A PANEL DATA ANALYSIS ON THE RELATIONSHIP BETWEEN RENEWABLE ENERGY AND ECONOMIC GROWTH FOR G-20 COUNTRIES

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Fossil fuels are a limited resource. This unavoidable fact is driving countries to investigate and adopt unlimited renewable energy sources. Solar, wind, hydro, geothermal and bio energy are the main resources and types of renewable energy. Their consumption is both efficient and environmentally friendly, in the long run. For that reason they have received lots of attention from developed and developing countries. Renewable energy will become a prime alternative energy type to meet the energy demands in near future. However, there may be decision implementation differences amongst countries in transition to renewable energy systems according to their developmental levels in nowadays. Starting from this reference point, this study makes an econometric analysis on the relationship between the renewable energy consumption and the economic growth for the group of G-20 countries. The econometric analysis includes panel data techniques. The findings attempt to investigate how an increase in the amount of renewable energy consumption in G-20 countries affects the economic growth in the indicated period. Therefore, an economic policy which depends on analytical approach that can be generated for future decisions regarding the energy consumption behaviors' of G-20 countries. So, a critical criticism might reflect that the conducted renewable energy policies are effective enough for each of them or not.

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