

*Study of Utilization Potential of Cow Manure Waste to Biogas in Krajan Hamlet  
Pesanggaran Village Banyuwangi*

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**ABSTRACT**

*The increased demand for energy is not accompanied by energy supply accrue because one of the main sources used is non-renewable energy so that it will depend on existing supplies. Biogas is a fuel that produces no smoke and has the potential to replace oil or natural gas. Observation of the biogas potential planning location was conducted in Krajan Hamlet in Pesanggaran Village, Banyuwangi. The data obtained is used as a reference for the potential development of biogas reactors. The aspects that need to be considered are the potential of biogas energy, the potential for other energy availability and the reactor plan. production of cow manure in Krajan Hamlet is 26,324 kg/day, which will be able to produce 1053 m<sup>3</sup>/day of gas and will produce 185.47 m<sup>3</sup>/day of methane gas. If on average each farmer in Krajan Hamlet has 7 cows, a digester will be built with a capacity of 6 m<sup>3</sup> and with a total of 266 reactors.*

**Key words :** *.Alternative Energy Sources, Biogas, Gas Production*