Assessing the economic impacts of nuclear energy in Malaysia

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Under the Economic Transformation Programs (ETP), the Malaysian government is planned to run a twin-unit of nuclear power plants with a total capacity of 2x1000 megawatt-electric by 2021. It was well documented in the literature that nuclear power plant has demonstrated its capacity to produce base-load electricity at a low, predictable and stable cost due to its low dependence on the uranium price. However, empirical evidences on the economy-wide impacts of nuclear power plants are lacking. Based on this premise, this paper aims to measure the extent to which running the twin-unit of nuclear power plants affects the Malaysian economy. To achieve the objective, we extend the econometric-input-output prototype model that developed by the International Atomic Energy Agency (IAEA) by integrating the analysis of income inequality. To run the model, we construct time-series input-output tables for Malaysia from 2000 to 2014 and based on the series a projection for the 2020 input-output table is made. This paper not only shows a significance contribution to the literature on economic-nuclear energy assessment, but also provides valuable information in formulating appropriate energy policy in Malaysia.