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Portable Device for Thermo-Electrical Generation using Waste Heat

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Abstract: *In India, cooking stove is use in almost every house. During this, some amount of heat generated by flames is get wasted due to open air. Also, in summer, steel sheds gets too much hot due to heavy sunlight. In this project we are designed a portable unit of TEG plates to generate electricity from waste heat. This portable unit can be use with any sufficient heat generation sources like cooking stove, steel sheds, vehicle silencer and industrial furnace. Due to the temperature difference between two sides of TEG, a voltage (current) is produced. The produced voltage is not sufficient to store in battery. So the voltage is boosted up to required level using a DC-DC converter. The boosted up voltage is stored in battery which is used as a backup. Here this energy will be utilize to light up LED lights or to charge mobile phones. This feature will run on energy generated by TEG plates. So no external energy is required for this feature..*

Keywords: Energy generation, TEG

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