Utilization of Coffee Peel Waste And Teak Sawdust With Sugar Cane Drops Adhesive (*Mollase*) As Briquettes

Dedy Eko Rahmanto, S.Tp, Msi (Minithesis Counselor)

Ainun Febriana Study Program of Renewable Energy Engineering Department of Engineering

ABSTRACT

The need for energy is increasing along with the increase in human activities, to reduce the consumption of fossil fuels humans make alternative materials that can be found easily and are environmentally friendly. Briquette is the cheapest alternative fuel and can be developed in a relatively short period of time which is a solid fuel made from a mixture of biomass. The purpose of this study is to utilize biomass waste as an alternative fuel. One of the materials that can be used as raw material for briquettes is coffee husk and teak sawdust using molasses as an adhesive. The results showed that the best composition of briquettes was found in KKSG5 variations, namely 50% coffee husk and 50% teak sawdust with 9 gram molasses perket, with a moisture content value of 7.62%, ash content of 6,8837%, density 0.8594 (kg/cm3), compressive strength 2.7843 (kgf/cm2) and calorific value of 7605.63 cal/g.

Keywords : Briquettes, Coffee Skin, Teak Sawdust, Sugarcane Drops.

RINGKASAN