

**Utilization of Biomass Stove Heat with Fuel Variations as Power Generation  
System based on TEG SP1848**

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**ABSTRACT**

*This study aims to convert heat energy into electrical energy by using a thermoelectric generator. Thermoelectric generator can generate electricity when there are temperature difference between the two sides. The heat source used comes from the wall of biomass stove. This system uses 4 thermoelectric modules in series and uses a variety of fuels, namely coffee bean husks, cocoa bean husks, and rice husks. The results of the research on this system produced the highest power of 0.5575 W with a resistance of 10 $\Omega$  on the burning of coffee bean husks. By using the charger method, the electric power generated can be increased up to 3 W.*

**Keywords:** *Thermoelectric Generator, Biomass Stove, Power*