Kanok Klonjit, Lt. 2010: The Appropriate Renewable Energy for Thailand under Global Warning Circumstance. Master of Engineering (Electrical Engineering), Major Field: Electrical Engineering, Department of Electrical Engineering. Thesis Advisor: Associate Professor Kieatyuth Kaveeyan, Ph.D. 177 pages.

This thesis presents the appropriate renewable energy for Thailand under global warming circumstance by using the potential energy in Thailand which are Wind Energy, Solar Energy, Micro Hydro Energy, Biomass Energy and Biogas Energy to be the approach for considering,

The suitable energy chosen by the procedure and methodology of quantitative and qualitative analysis as follows: The Payback Period, The IRR: Internal Rate of Return and The Weighted Average.

The outcome turns to the Biomass Energy because of the 12.30 years in Payback Period, 19.65% in IRR and the highest Weighted Average on qualitative factors. The Biomass Power Plant Project can generate up to 53,217,000 kWh per year and has the plant life at the minimum 25 years. Together with the supportive and compassionate policy with a subsidize funding from the Government for Biomass through the Ministry of Energy, therefore; Biomass will definitely be the appropriate renewable energy for Thailand under global warning circumstance.

Student's signature