

RINGKASAN

Lokasi penelitian berada di Kecamatan Bunyu, Kabupaten Bulungan Provinsi Kalimantan Utara. Kabupaten Bulungan merupakan salah satu daerah penghasil batubara di Indonesia yang mempunyai cadangan cukup besar yang terletak di Provinsi Kalimantan Utara. Kabupaten Bulungan pada saat ini sudah banyak terdapat titik-titik endapan batubara yang terindikasi adanya endapan batubara dan sebagian sudah dieksploitasi oleh pemerintah dan investor asing, adapun endapan batubara yang belum dieksploitasi dikarenakan masih kurangnya informasi tentang potensi dan besarnya investasi yang harus dikeluarkan untuk memanfaatkan potensi tersebut.

Pada penelitian di lapangan ditemukan tujuh singkapan batubara.

Berdasarkan data singkapan dan deskripsinya dapat dikelompokkan menjadi empat blok batubara atau cropline dengan nilai kalori berkisar 5202-5425 cal/kg dan tebal batubara berkisar 1-12 meter.

Hasil kajian penelitian, data yang didapatkan dari daerah penelitian diantaranya sumberdaya batubara terukur sebesar 3.793.621,89 ton, sumberdaya batubara tertunjuk sebesar 14.207.683,96 ton, dan sumberdaya tereka sebesar 44.676.051,78 ton. Hasil kajian kelas sumberdaya, tata guna lahan, pangsa pasar dan pencapaian daerah didapatkan wilayah keprospekan pertambangan pengembangan.

Rencana target produksi penambangan batubara adalah

1.000.000 ton/tahun dengan 2 shift kerja/hari. Hasil perhitungan rencana biaya dijabarkan menjadi rencana biaya persiapan penambangan sebesar

Rp. 41.537.760.000,00 , total rencana biaya K3 sebesar Rp. 1.788.480.000,00,

rencana gaji karyawan sebesar Rp 5.813.400.000,00, rencana biaya reklamasi

tambang sebesar Rp. 114.550.000,00/Ha, rencana biaya pascatambang sebesar

Rp. 16.626.480.000,00, rencana biaya pembelian alat mekanis sebesar

Rp 443.535.000.000,00, rencana biaya sarana dan prasarana sebesar

Rp 12.333.340.000,00. Rencana total keseluruhan hasil penjualan batubara

sebesar Rp. 4.224.061.596.734,00. Harga Pulang Pokok (HPP)

Rp. 121.709,95/ton, dan jika ditambah dengan biaya pengangkutan sebesar 35%

dari harga pulang pokok maka akan menjadi Rp. 164.308,43/ton.

Berdasarkan hasil analisis aliran uang tunai selama 10 tahun didapatkan NPV sebesar Rp. 135.237.221.436,00, nilai ROR sebesar 32 %, masa pelunasan (Payback Period) selama satu tahun tujuh bulan 20 hari. Dengan NPV > 1 dan nilai ROR > tingkat bunga minimum $i^* = 13 \%$, maka sumberdaya batubara di daerah penelitian berpotensi ekonomis dan layak dipertimbangkan ke tahap penelitian lebih lanjut.

ABSTRACT

Location for this research is in Bunyu Subdistrict, Bulungan Regency, North Borneo Province. Bulungan Regency is one of coal producer areas in Indonesia and has a quite great reserve placed in North Borneo. Bulungan Regency this time has many identified coal sediment points which parts of these have been exploited by government and foreign investors, whereas, the still unexploited ones remain in their places because of the lack of information and how much to invest to use these potentials.

In the field research was found seven coal field exposures. Based on the data of these exposures and their descriptions, the places can be arranged into four groups of coal clusters or croplines within calory values of around 5202-5425 cal/kg and layer thickness of around 1-12 meters.

Result of the research study, data gained from the researched areas show that in those areas measured reserved-coal-resource is of 3,793,621.89 tons, identified coal resource is of 14,207,683.96 tons, and predicted coal resource is of 44,676,051.78 tons. Results of class resource study, land and field utilization, market orientation and local income and achievement show that the areas in this regency are prospective to be developed as coal mining areas.

Coal mining production target plan is of 1,000,000 ton/year by 2 workshifts/day. Results for the calculation of the cost planning are divided into budgetplannings such as of Rp 41,537,760,000.00 for cost budget-plan of mining preparation funds, of Rp 1,788,480,000.00 for budget-plan of safety health environment total funds, of Rp 5,813,400,000.00 for budget-plan of employees'

salary, of Rp 114,550,000.00/hectare for budget-plan of mining reclamation funds, of Rp 16,626,480,000.00 for budget-plan of post-mining funds, of Rp 443,535,000,000.00 for plan-budget of mechanical tools and instruments funds, of Rp 12,333,340,000.00 for budget-plan of means and infrastructures funds. Total planning for the whole sale of the mined coal is of Rp 4,224,061,596,734.00. Price return of good (COGS) is Rp 121,709.95/ton, and if it is added by shipping and transportation cost of 35% from the COGS then it will be of Rp 164,308.43/ton.

Based on the analysis of the cash flow during 10 years operation of the mining it is gained for NPV of Rp 135,237,221,436.00, ROR value of 32%, payback period for a year seven months and twenty days. Within $NPV > 1$ and $ROR \text{ value} > \text{minimum interest level } i^* = 13\%$, then the coal resources in the researched areas are potentially economic and worthy to be considered for further stage of research.

Kata kunci: Sumberdaya Batubara - Ekonomi Pertambangan