

## ABSTRACT

*This study aims to analyze the financial feasibility of a nickel ore mining plan in the company of PT Trimegah Bangun Persada. The research locates Obi Island, South Halmahera Regency, North Maluku Province. This study uses a survey method. Data collection techniques in this study were in the form of observation. The lifetime of a nickel ore mine is 12 years. The planned production of nickel ore increased to 12,200,000 wmt in the third year and remained in the amount of 5.000.000 wmt until the eleventh year and the remaining reserves in the twelfth year. Investment for twelve years is Rp 8,263,169,079,395,-. The total operating costs are Rp 13,515,097,153,718,-. The post-mining fee is Rp 53,553,805,475,-. The feasibility analysis uses parameters of NPV (Net Present Value), DCFROR (Discounted Cash Flow Rate of Return), PBP (Payback Period), PI (Profitability Index). Based on the calculation of the financial feasibility of the nickel ore mining plan, the NPV is Rp 2,543,510,550,533,-; PBP is 2 Years 3 months 18 days; DCFROR of 29%, and PI of 1.72. The results showed that the investment plan for nickel ore mining in PT Trimegah Bangun Persada was feasible.*

*Keywords: feasibility, mining, nickel ore, NPV (Net Present Value), DCFROR (Discounted Cash Flow Rate of Return), PBP (Payback Period), PI (Profitability Index).*

## ABSTRAK

Penelitian ini bertujuan untuk menganalisis kelayakan finansial rencana penambangan bijih nikel pada perusahaan PT Trimegah Bangun Persada di Pulau Obi, Kabupaten Halmahera Selatan Provinsi Maluku Utara. Penelitian ini menggunakan metode survei yang dilakukan di PT Trimegah Bangun Persada. Teknik pengumpulan data dalam penelitian ini dalam bentuk observasi. Umur tambang bijih nikel adalah 12 tahun. Rencana produksi bijih nikel meningkat sampai 12.200.000 wmt pada tahun ketiga dan tetap sebesar 5.000.000 wmt sampai tahun kesebelas serta penambangan sisa cadangan pada tahun keduabelas. Investasi selama duabelas tahun sebesar Rp 8.263.169.079.395,-. Total biaya operasi sebesar Rp 13.515.097.153.718,-. Biaya pascatambang sebesar Rp 53.553.805.475,-. Analisis kelayakan menggunakan parameter NPV (*Net Present Value*), DCFROR (*Discounted Cash Flow Rate of Return*), PBP (*Payback Period*), PI (*Profitability Index*). Berdasarkan perhitungan kelayakan finansial rencana penambangan bijih nikel menghasilkan NPV sebesar Rp 2.543.510.550.533,-; PBP selama 2 Tahun 3 bulan 18 hari; DCFROR sebesar 29%, dan PI sebesar 1,72. Hasil penelitian menunjukkan investasi rencana penambangan bijih nikel pada perusahaan PT Trimegah Bangun Persada layak untuk dilaksanakan.

Kata Kunci: kelayakan, tambang, bijih nikel, NPV (*Net Present Value*), DCFROR (*Discounted Cash Flow Rate of Return*), PBP (*Payback Period*), PI (*Profitability Index*).