

Praween Sirikutt 2006: A Feasibility Study of Mono Ethylene Glycol (MEG) Manufacturing Project in Thailand. Master of Economics (Business Economics), Major Field: Business Economics, Department of Economics. Thesis Advisor: Miss Kanokwan Chancharoenchai, Ph.D. 130 pages. ISBN 974-16-2014-4

The purposes of this study is to analyzes feasibility of Thai Olefin Public Company Limited 's the second Mono Ethylene Glycol (MEG) manufacturing project in both market and financial prospectives to evaluate investment supports. The data of this study is secondary data. Market analysis consists demand and supply side. Demand side is to study about demand for MEG, which is study from demand for polyester fiber and PET bottle. Supply side is to study Ethylene capacity which is major material to produce MEG. Investment costs and financial and economic benefits analysis are based on various indicators, which are net present value (NPV), internal rate of return (IRR), payback period and benefit-cost ratio (BCR) at discounted rate of 5.85% within 13 years of project lifetime. Moreover, this study also approaches sensitivity analysis under 3 scenarios. First, revenues lower from 10% decrease in MEG production and sales quantities. Second, cost is higher from 5% increase in Ethylene price. Third, MEG production and sales quantities is lower 10% while Ethylene price increases 5% each.

The finding revealed that MEG demand excess in Thailand since 2010. The result of this study indicates that this project is feasible in market prospective. Ethylene capacity (which is major material to produce MEG) tentatively increases to server the Thai Olefin Public Company Limited throughout its second MEG manufacturing project demand.

Furthermore, the financial analysis shows 6,940 million baht NPV, 16.98% IRR, 1.07 BCR, and 4.67-year payback period. Sensitivity study also reveals that the project is feasible to invest. This study can be applied for real business and extended study in the future. Recommendation from this study is that Thailand should initiate MEG manufacturing project since 2010 and investor should control its operation in efficiency way. However, the area of study should be extended to other aspects such as economic analysis, technical analysis, environmental analysis.

---

Student's signature

---

Thesis Advisor's signature

\_\_\_\_ / \_\_\_\_ / \_\_\_\_