

# **Thermoelectric Energy Generator Based on Arduino**

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**Abstract:** *The project investigates the creation and application of a Thermoelectric Energy Harvesting system based on Arduino. By utilizing thermoelectricity, the system is devised to convert waste heat energy into electrical energy. The report describes the approach taken to build the system, highlighting the components considered and a description of the experimental procedures. The conclusion is that the Arduino based approach is a functional method for harvesting energy from temperature differences. Overall, the project explores an array of sustainable energy solutions and serves as a stepping stone for improved designs of thermoelectric energy harvesting systems. Given the increased amounts of Solid Waste produced in today's society, studying alternative energy sources derived from Solid Waste is essential*

**Keywords:** Thermoelectric Energy Harvesting

