ABSTRACT.

Characterization of wood waste from halaban wood, bottom ash, and coal fly ash has been done includes tests of water content, ash content, calorific value, and composition as well as morphology. One of the factors that influences the characteristics is the powder size. Therefore, this research uses 250 mesh sieve (smaller powder size) to make briquettes. From the test results, the average moisture content was 4.22% for halaban wood charcoal, 1.64% for bottom ash and 0.91% for fly ash. Average ash content of 41.93% for halaban wood charcoal, 82.03% for bottom ash and 89.69% for fly ash. Average Calorie Value of 6833.1 cal/g for halaban wood charcoal, 389.5 cal/g for bottom ash and for coal fly ash with calorie value of 0. From the SEM-EDX analysis results, there was no C mean of 76.69% In halaban wood charcoal, the average ash percentage of C was 41.87% and the average percentage of C was 16.17% in coal fly ash. The results of tests carried out are expected to be waste wood charcoal, basic ash and fly ash can be used as a mixture in the manufacture of briquettes.

KEYWORDS: fly ash, bottom ash, coal, briquette, halaban