

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND

Nowadays, Indonesia is facing crisis in electric power supply. Almost the entire areas including Java and Bali Island, the country's business center, are suffering the inconvenience. In 2008 and 2009, the electrical power requirement is still limited.

Based on confirmation from LPEM UI in Chatib Basri's article on Kompas daily dated on August 4th, 2008, it mentioned that the Indonesian economic growth was only 1% and it needed a power supply input as much as 1,5% - 2%.

According to the PLN's *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL)* Electricity Supply Business Plan 2009 – 2018 can be describes as follows:

- Electricity growth in year 2008 and 2009 will be adjusted with the production capacity and estimation growth is 6.5% (2008) and 7.6% (2009)
- Sales growth for the next following years is projected base on assumption average economy growth of 6.2% and also average population growth of 1.17%
- Electrification ratio can exceed into 95.5% end of year 2018

- Electricity growth outside Java – Bali in average are higher than national growth

PT. Medco Energi Internasional Tbk. (MEI) was established in 1980, is an integrated energy company engaged from oil and gas exploration and production (E&P), downstream oil and gas activities, power generation and drilling services. PT. Medco Power Indonesia (MPI) was established in 2004 as a subsidiary of MEI, which operates and maintains Power Plants in Batam Island, Tanjung Jati (Central Java), and Sarulla (North Sumatra). PT. Medco Ethanol Lampung (MEL) is a subsidiary of PT. Medco Downstream Indonesia (MDI) which holds all the company's downstream assets.

MEL has an asset of 5 Mega Watt (MW) Coal Fired Power Plant (CFPP) for generating the Bio-Ethanol Plant in Kotabumi, Northern Lampung and has been operating since December 2008. MEI instructed MPI to acquire MEL power plant therefore MEL can focus on their core business which is on bio-ethanol plant. MPI accepted the offer from MEI to acquire the CFPP and intend to develop a better system and generate a bigger electricity power supply in Northern Lampung area. In the future development MPI will upgrade the CFPP into 15 MW in the next two years.

## **1.2 PROBLEM STATEMENT**

Based on the background as described above, it is obvious that the company is currently need a business plan due to its plan on acquiring the existing CFPP and an upgrade of 15MW in future development.

There have been several questions asked in the effort to cope with the problem as follows :

- What is the best method of analysis should be used for the company?
- What are the assumptions to calculate the feasibility of the project?
- How long this project can create its positive cash flow?

### **1.3 OBJECTIVE AND BENEFIT**

Our objective is to create a capital budgeting for MPI to decide on acquiring the CFPP project and the future development based on our projection of this.

The benefit of this GFP will accommodate a better electricity supply in Northern Lampung area, also MPI will create more job opportunities for local community on surrounding area, increase MPI's asset, and MEL can concentrate on their core business.

### **1.4 SCOPE AND LIMITATIONS OF THE ANALYSIS**

Writers will propose a description and explanation of business plan and capital budgeting for MPI to provide a decision tools on acquiring the existing CFPP

from MEL include the 15 MW CFPP future development in the two years from now along with advantages, drawbacks, qualitative, quantitative analysis and also recommendations.

Here are the steps that we are going to do for this project:

1. Data Collection

We will collect data and information related to the project from the company and other resources that might be help.

2. Quantitative Analysis

For this step, we will create financial projection or project analysis which involve :

- a. Estimate the expected future cash flows of the project
- b. Estimate the Income Statement
- c. Estimate the Balance Sheet
- d. Analyze the risk associated with those cash flows
- e. Develop alternative cash flow forecast
- f. Examine the sensitivity of the results to possible changes in the predicted cash flows
- g. Subject the cash flows to simulation
- h. Weighted Average Cost of capital (WACC), Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period
- i. Real Options Valuation Method

## **1.5 STRUCTURE OF THE THESIS**

The thesis consists of five chapters. Namely:

### **Chapter I : Introduction**

This chapter explains the background of the thesis, the principal problems that will be discussed, the objectives and benefits, the scope and limitation of the analysis and the structure of the thesis.

### **Chapter II : Literature Review**

This chapter explains the definition, the importance, the rules of Capital Budgeting, how to evaluate Capital Budgeting, estimating Cash Flows, and the introduction and types of Real Option.

### **Chapter III : Method of Analysis and The Company Background**

This chapter provides an overview of the company's background. This chapter also describes the problem solving method used to help the company.

### **Chapter IV : Analysis**

This chapter describes the analysis and projection of the cash flow and valuation / assessment of the company shares by using the Capital Budgeting calculation and Real Option Valuation Method.

## **Chapter V : Conclusion and Recommendation**

This chapter provides conclusions and recommendations to the company in order to select the most profitable way on acquiring the existing asset and its expansion.