

## **Possibility of Using Cow Manure as The Primary Material in Briquette Production**

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### **ABSTRACT**

*Characteristics of briquettes using cow dung as the main ingredient and adhesive with the addition of coconut shell. What is the best composition of using cow dung as the main ingredient and adhesive with the addition of coconut shell? 4. Briquette Characteristics Test. the addition of the composition of additional ingredients to the briquettes affects the water content contained in the briquettes. The heating value is a very important parameter in determining the quality of briquettes. Where the value of water content is 8.04%, density is 0.14 gr/cm<sup>2</sup>, kamba density is 0.21 g/cm<sup>3</sup>, ash content is 7.31%, compressive strength is 4.216 atm, combustion rate is 0.045g/s, calorific value is 5.127 cal/ gr. KSTK 2 briquettes with a composition of 55% cow dung 45% with the addition of coconut shell, where the water content is 10.51%, Density is 0.14 gr/cm<sup>3</sup>, Kamba Density is 0.21 g/cm<sup>3</sup>, ash content is 7.23%, compressive strength is 4.321 atm, combustion rate 0.043 g/s, calorific value 5,086 cal/gr. KTSK 3 briquettes with a composition of 60% cow manure 40% with the addition of coconut shell, where the value of the water content is 10.81%, Density is 0.13 gr/cm<sup>3</sup>, Density of kamba is 0.19 g/cm<sup>3</sup>, ash content is 7.16%, strong pressure 4.406 Atm, combustion rate 0.039 g/s, calorific value 4.9089 cal/gr. The best composition for cow dung briquettes with added coconut shell is KSTK 1 which is in accordance with the standard (SNI) but the water content value is not in accordance with (SNI).*

**Keywords:** Cow dung, Coconut Shell, Briket, characteristics.