

## STUDI PERBANDINGAN INFRASTRUKTUR ALTERNATIF DALAM SISTEM ANGKUTAN BATUBARA

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As a result of the significant decline in coal prices in 2014 and 2015, as many as 125 coal companies closed. Companies that survive are required to make a cost down in order to survive. Electric conveyor as a hauling system replaces the hauling system with a chimp truck. The case study was conducted at one of the coal companies in Central Kalimantan where the annual target of coal hauling is 7 million tons. This investment feasibility study was carried out by economic analysis for 15 years hauling (according to the age of electric conveyor investment) and also for 25 years hauling (to use up the remaining coal reserves). At the end of the 25th year, the first alternative was obtained NPV of 31.724.584 USD, IRR of 130,62%, payback period of 1,02 years, B/C ratio of 1,01. The second alternative was obtained NPV of 32.554.204 USD, IRR of 14,13%, payback period of 10,19 years, B/C ratio of 1,11 and the third alternative was obtained NPV of 44.253.479 USD, IRR of 19,38%, payback period for 6,57 years, B/C ratio of 1,08. Investment in the second alternative is said to be feasible if hauling is carried out for 25 years with a target of 7 million tons per year.

Keywords: electric conveyor, economic analysis, NPV, MR, Payback period, B/C ratio, feasible