

***Study of Briquette Utilization of Sugarcane Bagasse Waste (Saccharum
offininarum) Cassava Peel Waste as an Adhesive (Manihot utilissima) Siti Diah
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ABSTRACT

Biomass is one of the energy sources derived from organic matter, such as plants, agricultural waste, and plantation waste whose availability is very high because it can be renewed such as bagasse waste and cassava peel waste. The purpose of this research is to study the utilization of briquettes from sugarcane bagasse waste (Saccharum offininarum) with cassava peel waste adhesive (Manihot utilissima). The research method used is the experimental method and the physical characteristics of briquettes by comparing the composition of the main ingredients and adhesives, namely AKS1 (80%: 20%), AKS2 (75%: 25%), AKS3 (70%: 30%). The results showed that the best briquette composition that meets the Indonesian National Standard for Charcoal Briquettes No. 01-6235-2000 is AKS1 (sugarcane bagasse 80%: cassava peel 20%) with an average moisture content of 3.24%, average ash content of 6.635%, calorific value of 4687.33 cal/gr, density of 1.517 gr/cm³, comb density of 0.260 gr/cm³, and burning rate of 00.00544 g/s.

Keywords: *Biomass, Sugarcane Bagasse, Cassava Peel, Briquette SNI*