

**The prodigious need for Sustainable Development 25 years after Agenda 21:
Determinants of CO₂ emission in a cross section of countries (2002-2013)**

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This study investigates the determinants of Carbon-dioxide emissions (CO₂) for 140 countries, using a dynamic cross-sectional annual data model for the period 2002 to 2013 inclusive. The main findings are that trade openness, growth of per capita GDP, industrialization, and urbanization have positive effects on CO₂ emissions. Energy intensity level of primary energy consumption proxied for energy consumption level of the country is found to have a negative impact on CO₂ emissions, although insignificant, while alternative sources such as renewable resources are identified as significantly reducing CO₂ emissions. The limited availability of data has given rise to a few limitations in the analysis, but the study is still able to propose several policy suggestions for the contemporary global issue of the carbon footprint. The study has clearly identified some important implications and prospects for developed countries, as it finds that there is a significant difference between the determinants of CO₂ emissions in developed countries from those that are still developing. The study revisits several agreements, such as Agenda 21 (Rio Summit, 1992) and the Kyoto Protocol (2002)—global agendas designed to address the problem of climate change and the need for sustainable development—and draws on them to propose policy interventions targeting developing countries in particular. The study thereby aims at deriving tailor-made propositions for both developed and developing countries.

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