

Tinjauan Kelayakan Ekonomi dan Teknis Perancangan Awal Pabrik Pengolahan Gas dengan Umpan dari Lapangan Gas Senoro

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20305041&lokasi=lokal>

Abstrak

Natural gas industries in Indonesia is a good industries to be invested. It is due to Indonesia has many natural gas resources, the raising of BBM subsidies, and good promising market. From market analysis, the capacity for this industry is about 153,257.238 MMSCF/year, and this industry will be operated for about 19 years. This plant will be built in Kecamatan Batui, Kabupaten Banggai, Central Sulawesi. The natural gas will be processed in two main process which are sweetening process and fraksionasi process. The operation mode of this plant is using continuous mode. Good process performance of this plant is shown by energy efficiency of 82.61% (sweetening process) and 98.57% (Fraksionasi process). Economic analysis calculated that the total investment to build this plant is about US\$ 160 million with manufacturing cost of US\$ 57.7 million. NPV for this project calculated at US\$ 94 million, 25% JRR, with payback periods in 6 years. The most sensitive for this project is production capacity, which is no less than 76,136.884 MMSCF/year or 49.68% from basic production capacity of this plant. Risk analysis of this plant using Monte Carlo's method considering that the value of IRR is more than the discount level (11%), it can be summarized that the certainty of feasibility level of this plant for city gas distribution using pipeline method is 82.15%, whilst using CNG is 79.78%. Based on economic analysis mentioned above, this plant is considered being feasible for a commercial commencement.