

BAB XI KESIMPULAN

11.1 Kesimpulan

Berdasarkan uraian dan hasil perhitungan dari bab–bab sebelumnya pada prarancangan Pabrik Metanol dari Gas Alam dan Steam dengan menggunakan metode *Lurgi* dapat disimpulkan sebagai berikut :

1. Prarancangan Pabrik Metanol dari Gas Alam dan Steam dengan kapasitas produksi 200.000 ton/tahun direncanakan untuk memenuhi kebutuhan dalam negeri dan luar negeri.
2. Dari analisa teknis dan ekonomi yang dilakukan, maka prarancangan Pabrik Metanol dari Gas Alam dan Steam dengan kapasitas produksi 200.000 ton/tahun layak didirikan di Kabupaten Banyuasin, Sumatera Selatan.
3. Prarancangan Pabrik Metanol dari Gas Alam dan Steam merupakan perusahaan berbentuk Perseroan Terbatas (PT) dengan struktur organisasi *line and staff* dengan jumlah tenaga kerja 252 orang yang terdiri dari 156 karyawan *shift* dan 96 orang karyawan *non shift*.
4. Dari perhitungan analisa ekonomi, maka Prarancangan pabrik metanol (CH₃OH) dengan bahan baku CO₂ dan H₂ produksi 200.000 ton/tahun ini layak didirikan dengan :
 - Rate of Return = 133,49 %
 - Pay Out Time = 2 tahun 3 bulan 20 hari
 - Break Event Point = 44,14 %

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