

ABSTRACT

Economic growth cannot be separated from the economic activities of the people of a country. Excessive economic activity often creates negative externality effects that can harm all parties. The increasing volume of economic activity will lead to an increase in problems related to nature and environmental sustainability. This study aims to empirically examine the effect of economic growth, trade openness, urbanization, and energy consumption on the environment in Indonesia. Based on the Environmental Kuznets Curve (EKC) hypothesis, economic growth will contribute to higher emissions but further economic growth will then be able to reduce environmental degradation.

This research uses the Vector Error Correction Model analysis method using E-Views 12 software which is applied to time series data for the variables of Economic Growth, Trade Openness, Urbanization, and Technology.

The results of the study show that in the short term only Trade Openness affects CO2 Emissions with a t-statistic value of -2.21323 which is greater than the t-table of 2.048. Then, in the long term, only urbanization does not significantly affect CO2 emissions. While other variables, namely economic growth, trade openness, and energy consumption have a significant negative effect. This indicates that in the Kuznets Curve, Indonesia is in the 2nd stage, namely the industrial-based economy stage because the increase in economic growth causes high energy consumption which ultimately increases CO2 emissions.

Keywords: Economic growth, trade openness, urbanization, technology, Vector Error Correction Model, Environmental Kuznets Curve.