Aunchalee Wangvisatgusol 2010: Economic Analysis of Project Biogas System from Waste: Case Study of Thungsong Municipality, Nakhon Si Thammarat. Master of Economics (Business Economics), Major Field: Business Economics, Department of Economics. Thesis Advisor: Associate Professor Chiraphan Kuladilok, M.Econ. 137 pages.

The Objective of this study is mainly to analysis the economic feasibility of investment municipal waste-base biogas production system. Secondary data were used to gather data from organizations. The interview was conducted to collect the preliminary data in order to evaluate the performing project and use data for decision making in the investing in this system in the future.

The economic analysis of biogas system project is carried out by comparing the project benefits and costs. The indicators of economic project worth are net present value (NPV), benefit-cost ratio (BCR) and internal rate of return (IRR). Moreover, sensitivity analysis. This project have 10 years as project life and 8 percent as discount rate.

The result shows that the project is not worth to invest because it can separate of organic waste to be fed into the system only 1 ton per day. On the other hand, the sensitivity project is worth it to invest. If can separate of organic waste to be fed into the system at 5, 10 and 15 ton per day. And it tends to far more invest as it is worth it.

If appropriate quantity of the feed arrangement of the organic waste meets the size of the system, the project is worth. Then the economic analysis of biogas system project is worth to invest as it distributes renewable energy using raw material in within the country and it helps to reduce the environmental pollution.

_____ _____ __ / __ / __

Student's signature Thesis Advisor's signature