

ABSTRACT

The balance between accelerating the rate of economic growth and protecting the quality of the environment is one of the challenges faced by both developed and developing countries. Without a commitment to carry out sustainable development, the use of natural resources and the environment will increase. This increase in utilization increases CO₂ emissions every year from the combustion of fossil fuels. The increase in CO₂ emissions is triggered by economic development activities. The purpose of this study is to examine the effect of the variables of gross domestic product, energy intensity, population, and urbanization on total CO₂ emissions in 2005 to 2018 in BRICS member countries.

This research is a quantitative research type. The data used is secondary data obtained through library search with panel data totalling 70 observations. The data analysis technique used is multiple linear regression analysis with the analysis model used in this study is panel data regression with Fixed Effect Model.

The results of this study indicate that the variables of energy intensity and population have a positive and significant effect, while the variables of gross domestic product and urbanization do not have a significant effect. Simultaneously, the independent variable affects the dependent variable.

Keywords : total CO₂ emissions, gross domestic product, energy intensity, population, urbanization, fixed effect model