

ABSTRACT

Indonesia has a total coal potential of 38.80 billion tons. Currently, coal in Indonesia is extensively used for Steam Power Plants (PLTU), Processing and Refining Industries, and other sectors. There are two types of coal based on their uses, namely thermal coal and metallurgical coal. In Indonesia, the amount of metallurgical coal mining is relatively low, with the demand relying on imported coal. The Ministry of Energy and Mineral Resources (ESDM) has conducted exploration of metallurgical coal, revealing deposits of 1.56 billion tons in Kalimantan. PT. XYZ has conducted exploration in a mining area located in Lahei 1 Village, Lahei District, North Barito Regency, Central Kalimantan, and identified a metallurgical coal potential of 3.900.000 tons. However, a feasibility study regarding the viability of coal mining by PT. XYZ has not yet been conducted. In this final project, the researcher conducts a feasibility analysis, focusing on several aspects: market, technical, environmental, and financial. Based on the conducted feasibility design, it is shown that the mining venture has NPV value of Rp 1.075.338.569.192, IRR value of 80,66%, and Payback Period for 2,23 years. Additionally, a sensitivity analysis indicates that PT. XYZ's coal mining venture is sensitive to a decrease in selling price by 47,91% and sensitive to the unachievable production targets by 47,91%. Based on the study's results, which consider by market, technical, environmental, and financial aspects, the establishment of PT. XYZ's coal mining business is deemed feasible to pursue.

Keywords: Feasibility Analysis, NPV, IRR, PBP, Coal Mining