STUDY OF THE POTENTIAL APPLICATION OF CLEANER PRODUCTION STRATEGIES IN THE PLYWOOD INDUSTRY: A CASE STUDY IN CV MEKAR ABADI, WONOSOBO, CENTRAL JAVA

Lutvia Rosaliana dan Anas Miftah Fauzi
Department of Agroindustrial Technology, Faculty of Agricultural Technology, Bogor Agricultural University, IPB Darmaga Campus, PO Box 220, Bogor, West Java, Indonesia.
Phone 62 564 3366160, e-mail: rosaliana.lutvia@gmail.com

ABSTRACT

Plywood industry is an industry that has a problem toward the use of raw materials and large quantities of waste disposal. Therefore, the cleaner production strategies are needed to improve the efficient use of wood logs and energy and minimizing waste is wasted. The analysis includes three aspects. Analysis of technological techniques to see unit processes and machines production which is the source of waste, and produce cleaner production options as a solution. Financial analysis determines the priority of each of these production options and calculate the payback period. Political analysis is done using two methods, the analysis of SWOT (Strength, Weakness, Opportunity, and Threat) and Analytical Hierarchy Process that will result in cleaner production strategies. Analysis of technological techniques produces six priority cleaner production options. Financial analysis resulted in a total investment cost for six priority cleaner production options amounting to Rp 206,593,027. Advantages and savings gained Rp 65,210,649, with payback period for 3 months and 5 days. Political analysis produced seven strategies for implementation of cleaner production. Its main strategy is to socialize and training in the implementation of cleaner production and improving the quality of plywood. Thus, CV Mekar Abadi has great potential in the application of cleaner production as an environmental management strategy. The use of cleaner production strategies above can create CV Mekar Abadi as the sustainable plywood industry.

Keywords: Cleaner production, plywood industry