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## CAN DIGITAL TRANSFORMATION IMPROVE CORPORATE CARBON PERFORMANCE?

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## **Abstract**

This study investigates the impact of digital transformation on the carbon performance of environmentally sensitive enterprises in China. Using a sample of Chinese listed companies from 2011 to 2022, the authors employ two-way fixed-effects models and mediation analysis to examine the relationship between digital transformation and carbon performance. The results demonstrate that digital transformation significantly improves the carbon performance of environmentally sensitive enterprises by promoting eco-friendly innovation and enhancing resource allocation efficiency. The study also reveals regional, industry, and ownership heterogeneity in the impact of digital transformation on carbon performance. The findings highlight the importance of digital transformation in driving the green transformation of enterprises and provide valuable insights for policymakers and companies in achieving sustainable development goals.

Key words: carbon performance, enterprise digital transformation, environmentally sensitive enterprises, green innovation, resource allocation efficiency

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