

## Exploring Factors Affecting Electricity Production in Malaysia

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**Abstract :** Ability to supply reliable and secure electricity has been one of the crucial components of economic development for any country. Forecasting of electricity production is therefore very important for accurate investment planning of generation power plants. In this study, we aim to examine and analyze the factors that affect electricity generation. Multiple regression models were used to find the relationship between various variables and electricity production. The models will simultaneously determine the effects of the variables on electricity generation. Many variables influencing electricity generation, i.e. natural gas (NG), coal (CO), fuel oil (FO), renewable energy (RE), gross domestic product (GDP) and fuel prices (FP), were examined for Malaysia. The results demonstrate that NG, CO, and FO were the main factors influencing electricity generation growth. This study then identified a number of policy implications resulting from the empirical results.

**Keywords :** energy policy, energy security, electricity production, Malaysia, the regression model

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