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Impact of Macroeconomic and Social Variables on Renewable Energy Consumption for the G7 Countries: A Panel Data Approach

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ABSTRACT

This study investigates the impact of some variables on RE consumption (% of total energy consumption), namely human development index, research expenditures (% of GDP) and energy imports (% of GDP) in the G7 countries. The data period is 1990-2014. We use the General Least Squares (GLS) to estimate a panel data model. The analysis give empirical evidence that Research Expenditure (% of GDP), Human Development Index and Energy imports (% of total energy consumption) have individual positive effects on Renewable Energy Consumption (% of total consumption), *ceteris paribus*. This study is innovative since nobody till now studied such a sample for the 7 countries of the G7 group with such a methodology, fills a gap in the existing literature and increases the body of knowledge.

KEYWORDS Human Development Index; Research Expenditures (% of GDP); Energy Import (% of GDP); Factors of Renewable Energy

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