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## The Use of Thermoelectric Peltiers to Recapture Waste Heat

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### **The Use of Thermoelectric Peltiers to Recapture Waste Heat**

Peltier devices are a method of converting differences in temperature into electrical energy. Using data from a supplier of these devices, calculations were made to determine the efficiency of these devices in conjunction with a residential solar hybrid electric system. The initial calculations show efficiencies less than 2% with the temperature differences experienced during the springtime. While this efficiency doesn't sound stellar, taking into account the current efficiency of residential solar cells, this would be an appreciable addition to the power output of a residential solar system.

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*Navarre Bartz is a sophomore in Ceramic engineering. He is a member of Solar Car, Solar House, and the Vehicle Design Summit. His interests lie in the area of alternative energy.*