BYU students earn EPA grant to improve electricity generation from waste heat

Thermoelectric Power Harvesting System one of the promising sustainable technologies supported by People, Prosperity and the Planet program

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(Denver, Colo. – October 14, 2009) The U.S. Environmental Protection Agency has awarded Brigham Young University students with a $10,000 grant to help test a prototype unit that converts heat from waste into electricity. The grant is one of 43 awarded nationwide under EPA's People, Prosperity and the Planet (P3) awards.

The BYU students will develop a prototype in which thermoelectric generators are connected to a heat source and a heat sink via variable thermal pathways. This project will offer potentially valuable insights on how to more efficiently convert waste heat into electricity. The development of economically viable thermoelectric power harvesting systems can significantly reduce the consumption of fossil fuels, and increase the overall efficiency of renewable power production systems such as solar thermal and geothermal power plants.

EPA has awarded 43 grants to teams of college and university students across the country who will design creative technologies to sustainability challenges in the developed and developing world. The People, Prosperity, and the Planet (P3) Phase I awards for the 2009-2010 competition challenge students, working together on interdisciplinary teams, to design and build sustainable technologies that improve quality of life, promote economic development, and protect the environment.

The competition begins in Phase I with the award of $10,000 grants to student teams who submit applications that focus on a wide range of categories, including water, energy, agriculture, built environment, materials and chemicals, and information technology.

After working on the project for eight months, the teams will bring their designs to the 6th Annual National Sustainable Design Expo on the National Mall in Washington, D.C. Projects will be judged by a panel of experts and a select few will be awarded P3 Awards and Phase II grants up to $75,000 for students to further their designs, implement them in the field, or move them to the marketplace.

More information on EPA's P3 program: http://www.epa.gov/ncer/p3/