

Impact of Kyoto Protocol and institutional factors on carbon dioxide emission in Asia-Pacific region

ABSTRACT

This study investigates the impact of Kyoto Protocol and four institutional factors i.e. political stability, property rights, corruption and freedom of trade on the growth of per capita CO₂ emissions in Asia and the Pacific region for the period of 1971-2009. The region consists of East Asia, South Asia and the Pacific islands are the fastest growing economic region and the source of global greenhouse gas emissions. A dynamic panel data model based on the Generalised Method of Moments (GMM) technique is utilized to examine these impacts. The findings indicate only Kyoto commitment (Kcom), Kyoto Clean Development Mechanism (Kcdm) and Corruption (COR) describe statistically significant positive effects on CO₂ emissions.

Keyword: CO₂ emissions; GMM; Kyoto Protocol commitment; Clean development mechanism; Institutional factors