



**UJI EFEKTIFITAS PEMBAKARAN DAN EMISI
GAS BUANG BIOBRIKET CAMPURAN
BATUBARA DAN BLOTONG TEBU**

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Abstract. Fuel oil is increasingly scarce to make the government-the Ministry of Energy and Mineral Resources - issued a National Energy Policy, one of the steps is the diversification of energy namely increasing the diversification of the use of alternative energy (coal, gas, and renewable energy). Biobriket is one of the alternative energy derived from fossil materials and agricultural waste in this case coal and sugar cane.

Sample with a composition of 60% blotong cane : 40% of coal has the smallest boiling time. Time to boil water is smaller than the other because of the volatile matter content of a substance or material flammability, calorific value of 2602 cal / g. The magnitude is proportional to the calorific value of the fixed carbon content of a material. Fixed carbon content of these fourth sample of 2.4164%, greater than samples composite 100% blotong cane : 0 coal % blotong cane but smaller than 0 % blotong cane : 100 % blotong coal. Percentage thickness of the smoke (opacity) of 7.6%, is quite safe because it is far from the threshold value of air quality standards set by the government. The addition of cane blotong positive impact on the effectiveness of combustion but less well against indicators of calorific value of materials. The addition of sugarcane blotong was increasing exhaust emissions that form smog. The fourth sample thickness of smoke by 7.6%. The smoke of blotong sugar cane contains some gas of CO₂, CO, NO₂ and little SO₂. Biobriket with a composition of 60% blotong cane : 40% coal is a composition which is effective in burning and environmentally friendly.

Key words: Biobriket, alternative energy, exhaust emissions.

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