

ABSTRACT

This study analyzes the impact of economic growth, foreign direct investment (FDI), energy intensity, and population density on carbon dioxide (CO₂) emissions per capita across 10 ASEAN countries from 2000 to 2022. The analysis is conducted using a macro data panel approach. The findings successfully confirm the existence of the Environmental Kuznets Curve (EKC) in the ASEAN region.

Furthermore, foreign direct investment, energy intensity, and population density are found to contribute to the rise of CO₂ emissions in the region. Based on these findings, the study highlights the importance of a collective policy commitment among ASEAN countries to reduce carbon emissions, alongside the urgency of implementing sustainable spatial planning.

Keyword: Carbon Dioxide (CO₂) Emission, Environmental Kuznets Curve (EKC), ASEAN, Economic Growth, FDI, Population Density, Energy Intensity.