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A Proposal on Eco-Friendly Technologies and Green Investment terhadap Corporate Sustainability: The Mediating Role of Business Innovation

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Abstract: This study aims to test and analyze the influence of Eco-Friendly Technologies and Green Investment on Corporate Sustainability with Business Innovation as a mediating variable in food and beverage companies. Research object is a company engaged in the food and beverage sector in the Jakarta area. The research method used is a quantitative mix method using primary data. Sampling was done using the Purposive sample method. The analysis method used is the equation structure of the WarpPLS model, the result to be achieved is to test the research model.

Keyword: Eco-friendly, technologies, green investment

INTRODUCTION

In Indonesia's manufacturing landscape, this study analyzes the complex relationship between ecological control, green technology, green investment, business innovation, and corporate sustainability. The main goal is to explain how these things interact with each other to achieve sustainable business practices. Data collected from a diverse sample of manufacturing companies, which spanned eight sectors, were used in this quantitative study. Twenty top management representatives come to each sector to provide knowledge of the practice

Many companies are implementing green technologies and green investment strategies to improve their sustainability performance (Ajmal et al., 2018). In the face of growing environmental concerns and an urgent need for sustainable development, Corporate sustainability, which means that a company's ability to operate with environmental responsibility, social justice,

and economic viability over the long term, has become a top goal for organizations looking to survive and thrive in the modern business landscape. Stakeholders such as consumers, investors, and regulatory bodies are now demanding more accountability and transparency in corporate practices, making green initiatives a key driver of competitive advantage and long-term success. The role of green investment in the Indonesia context has grown significantly due to the need to manage natural resources wisely and reduce negative impacts on sensitive environments (Wang et al., 2002), (Wu et al., 2021) and (Zahoor et al., 2022). In addition, business innovation has emerged as an important factor in achieving corporate sustainability by creating more sustainable products and services and adopting innovative business models (Bocken & Geradts, 2020) and (Todeschini et al., 2017).

The role of green investment and business innovation in the Indonesia context is critical to understanding how these practices can shape and drive corporate sustainability in the country (Ameer & Khan, 2023), (Nuryanto et al., 2024) and (Rinawiyanti et al., 2023). The factors that influence green investment and business innovation in Indonesia are crucial in shaping the direction and scale of sustainability efforts in companies in the country (Varkkey et al., 2108). The success and growth of green investment and business innovation is highly dependent on ecological control, government support, including fiscal incentives, strict environmental regulations, and research and development assistance (Deng et al., 2022).

In addition, the availability of green technologies affects how companies can implement sustainable business innovations (Nguyen & Vien, 2023). Partnerships and collaborations between various stakeholders and global market conditions also contribute to shaping the landscape of ecological control, green investment, and business innovation in Indonesia. These elements are integral to the collective effort to achieve sustainable corporate sustainability in the country (Sundin & Brown, 2017), (Nguyen & Vien, 2023) and (Aziz et al., 2018). Eco-friendly technologies, which consist of various innovations aimed at reducing negative impacts on the environment, play a crucial role in improving business sustainability. These technologies include renewable energy systems, energy-efficient manufacturing processes, waste reduction methods, and sustainable product design. This technology not only helps companies reduce their carbon footprint, but it also helps them save money and be more efficient in their operations. Businesses can comply with strict environmental regulations and improve the perception of environmentally conscious consumers by utilizing eco-friendly technologies. Environmentally friendly and socially responsible corporate activities can benefit a country

With increasing awareness of the negative impacts caused by conventional business practices on the environment and society, it has prompted companies to look for new ways to achieve their long-term sustainability goals (Begum et al., 2022) and (Sarkar et al., 2020). Challenges and opportunities in realizing corporate sustainability are becoming increasingly complex in Indonesia, which is blessed with abundant natural resources (Rochwulaningsih et al., 2019) and (Sharvini et al., 2018). Ecological control refers to the monitoring and management of the environment which aims to monitor and control the negative impact on the environment due to human or corporate activities (Henri & Journeault, 2010). Eco-friendly technology is a technology that is designed or used with its environmental impact in mind, aiming to reduce its carbon footprint, waste, or other negative impacts (Saleem et al., 2022). On the other hand, green investment involves allocating financial resources to projects and initiatives that promote environmental sustainability. This includes investments in renewable energy projects, green infrastructure, sustainable supply chains, and eco-friendly products. Green investment not only

supports the development and application of sustainable technologies but also demonstrates the company's commitment to environmental management. By prioritizing green investments, companies can attract socially responsible investors, access new markets, and build resilience to environmental risks.

While the benefits of green technology and green investments are recognized, achieving corporate sustainability requires more than just the adoption of these initiatives. Business innovation, which refers to the development and implementation of new ideas, products, processes, and business models, plays an important mediating role in translating green efforts into tangible sustainability outcomes. Innovative approaches allow companies to optimize the use of their resources, increase their bargaining value, and create a sustainable competitive advantage. For example, the integration of digital technologies, such as the Internet of Things (IoT), big data analytics, and artificial intelligence, can improve the efficiency and effectiveness of environmentally friendly technologies, leading to greater environmental and economic benefits. Additionally, business innovation fosters a culture of continuous improvement and adaptability, which is essential for responding to environmental challenges and evolving market dynamics. Companies that embrace innovation are better equipped to anticipate and address emerging sustainability issues, capitalize on new opportunities, and drive transformational change in their industries. By mediating the relationship between green technology, green investment, and corporate sustainability, business innovation serves as a catalyst for creating sustainable value and achieving long-term success.

The interplay between green technology, green investment, and business innovation emphasizes the importance of a holistic and integrated approach to corporate sustainability. While green technologies provide the tools and processes necessary to reduce environmental impact, green investments provide the financial resources needed to support sustainable initiatives. Business innovation, in turn, increases the effectiveness and scalability of these efforts, ensuring that companies can achieve meaningful and long-lasting sustainability outcomes.

In this context, this study aims to explore the impact of green technologies and green investments on corporate sustainability, with a particular focus on the mediating role of business innovation. By examining the relationship between these variables, this study aims to provide insight into the mechanisms by which green initiatives contribute to sustainable business practices. In addition, the study aims to identify the key drivers and barriers to the successful implementation of green technologies and green investments, as well as the critical factors that affect the effectiveness of business innovation in promoting sustainability.

To achieve this goal, this study will use a mixed-method research design, combining quantitative and qualitative data collection and analysis techniques. Quantitative data will be collected through surveys distributed to a diverse sample of companies across different industries, while qualitative data will be obtained through interviews with key stakeholders, including company executives, sustainability managers, and industry experts. The integration of quantitative and qualitative data will provide a comprehensive understanding of the factors influencing the adoption and impact of green technologies, green investments, and business innovation on the sustainability of companies. Based on the description above, the reason for taking the title Eco-Friendly Technologies and Green Investment to Corporate Sustainability: The Mediating Role of Business Innovation.

By exploring the relationship between green technology, green investment, business innovation, and corporate sustainability, this research aims to improve our understanding of how

companies can effectively navigate the path to sustainability. Through a comprehensive and nuanced analysis, the research aims to uncover strategies and practices that allow businesses to not only survive but thrive in an increasingly environmentally conscious world.

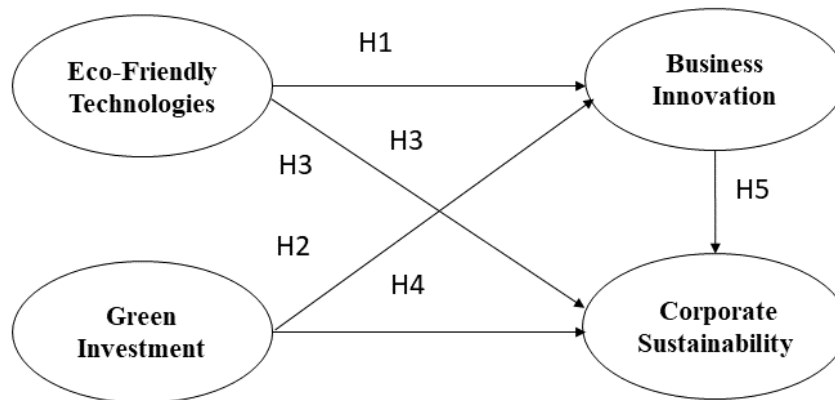


FIGURE 1. Framework of Thought

Hypothesis development

H₁: Eco-Friendly Technologies have an impact on Business Innovation

H₂: Green Investment has an effect on Business Innovation.

H₃: Eco-Friendly Technologies has an effect on Corporate Sustainability

H₄: Green Investment has an effect on Corporate Sustainability.

H₅: Business Innovation has an effect on Corporate Sustainability.

METHOD

This type of research uses a descriptive approach with a quantitative approach, and the type of data used in primary data sourced from respondents who have been designated as research subjects in the sample of research subjects (Hair et al., 2016). The research was mixed method with interviews and questionnaires. The research process is interviews, surveys, pretests, data tabulations to data processing. The population used in this study is experts from companies at the level of assistant managers, managers and managers. The sample collection technique used in this study uses the purposive sampling method or the design of the target sample (Anjarwati et al., 2024). Refers to (Hair et al., 2016) The determination of the sample size is carried out by accumulating the largest number of indicators from each research variable then multiplied by 5-10 of the indicators.

RESULTS AND DISCUSSION

Based on the results of the analysis and discussion that has been carried out about Eco-Friendly Technologies affecting Business Innovation, Green Investment affecting Business Innovation, Eco-Friendly Technologies affecting Corporate Sustainability, Green Investment affecting Corporate Sustainability and business Innovation affecting Corporate Sustainability

CONCLUSION

Eco-Friendly Technologies affect Business Innovation, Green Investment affects Business Innovation, Eco-Friendly Technologies affect Corporate Sustainability, Green Investment affects Corporate Sustainability and business Innovation affects Corporate Sustainability.

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