

Thesis Title	Tax Barriers and Guidelines for Promoting Energy Efficient Passenger Cars
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Abstract

Transportation sector is one of an energy intensive sector and also the main cause of air pollution. Therefore, this research studied the barriers and guidelines for taxation to promote the use of energy efficient passenger cars in Thailand. The passenger car taxation of 4 developed countries; namely Japan, Germany, United Kingdom (UK) and United States (US) were analyzed and compared with Thai taxation. The survey of the barriers and guidelines for taxation to promote the energy efficient passenger cars were conducted by using the questionnaires. The results found that tax on acquisition in the developed countries were only subjected to sales tax, while Thailand's acquisition tax composed of customs duty, excise duty, municipal tax and value added tax. The ownership tax rates of passenger cars in Japan, Germany and UK were based on different fuel consumption parameters such as cylinder capacity, vehicle weight, and CO₂ emissions which can promote energy efficient cars. On the contrary, the ownership tax rate of USA and Thailand reduces with the age of vehicle. Fuel tax, the rate of which was imposed to support the country energy policy, was mainly composed of excise and value added taxes. Among the studied countries, UK levied the highest fuel tax about 57% of fuel price. Based on power purchasing parity (PPP) exchange rate, gasoline and diesel price of UK were respectively, 23.24% lower and 14.29% higher than Thailand's fuel prices. The policy tools for promoting energy efficient cars in developed countries were use both incentive and legal measures, while Thailand used only incentive measures. Opinion survey results from 400 people in Bangkok on barriers for promoting energy efficient passenger cars in Thailand showed that the

significant problems were the lack of incentives measures to promote the use of energy efficient cars. Most of all agreed with passenger car taxation based on fuel economy.

Keywords: Taxation/Energy Efficiency/Passenger Cars