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# The Impact of Environmental Policy Stringency on Energy Poverty: The Mediating Role of Institutions

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#### Abstract:

The findings related to strict environmental policies and energy poverty have been found contradictory. Strict environmental regulations may protect the environment by enhancing renewable energy resources. Still, at the same time, major dependent sectors and consumers relying on nonrenewable energy resources face the problem of energy poverty. Moreover, environmental policies are strict and depend on stakeholders' preferences, and such policies are implemented through institutions. Considering these aspects, the current study examines the impact of environmental policy stringency on energy poverty. Further, it examines the role of institutions in bridging the gap between environmental policy stringency and energy poverty for the selected 31 countries from 1996 to 2020. Pooled OLS, random effect model, and system generalized methods of moments (GMM) are applied for empirical analysis. To check the robustness of baseline models, spatial lag, spatial error, and feasible generalized methods of moments are applied. Furthermore, we applied the structural equation modelling technique to examine the mediating role of institutions. Empirical analysis shows that increasing environmental policy stringency significantly increases energy poverty, while institutional proxies significantly decrease energy poverty. The interactive effects of institutional proxies indicate declining effects on energy poverty. More importantly, institutions mediate between environmental policies and energy poverty. This study recommends soft environmental policies to balance a sustainable environment and minimum energy poverty based on the findings. This study further recommends authorizing and strengthening the institutions to formulate and regulate balanced environmental policies for environmental safety and reduced energy poverty. This study further recommends increases in urbanization, personal remittances, and enhanced energy efficiency to minimize energy poverty.

#### Keywords

Environmental policy, energy poverty, institutional mediation, renewable energy, energy accessibility, structural equation modeling

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