

Exploring Macroeconomic Factors and Sustainability Practices in the Technology Sector: A Global Perspective

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Abstract

This study explores sustainability practices within Saudi Arabia's technology sector, focusing on how macroeconomic factors and corporate sustainability practices affect renewable energy consumption. The dependent variable is renewable energy consumption, while the independent variables include macroeconomic factors (foreign direct investment, GDP growth, and inflation) and sustainability practices (energy commitment, environmental teams, resource use score, ESG score, carbon emission performance, and board oversight of climate change risks). Data for 10,006 technology-listed firms from 2013 to 2023 was sourced from Refinitiv. The analysis uses a fixed-effects regression model with robust standard errors. The results indicate that energy commitment, resource use score, and carbon emission performance positively and significantly influence renewable energy consumption. Conversely, the resource use score negatively affects renewable energy consumption. Although carbon emission performance has been widely studied in various industries, there is limited empirical research on its impact within the technology sector in Saudi Arabia.

