

# Prediction of Energy Consumption in Malaysia Using Statistical Method

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## ABSTRACT

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The goal for this paper is to forecast the electricity consumption of Malaysia from 2014 to 2035 and also determine the factors that affect the electricity consumption. Linear regression analysis, Fourier Series and Singular Value Decomposition are being used to achieve the objective. From the results, it shows that gross domestic product and population have high impact on the electricity consumption of Malaysia. Two different approaches have been used where forecasting models are constructed using data from 1980 until 2012 and 2005 until 2012. Results show that in year 2035, the electricity consumption of Malaysia is going to increase to 762890 GWh with an increment of 7 to 11 percent annually. It also shows that models were constructed using data from 1980 to 2012 give better results. It is hope that this paper will become an important reference for the policy maker to come out with a plan to ensure enough supply of electricity for the country.