

Watsamon Nimchuen 2008: Cost- Benefit Analysis of Flue Gas Desulfurization (FGD) at Mae Moh Thermal Power Plant. Master of Economics, Major Field: Economics, Department of Economics. Thesis Advisor: Ms.Kanokwan Chancharoenchai, Ph.D. 119 pages.

The objective of this analysis is to study general problems that affect people and environments which have caused by sulfur dioxide emitted from Mae Moh power plant's electricity generating process. Secondary information set is collected from other relevant researches and from Electricity Generating Authority of Thailand (EGAT) in order to construct the analysis of cost and benefit from applying FGD, in that electricity plant. Another aspect of this research is to comply with the environment laws. As of the ignorance of official study. This study will mainly focus on the cost - benefit analysis of setting FGD in Mae Moh power plant's electricity generating number 4 and 5. The analysis will be applied 3 common criteria mainly, NPV, BCR and IRR. Moreover, the analysis will also contemplate these 4 sensitive cases regarding this project.

According to the results benefit analysis in both financial and economic view, the project is really worth the investment. Despite the 4 sensitive cases above, the project is still worth investing. The results from this study can be used as a course for the industries that utilize natural gases to generate electricity, including for other industries that use natural gases in their production processes. The same external effects which Mae Moh power plant has faced before may occur to these industries as well. In that case, such industries can now be aware of the problems and can apply the information provided here to support their decision making in setting up an FGD. Ultimately, this will be worthwhile for the country on the whole.

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Student's signature

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