## Abstract

PT XYZ is a mining company that will open a new mine in Tanjung Agung, Muara Enim, South Sumatra. Currently PT XYZ has been working with government programs to participate in the 35,000 MW PLTU program. PLTU to be supplied for coal needs by PT XYZ is PLTU Mulut Tambang Sumbagsel 1 with a capacity of 2 x 150 MW and requires approximately 2,000,000 tons of coal per year. In addition PT XYZ will also supply coal for Great Giant Pineapple and Nippon Oil. To follow this program, then PT XYZ should be able to make the feasibility study design

The feasibility analysis made includes technical aspects, environmental aspects, human resources aspects, market aspects and financial aspects. Technical aspects consist of equipment requirements, production processes, number of heavy equipment operators, and will result in investment costs, environmental, and machine operator's wage costs. Human resource analysis discusses the number of directors and employees outside the machine operator and his wages. The environmental analysis contains an analysis of the environmental circumstances surrounding the mine, and analysis of the impacts or risks of mining activities and how they are handled. The market aspect analyzes the coal market from excess coal production. This data is obtained by looking for data on the needs of other steam power plants and other sources. Market aspects, technical aspects, environmental aspects, and financial aspects are obtained from secondary data sources.

The results of financial calculations indicate that the NPV value for the period 2017-2022 amounted to Rp 879.061.876.000,00. IRR percentage of 38,32%, and PBP 4,5 years. BCR 2,04. The IRR value obtained is greater than the The rate of return on investment value of 15% and the NPV value is positive, the BCR value is greater than 1. From that parameter, the opening of a coal mine in the Tanjung Agung area of Muara Enim regency, South Sumatera Province can be considered feasible.

## Keywords : development, Quail Farm, Feasibility Analysis, NPV, IRR PBP.