

How Stakeholder Response and Technological Innovation Transform Environmental Management and Performance

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ABSTRACT

This study analyzed the impact of environmental management on environmental performance, focusing on the mediating effect of stakeholder engagement and the moderating effect of technological innovation, using a framework that integrated stakeholder theory and institutional theory. Combining ESG rating information, financial data, and patent information, we derived 918 panel data measurements from 2016 to 2021. Empirical results produced using SPSS/WIN 27.0 and Macro 4.1 showed that environmental management has a positive impact on stakeholder participation and environmental performance, and that stakeholder participation mediates this relationship. Additionally, technological innovation was confirmed to amplify the positive effect of environmental management on environmental performance by enabling efficient resource utilization and pollution reduction. This study is expected to provide meaningful implications for the formulation of corporate environmental management strategies and the practice of sustainable management.

JEL Codes:

Keywords: *Stakeholder, ESG, Transform Environmental, Performance.*