

## **Improvement of Cow Manure Waste as Biogas for Processing Animal Feed**

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### **ABSTRACT**

Cow dung waste that builds up will harm the ecosystem and the air. Therefore, steps must be taken to limit cow manure waste, which contributes to environmental pollution. The process includes turning cow manure into biogas. Biogas is a type of gas fuel produced by the anaerobic fermentation of organic materials by bacteria that produce methane. A biodigester tube with a 1050 liter capacity is used in the energy conversion process for cow dung biogas. A system called a biodigester was created to hasten the breakdown of organic molecules. An enclosed tube called a biodigester is where organic waste is fermented to create energy. The biodigester was developed for cattle breeders as a means of reducing cow manure waste and can be used for processing animal feed and other tasks requiring alternative fuel. According to this study, biogas made from leftover cow dung may generate 4000 cal/g of heat.

Kata Kunci: *Cow dung, Biodigester, Biogas.*