ABSTRACT

The study was conducted the andesite mining plan on PT Daffa Athalla Putra (DAP) which is located in the Lagadar village, Margasasih subdistrict, Bandung regency, West Java. PT DAP has a target production of 408,000 m³/year on an area of 21 hectares for 10 years. Study conducted a detailing the economic costs and revenues research. Total investment costs amounted to Rp 62,888,398,187.

Economic feasibility analysis method used is the Net Present Value (NPV), Discounted Cash Flow Rate of Return (DCFROR), and Pay Back Period (PBP) for all of the capital structure. The results of the analysis by this method with \( i^* = 17\% \) is, 100% of own capital NPV = Rp 9,209,378,203,-, DCFROR = 20.86%, PBP = 4.1 years, to capital 70% own 30% of the loan NPV = Rp 13,062,484,850,-, DCFROR = 24.41%, PBP = 3.7 years to capital 50% own 50% of the loan NPV = Rp 15,631,222,62,-, DCFROR = 29.71%, PBP = 3.3 years, and for 100% of capital the loan NPV = Rp 22,053,067,042,-, DCFROR = ~, PBP = 0 years. Based on the results of this economic analysis, all feasible alternatives to consider because NPV>0 and DCFROR>i*.

The study conduct sensitivity analysis in investment projects PT DAP. Variable tested are changes in income (15%), operating costs (15%) and investments (15%) of the feasibility of the project. capital structure 100% owned is not worth the 10% increase in operating costs, revenue fell 10% and investment costs increase 15%. The capital structure of 70% owned 30% of the loan and 50% owned 50% of the loan is not worth the 15% increase in operating costs, revenue fell 10%. As for the capital of 100% of loans are is not worth to the revenue fell 10% and for other variable worth it. Alternatives suggested that the capital structure of 100% of the loan.