heat into usable electricity for broad application in industrial and commercial processes. The system reduces the amount of greenhouse gas emissions entering the Earth's atmosphere by generating electricity with no additional carbon emissions.

Cool Energy, which holds six U.S. patents on its **SolarHeart** Engine system, has determined that its technology can service the untapped \$15 billion U.S. market for waste heat recovery in the low to medium temperature range (100 to 300 degree Celsius). Currently, 20 to 50 percent of energy consumed in industrial and commercial processes is lost via waste heat.

"If we installed SolarHeart Engines in just 30 percent of the industrial waste heat recovery opportunities in the U.S., we'd install 11 gigawatts of generating capacity which would produce 60 billion kilowatt hours of electricity every year from heat that's wasted up industrial smoke stacks," said Sam Weaver, President and CEO of Cool Energy, Inc. "We could save 30 million tons of carbon dioxide emissions every year if we got even 30 percent of these opportunities – and that's in the U.S. alone," said Weaver. (Link to 3-minute video on YouTube with Sam Weaver explaining his heat recovery technology.)

In the fourth quarter of 2011, Cool Energy designed, built and delivered two of its fourth generation 3kW engines to European customers, with a third unit in final assembly. The company is now developing designs for higher-power engines to capture the large untapped market for power conversion in the 10kW to 50kW range. Mr. Weaver recently returned from India where he interviewed potential partners with capabilities to manufacture and distribute the SolarHeart Engine in India.

The company's technology is expected to increase engine-based electrical generator efficiencies by up to 20 percent with a return on investment for some applications in as little as one year. Cool Energy has received grants from the National Science Foundation, the U.S. Department of Energy, the Environmental Protection Agency and the Colorado Governor's Energy Office.