

For Immediate Release

Media Contact Neshama Abraham Paiss Neshama@AbrahamPaiss.com (303) 413-8066

Colorado RE Power Generation Company - Cool Energy, Inc. – Achieves Record Performance Numbers

Advanced Stirling Engine Technology Converts Waste Heat into Electricity for Untapped \$50 Billion U.S. Market and Improves Cell Tower Efficiency for \$10 Billion World-wide Market

BOULDER, CO; June 20, 2012 – <u>Cool Energy Inc.</u>, a clean energy power equipment company with headquarters in Boulder, Colorado, set new records for its advanced Stirling Engine technology that recovers waste heat and exhaust from commercial sources. The **SolarHeart® Engines** from Cool Energy are used to generate electricity from heat vented from industrial processes and internal combustion engines that would otherwise be lost. This system converts the heat into valuable electricity in a variety of applications. On June 13, the SolarHeart® Engine system being tested for a customer in Spain achieved an 18 percent thermal to electric conversion efficiency at a power output of 2,100 watts – the engine's highest heat-to-electricity conversion rate obtained to date. The result was achieved at a hot temperature test point of 230 degrees Celsius, a temperature typical for emissions from engines and factories.

Currently, 20 to 50 percent of energy consumed in industrial and commercial processes (e.g. coffee roasting, kiln firing, water bottling) is lost via waste heat — heat that the Cool Energy power conversion system can use to generate electricity. According to the company's research, if the **SolarHeart** Engine system was installed in just 30 percent of the industrial waste heat recovery opportunities in the U.S., they would install 11 gigawatts of generating capacity which would produce 60 billion kilowatt-hours of pollution-free electricity every year from heat wasted up industrial smoke stacks.

"We could save 30 million tons of carbon dioxide emissions a year from entering the atmosphere if we got even 30 percent of waste heat opportunities – and that's in the U.S. alone," said **Sam Weaver**, President and CEO of Cool Energy, Inc.

Technology Can Increase Efficiencies for Word-Wide Cell Tower Market

In the second quarter of 2012, Mr. Weaver traveled to Europe and Asia to identify manufacturing and distribution partners for the company's 3kW **SolarHeart** Engine. The technology can increase diesel engine efficiencies by up to 20% with a return on investment in as little as one year. This savings is particularly attractive in countries where diesel fuel is expensive, such as in India and Africa, or in remote U.S. military applications. The Cool Energy technology is applicable for the world-wide \$10 billion off-grid cell tower equipment market of 650,000 towers where more than 50,000 new towers come on line every year.

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COOL ENERGY ACHIEVES RECORD NUMBERS .../2

In the fourth quarter of 2011, Cool Energy designed, built and delivered two of its fourth generation 3kW engines to European customers. A third unit is currently undergoing testing in the Boulder lab. 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.

About Cool Energy

Cool Energy is a privately-held high tech power conversion corporation based in Boulder, Colorado. The company was founded in 2006 when development began on a thermal-to-electrical power generation system for converting waste heat from engines and industrial processes into clean electricity. The system is built around an advanced-materials Stirling engine, the **SolarHeart® Engine**, which captures and converts low-to-medium temperature heat (100 – 300 degrees Celsius) into electricity. Cool Energy holds six U.S. patents on its **SolarHeart® Engine** system with four additional patents pending, and has received grants from the National Science Foundation, the U.S. Department of Energy, the U.S. Environmental Protection Agency and the Colorado Governor's Energy Office. More information is available at www.CoolEnergyInc.com.

Note to Journalists: For a short explanation of the Cool Energy Stirling engine technology and market applications, including video of CEO Sam Weaver, please watch this **3-minute video** on YouTube.

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