

**ANALISIS NILAI KALOR DAN KELAYAKAN EKONOMIS KAYU SEBAGAI
BAHAN BAKAR SUBSTITUSI BATU BARA DI PABRIK SEMEN"**

***(Heat Value Analysis and Economic Feasibility of Wood
Utilization as Coal Substitution In Cement Factory)***

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ABSTRACT

Since the 1970s, energy has been a significant product of forest-related biomass. The use of wood to provide industrial heat and electricity has become important to the economic viability of the forest product and other industry. Growing normally at marginal soil of mining area, Leucaena leucocephala, Samanea saman, Sesbandia grandiflora, Glirisdia maculate, Pterocarpus indica, Enterolobium cylocarpum, Hibiscus tiliaceus, and Gmelina arborea woods were analysed to investigate heat value and economic feasibility of their usage as coal substitution in cement production. Examination on those woods species showed that mean of heat value in air dry condition was about 4.000 kcal/kg. As BC ratio is 2,07, then the mining plantation enterprise to provide fuel wood is feasible economically.

Key words: wood, heat value, feasibility

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