



Accelerating Renewable Energy Deployment through Policy and Regulatory Frameworks in South Africa

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Abstract

South Africa faces significant climate change impacts, necessitating urgent adaptation measures to ensure sustainable development. Not applicable for this type of brief. Recent data show that renewable energy sources contribute approximately 25% towards total electricity generation in South Africa, indicating potential for further expansion. Current policy frameworks are effective but require reinforcement to achieve higher deployment targets and reduce dependency on fossil fuels. Implementing a carbon pricing mechanism and expanding interconnectivity with neighboring countries will accelerate renewable energy adoption. The empirical specification follows $Y = \beta_{0+\beta} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Renewable Energy, Solar Power, Wind Energy, Biomass, Carbon Dioxide Reduction, Policy Analysis, Regulatory Reform*

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