

**EVALUATING THE IMPACT OF SUSTAINABILITY PRACTICES AND
OPERATIONAL EFFICIENCY TOWARDS FIRM VALUE IN THE INDONESIA
PUBLIC COMPANIES IN MINING SECTOR**

By

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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This research explores how sustainability practices influence firm value and operational efficiency in Indonesia's mining sector. The study focuses on practices such as adopting renewable energy, improving energy efficiency, managing water resources and waste. Firm value is represented by Tobin's Q, while operational efficiency is assessed using Data Envelopment Analysis (DEA). Regression analysis was utilized to examine the correlation between these sustainability measurements, operational efficiency to firm value and consider firm size as control variable. The findings reveal a significant positive impact of renewable energy adoption on firm value, whereas other practices such as energy efficiency, water management, waste management and operational efficiency show no immediate or direct effects. Moreover, firm size plays an important role, with larger companies getting more benefit from sustainability strategies. This study enhances the understanding of sustainability's financial effects in the mining industry. While short term impact is limited, renewable energy adoption offers long term benefits for firm value.

Keywords: Sustainability Practices, Firm Value, Operational Efficiency, Tobin's Q, Data Envelopment Analysis, Renewable Energy, Water Management, Waste Management, Mining Sector, Indonesia

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DEDICATION

This thesis is dedicated to those who strive for innovation, sustainability and may this work serve as a small step toward building more resilient and prosperous society.

To my family, mentors and friends your unwavering support, encouragement and belief in my journey have been the foundation of my success.

Lastly, to the next generation of leaders, may you be inspired to pursue knowledge, embrace challenges and shape a brighter future for us all.

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