

Thesis Title	Energy Demand Analysis and Forecasting in Transportation Sector
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### Abstract

Transportation widely effects to people's livelihood and economic development. In the past the transportation system of Thailand expanded according to economic conditions; this made the energy consumption for transportation have high growth rate. Transportation branch is the branch that has the first highest consumption of energy. The energy use is petroleum product energy in which Thailand has to import. The objective of this study are for analysis and forecasting in transportation sector.

This study uses ENPEP program for the tool to analysis of energy consumption characteristics by using energy consumption, value added in transportation, per capita income and export for program to forecasting. The analysis show that the energy consumption in transportation sector has high growth rate especially in road transportation which is the main transportation of country. In the part of forecasting in energy consumption, the analysis can be divided into 2 scenario; 1<sup>st</sup> scenario : The energy forecasting by using the economic forecasting before 1996 crisis and 2<sup>nd</sup> scenario : The energy forecasting by using the economic forecasting after 1996 crisis. The forecasting results show the differences of energy consumption in transportation from economic reasons. In 1<sup>st</sup> scenario the growth rate rather continue from the past, 8.36% per annual while 2<sup>nd</sup> scenario the growth begins to slow down because of the economic condition and steps higher after the economic crisis begins to be solved, growth rate -0.07% per annual.

**Keywords : Analysis / Forecasting / Energy Demand / Transportation / ENPEP Program /  
Elasticity.**