

Green Strategy, Green Leadership, Green Innovation on Financial Performance: Case Indonesia

Emelda Sekar Mayangsari*

Master of Accounting, Trisakti University

*Corresponding Author: sekar_mayangsari@trisakti.ac.id

Abstract: Environmental sustainability is a global issue that demands mutual attention, including Indonesia. In this era where the economy is growing rapidly, it is certainly a challenge for every company, especially in Indonesia. Given the business processes in large companies that are not environmentally friendly create air pollution and environmental pollution that can have an impact on global warming. This research aims to see the influence of green strategy, green leadership, and green innovation that can have a good impact on financial performance. The purpose of this study was to analyze the effect of green strategy, green leadership, and green innovation on financial performance in an issuer in the consumer goods sector. The object of this research is the consumer goods industry sector companies listed on the Indonesia Stock Exchange in the period 2017-2022.

Keywords - Financial Performance, Green Strategy, Green Leadership, Green Innovation

Date of Submission: 06-08-2023

Date of Acceptance: 22-08-2023

I. Introduction

One of the main issues facing large companies in developing countries is whether they adopt a *corporate environmental culture* where most companies want to adopt a *corporate environmental culture* and they believe that such a stance will improve the economy of the company. When companies are convinced to make a strong push to adopt green strategies, they will maintain their *high value* and their financial performance will not be jeopardized, so companies consider such dilemmas as easier problems to deal with. As these companies grow, their existential focus shifts to increasing market share and exploring new markets. In doing so, these companies inadvertently enter a contest with other global players. It is a fact that the *global policy of academics and the environment* is one that emphasizes that the need for companies and societies to adopt policies that position them as environmentally conscious entities.[1]

The lack of a clear understanding of *corporate environmental culture's* implementation of *green strategy* (GS) explains that many companies struggle to operationalize green strategy into effective green innovation and consequently fail to improve the company's overall green performance. [2]. According to the report of the Ministry of Environment and Forestry (2018), in the period from 2015 - 2018 the level of case handling through law enforcement was 530 companies that committed environmental damage. This proves that companies in achieving their goals still make efforts that can damage the environment which will certainly threaten *going concern*. The government has tightened regulations relating to the environment contained in Environmental Law No.46 of 2017 concerning Environmental Economic Instruments. [3] to the Minister of Environment Regulation No. 02 of 2014 implementing the "Eco-Label". The Minister of Environment also held a PROPER program which aims to encourage companies in every business activity. [4]

Then the role of *Green Leadership* (GL) is expected to influence employees to do more to improve company performance where leaders who have a leadership spirit and care about environmental sustainability. [5]. Leadership can be seen as a symbol of organizational identity because it can be used to influence what employees see, feel and think about the organization (Hatch and Schultz, 1997). Demands from business competitors, government, society and investors require companies to carry out a *new innovation* in every production process and product. The company's goal in today's modern era is not only to make a profit, but also to maintain its business. *Green Innovation* (GI) is one of the strategies as a solution for companies in developing their business without violating government regulations. [6]. The purpose of green innovation is to improve a product to be more productive, open up new market opportunities, cost efficiency to improve company performance economically and reduce *negative impacts* on the environment and create a competitive advantage for companies to encourage companies to process waste production into products that can generate additional profits for the company. Kohtamäki et al. (2020) in [7] stated that performance can provide information to assess the extent of an organization's excellence.

The topic of the environment is a topic that needs to be studied and researched seeing that in Indonesia the negative environmental impact of company activities is not yet aware of the importance of strategy, innovation,

and leadership that is concerned with the environment. However, what distinguishes this research from previous research is the use of *green strategic*, *green leadership*, and *green innovation* variables on *financial performance* which are rarely studied simultaneously and there is still little research on these variables and also this study uses the selected research object is the consumer goods industry sector. The reason for choosing the consumer goods industry sector is because it is one of the company sectors that contributes to the economy because it has a large GDP value and plays an active role in the Indonesian capital market and also the consumer goods industry provides primary needs. Product demand is relatively stable so that it gets positive appreciation from investors, but Research Director of the Center of Reform on Economics (CORE) Indonesia Piter Abdullah claims that environmental management performance in the consumer goods industry is still lower and not entirely appropriate. [8].

The purpose of this article is to analyze the effect of *green strategy*, *green leadership*, and *green innovation* on *financial performance* in the consumer goods industry sector listed on the IDX for the 2017-2022 period. This research has a contribution to the development of theories related to environmental accounting, as well as contributing to practice, especially to companies as parties who have a large share of environmental pollution to be able to reduce the negative impact of this environment in order to improve the company's financial performance.

Based on the background description, the problem can be formulated as follows:

1. Does *Green Strategy* affect *Financial Performance*?
2. Does *Green Leadership* affect *Financial Performance*?
3. Does *Green Innovation* affect *Financial Performance*?

Legitimacy Theory

The company gains legitimacy from the community because the company is considered to pay attention to the environment so that it has a good impact on the company's survival. The company should be able to report its social activities in order to ensure the *sustainability of the company*. Basically, legitimacy theory is applied in the social and environmental accounting literature which adopts the central assumption that the maintenance of successful organizational operations requires managers to ensure that the company operates in accordance with what society expects. In legitimacy theory, companies are viewed as part of a wider social system and are not considered to have inherent rights to resources. Instead, rights to resources must be acquired and organizations that are able to maintain rights to resources are needed (Mathews, 1997) in [9]. Proponents of legitimacy theory argue that corporate social and environmental responsibility is likely to reduce the risk of regulatory action and boycotts by stakeholders and strengthen a company's license to operate. [10].

Effect of Green Strategy on Financial Performance

Green programs in companies are based on the motive of maximizing corporate *profits* and vice versa. This means that firms are likely to invest more in green programs if their strategic business model is based on green policies, and if they have the necessary capacity to match green capabilities to complement the strategic business model. Firms that use *green strategy* are likely to achieve greater sustainable competitive advantage, which will lead to broad financial performance outcomes due to the level of uncertainty in the environment. (Olayeni et al., 2021). The hypothesis proposed is as follows:

H1 : There is a positive influence of *green strategy* on *financial performance*.

The Effect of Green Leadership on Financial Performance

Green leadership has an impact on the relationship between individuals and organizations in an effort to achieve the goal of a *sustainable environment* in carrying out pro-environmental activities. [11]. *Green leadership* can stimulate the development of new ideas and encourage followers to make breakthroughs and encourage team members to conceptualize problems from various points of view can increase team creativity which can improve company performance. [12]. The hypothesis proposed is as follows:

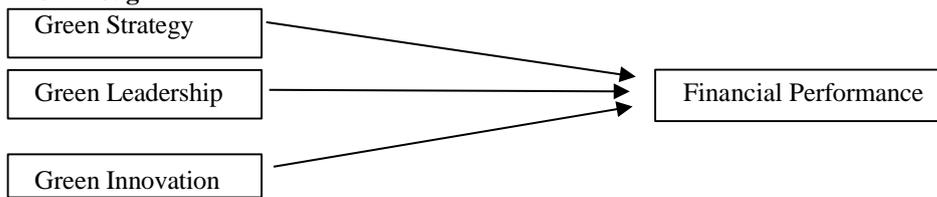
H2 : There is a positive influence of *green leadership* on *financial performance*.

The Effect of Green Innovation on Financial Performance

Based on research conducted by Agustia et al. (2019) in [13] the application of *Environmental Management Accounting* will encourage and influence *green innovation* to improve the company's financial performance. Companies that have implemented *green product innovation* and implemented *Environmental Management Accounting* will further improve financial performance. Companies that produce environmentally friendly products and environmentally friendly products will attract consumers, thus creating a *competitive advantage* which can then improve the company's financial performance. Based on this explanation, the hypothesis of this study is:

H3 : There is a positive influence of *green innovation* on *financial performance*.

Framework of Thought



II. Materials and Methods

Research Design

This type of research is causal research which aims to determine the relationship between several variables. The approach used in this research is a quantitative approach. The data used in this research is panel data. This study uses secondary data obtained from *annual* financial report data and annual *sustainability* reports published by the IDX from 2017-2022 in the consumer goods industry sector.

Population and Sample

The population in this study are consumer goods industry sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2017 to 2022 which come from the official website, namely www.idx.co.id and the official website of the relevant company. The sample used in this study used *purposive sampling*. The criteria for sampling in this study are: (a) Consumer goods industry sector companies listed on the Indonesia Stock Exchange for the period 2017-2022. (b) Consumer goods industry sector companies that did not exit (*delisting*) from the IDX during the research period (2017-2022). (c) Consumer goods industry sector companies that publish audited financial statements by independent auditors in 2017-2022. (d) Consumer goods industry sector companies that publish *sustainability reports* in 2017-2022.

Variable Measurement

In this study, there is one dependent variable, namely *financial performance* and three independent variables, namely *green strategy*, *green leadership*, and *green innovation*. *Financial performance* in this study is measured by Return On Asset (ROA). High performance reflects the effectiveness and efficiency of management in utilizing company resources and ultimately contributes broadly to the country's economy. [14].

Green strategy in this study is measured by the following indicators:

- a) The company has an environmental protection concept
- b) The company has environmental protection objectives
- c) The company has an environmental management system (ISO 14001)
- d) The company organizes environmental education and training
- e) The company has special environmental protection expenditures

Measurement of *green strategy* variables using content analysis where the company gets a score of 1 if there are components that are fulfilled, but if each indicator component cannot be fulfilled, the company gets a score of 0. The *green strategy* parameters used are as follows:

$$GS = \frac{\text{Total Indicator Disclosed}}{\text{Total Indicators}}$$

[15]

Green leadership in this study is measured by the following indicators:

- a) Company leaders inspire an organizational vision of environmental sustainability, creating or maintaining environmental values within the company.
- b) Company leaders use a well-developed approach to environmental management that generally centers on programs tailored to the company's specific business and markets.
- c) Company leaders cooperate with company stakeholders to solve environmental problems and to achieve environmental goals.
- d) Company leaders can take on environmental education responsibilities with the aim of engaging employees in environmental management initiatives.

Measurement of *green leadership* variables using content analysis where the company gets a score of 1 if there are components that are fulfilled, but if each indicator component cannot be fulfilled, then the company gets a score of 0. The *green leadership* parameters used are as follows:

$$GL = \frac{\text{Total Indicator Disclosed}}{\text{Total Indicators}}$$

[12]

Green innovation in this study is measured by the following indicators:

- a) Using less or non-polluting/toxic materials (Using environmentally friendly materials).
- b) Improve and design environmentally friendly packaging (e.g. reducing the use of paper and plastic materials) for old and new products.
- c) Products that are easy or recyclable.
- d) Using eco-labels.

Measurement of green innovation variables using content analysis where the company gets a score of 1 if there are components that are fulfilled, but if each indicator component cannot be fulfilled, the company gets a score of 0. The green innovation parameters used are as follows:

$$GI = \frac{\text{Total Indicator Disclosed}}{\text{Total Indicators}}$$

[16].

Data Analysis Method

The analysis in this study uses descriptive statistics, while hypothesis testing uses multiple linear regression. Multiple linear regression is used to determine whether there is an influence of independent variables, namely green strategy, green leadership, green innovation on the dependent variable, namely financial performance. The tests carried out are descriptive statistical analysis, model feasibility test, namely the coefficient of determination (R2) test, hypothesis testing which consists of simultaneous significance test (F Statistical Test) and partial significance test (T statistical test) and multiple linear regression test.

The multiple regression model in this study is expressed as follows:

$$FP = \alpha + \beta_1GS + \beta_2GL + \beta_3GI + e$$

III. Result

Statistical Description Test

Table 1. Descriptive Statistics

Variabel	Observations	Mean	Median	Max	Min	Std. Dev
GS	128	0.782813	0.800000	1.000000	0.000000	0.223117
GL	128	0.593750	0.500000	1.000000	0.000000	0.271696
GI	128	0.613281	0.750000	1.000000	0.000000	0.292389
ROA	128	0.087438	0.687330	0.599025	-0.279327	0.121001

Source : Data processed (2023).

Chow Test
Table 2. Chow test

Effect Test	Statistic	d.f	Prob.
Cross-section F	4.344556	(55.69)	0.0000
Cross-section Chi-square	191.466598	55	0.0000

Source: Data processed (2023)

The selected model is Fixed Effect (FE), so the Hausman Test is continued.

Hausman Test

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section random	12.367562	3.00	0.0062

Source: Data processed (2023)

The model chosen is the *Fixed Effect* (FE) model.

Panel Data Regression Equation

$$ROA = 0.10 + 0.02*GS + 0.42*GL - 0.48*GI$$

The constant value of 0.10 means that without the GS, GL, and GI variables, the ROA variable will increase by 10%. The beta coefficient value of the GS variable is 0.02, if the value of other variables is constant and the GS variable increases by 1 unit, the ROA variable will increase by 2%. Likewise, on the contrary, if the value of other variables is constant and the GS variable decreases by 1 unit, the ROA variable will decrease by 2%. The beta coefficient value of the GL variable is 0.42, if the value of other variables is constant and the GL variable increases by 1 unit, the ROA variable will increase by 42%. Likewise, on the contrary, if the value of other variables is constant and the GL variable decreases by 1 unit, the ROA variable will decrease by 42%. The beta coefficient value of the GI variable is -0.48, if the value of other variables is constant and the GI variable increases by 1 unit, the ROA variable will decrease by 48%. Likewise, on the contrary, if the value of other variables is constant and the GI variable decreases by 1 unit, the ROA variable will increase by 48%.

Test t

Table 4. The t-test

Variable	Coefficient	Std. Error	t.Statistic	Prob
C	0.109198	0.229155	0.476523	0.6352
GS	0.028581	0.093618	0.305291	0.7611
GL	0.421930	0.332029	1.270762	0.2081
GI	-0.480454	0.140591	-3.417391	0.0011

Source : Data processed (2023)

The effect of independent variables on the dependent variable partially where GS has no effect on ROA of the Consumer Goods Industry Sector in Indonesia, GL has no effect on ROA of the Consumer Goods Industry Sector in Indonesia and GI has a positive effect on ROA of the consumer goods industry sector in Indonesia.

F test

Table 5. F-test

R-squared	0.808240
Adjusted R-squared	0.647051
S.E. of regression	0.071886
Sum squared resid	0.356569
Log likelihood	1.949044
F-statistic	5.014222
Prob(F-statistic)	0.000000

Source : Data processed (2023)

GS, GL, and GI variables affect ROA in the Consumer Goods Industry Sector in Indonesia.

Test Coefficient of Determination (R2)

Table 6. Coefficient of Determination (R2)

R-squared	0.808240
Adjusted R-squared	0.647051
S.E. of regression	0.071886
Sum squared resid	0.356569
Log likelihood	194.9044
F-statistic	5.014222
Prob(F-statistic)	0.000000

Source: Data processed (2023)

The adjusted R Square value is 0.647051 or 64.7051%. The coefficient of determination shows that the independent variables consisting of GS, GL and GI are able to explain the dependent variable, namely the ROA of the Consumer Goods Industry Sector in Indonesia by 64.7051%, while the remaining 35.2949% is explained by other variables not included in this research model.

Where the consumer goods industry sector still provides the largest contribution to the national gross domestic product (GDP) structure based on data from the Central Statistics Agency (BPS), gross domestic product (GDP) on the basis of current prices (ADHB) the industrial sector reached IDR 877.8 trillion in the second quarter of 2022. Thus, the industrial sector contributed 17.84% to national GDP from other sectors, namely the mining sector, which reached 13.06%. Followed by the agricultural sector with a contribution of 12.98%, trade at 12.71%, and the construction sector at 9.14%. [17].

Consumer interest in environmentally friendly products will make consumers consider the products to be purchased, for example, whether the product is safe and does not have an impact on the environment. The fulfillment of this legitimacy makes it easier for companies to get support from stakeholders so that green implementation is much more optimal. Implementation of green processes will reduce operational costs, reduce waste management costs, and increase productivity and efficiency so that increased profits are followed by improved financial performance of the company.

IV. Discussion

The Effect of Green Strategy on Financial Performance.

The statistical test results show that *green strategy* has no effect on *financial performance*. The increase in financial performance in consumer goods industry sector companies is not influenced by the implementation of *green strategy*. Then H1 is rejected.

Green strategy in consumer goods industry sector companies that have the concept of environmental protection, environmental protection objectives, have an environmental management system (ISO 14001), organize environmental education and training and have special environmental protection expenditures do not encourage performance improvement in the consumer goods industry sector. This shows that many companies feel reluctant to implement green strategies because the costs incurred will be more to carry out activities that are in accordance with the company's vision and mission to green. This creates a disconnect between the company's expenses and income to improve the company's financial performance as proxied by ROA.

[18] [18] argues that companies operating in developing countries pay less attention to environmental issues, companies consider achieving economic growth more important than thinking about environmental issues which results in increasing the burden on the company.

The Effect of Green Leadership on Financial Performance

The statistical test results show that *green leadership* has no effect on *financial performance*. The increase in the company's financial performance is not influenced by the implementation of *green leadership*. Then H2 is rejected.

Green leadership in consumer goods industry sector companies where company leaders inspire the organization's vision as environmental sustainability, create or maintain environmental values and also company leaders use a well-developed approach to environmental management which is generally centered on programs

tailored to the company's specific business and market where company leaders establish cooperation with company stakeholders to solve environmental problems and to achieve environmental goals and take responsibility for environmental education with the aim of involving employees in environmental management initiatives which do not encourage improved performance in the consumer goods industry sector. This shows that *green leadership* in consumer goods industry sector companies has no influence on financial performance, where leadership is important to ensure that followers take these issues seriously and develop environmentally friendly behavior at the individual and collective levels. To achieve green goals, leaders must be more authentic in recognizing ecological issues and lead by example to communicate effectively and transform their green values and identity to their teams. Such leaders will often nurture green team values and place environmental goals as an integral part of corporate goals. [19].

The Effect of Green Innovation on Financial Performance

The statistical test results show that *green innovation* has a positive effect on *financial performance*. Companies that implement *green* innovation to produce environmentally friendly products will be able to improve the company's financial performance. This makes *green innovation* has environmental benefits for consumers. Products that have benefits, good quality and can be competitive will attract consumers so that consumer interest in these products increases. This will provide a competitive advantage for the company. In addition, consumer interest in environmentally friendly products is based on the level of trust in these products. Consumers will consider the products to be purchased such as whether the product is safe and does not have an impact on the environment. This is also due to consumer awareness in consuming environmentally friendly products.

Green innovation has the potential to reduce operational costs, save on waste management, and increase productivity and efficiency so that increased profits are followed by an improvement in the company's financial performance. Using less or non-polluting/toxic materials, using environmentally friendly materials then improving and designing environmentally friendly packaging (for example: reducing the use of paper and plastic materials) for old and new products as well as recycling products and finally using environmentally friendly labels.

Based on the results of the WWF-Indonesia and Nielsen survey (2017), it shows that the level of awareness of Indonesian consumers is good in realizing to consume environmentally friendly products. [20]. The better the company in implementing *green innovation*, the more the company's economic performance will increase. This is because *green innovation* helps companies meet the targets to be achieved through the management of resources used so as to encourage companies to further increase productivity. In line with research [21], [22] and [23] that there is a positive influence on the relationship between *green innovation* and the company's financial performance, then, H3 is accepted.

As is the case with the company PT Multi Bintang Indonesia Tbk, it has increased profits and has exceeded the profit target in 2021. The company's profit increased significantly by 133% compared to last year. This is due to increased productivity and the company has implemented a *green company* with a culture of innovation in the use of effective and efficient resources. This shows that companies that have implemented *green innovation* in every business process will be able to increase company profits.

V. Conclusion

Environmental management is a growing problem for business organizations around the world. This study aims to determine the effect of *green strategy* (GS), *green leadership* (GL), and *green innovation* (GI) on *financial performance* (ROA). Based on the results of the study, it can be concluded that there is a positive influence between *green innovation* on company performance. However, *green strategy* and *green leadership* have no effect on company performance. In addition, based on *legitimacy theory*, companies that have made efforts to minimize environmental impacts will be able to survive and ensure business continuity in the future. Business continuity is obtained by the company if the company has been legitimized, meaning that the company in its business processes has fulfilled the rules or limits accepted by society. Companies can minimize environmental impacts by implementing sustainable management and can reduce long-term costs so as to improve company performance.

This study has limitations, where there are still many other variables that can affect the relationship between variables. In addition, this study only examines consumer goods industry sector companies listed on the Indonesia Stock Exchange for 6 years from 2017-2022, so the results cannot be generalized other than to consumer goods industry sector companies. As well as limited research sources between the influence of *green strategy*, *green leadership*, and *green innovation* on *financial performance*.

Suggestions that can be given to future researchers are to add other variables such as *green brand awareness* and *green products*. Further researchers increase the number of company samples and research years so that the data used becomes more relevant and can provide maximum research results.

References

- [1]. A. Olayeni, A. Ogbo, H. Okwo, B. Chukwu, C. Ifediora, and C. Ezenwakwelu, "Green strategy effect on financial and environmental performance: a mediation analysis of product quality," *Sustainability (Switzerland)*, vol. 13, no. 4, pp. 1-17, Feb. 2021, doi: 10.3390/su13042115.
- [2]. J. Jirakraisiri, Y. F. Badir, and B. Frank, "Translating green strategic intent into green process innovation performance: the role of green intellectual capital," *Journal of Intellectual Capital*, vol. 22, no. 7, pp. 43-67, 2021, doi: 10.1108/JIC-08-2020-0277.
- [3]. [Government Regulation of the Republic of Indonesia, "Government Regulation of the Republic of Indonesia Number 46 Year 2017," 2017.
- [4]. [Regulation of the Minister of Environment and Forestry of the Republic of Indonesia, "Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 8 of 2021," 2014.
- [5]. A. Nurwahdah and Muafi, "The Influence Of Green Transformational Leadership And Green Attitude On Green Organisational Citizenship Behaviour Mediated By Emotional Intelligence," *Internayional Journal Of Research In Business And Social Science*, vol. 11, no. 3, pp. 99-111, 2022, doi: 10.20525/ijrbs.v11i3.1714.
- [6]. B. Sezen and S. Y. Çankaya, "Effects of Green Manufacturing and Eco-innovation on Sustainability Performance," *Procedia Soc Behav Sci*, vol. 99, pp. 154-163, Nov. 2013, doi: 10.1016/j.sbspro.2013.10.481.
- [7]. Z. Zulganef, S. A. Pratminingsih, and A. Rianawati, "Leveraging strategic intuition to reach firm performance: the role of entrepreneurial agility and environmental dynamism," *Journal of Business Strategy*, pp. 49-60, Dec. 2022, doi: 10.20885/jsb.vol27.iss1.art4.
- [8]. [Bisnis.com, "Environmental Management, MoEF Highlights Consumer Goods Industry Sector," 2020.
- [9]. C. M. Deegan, "Legitimacy theory: Despite its enduring popularity and contribution, the time is right for a necessary makeover," *Accounting, Auditing and Accountability Journal*, vol. 32, no. 8, pp. 2307-2329, Nov. 2019, doi: 10.1108/AAAJ-08-2018-3638.
- [10]. P. Aggarwal, "Relationship between Environmental Responsibility and Financial Performance of Firm: A Literature R," *IOSR Journal of Business and Management*, vol. 13, no. 1, pp. 13-22, 2013, doi: 10.9790/487X-1311322.
- [11]. K. Kardoyo, M. Feriady, N. Farliana, and A. Nurkhin, "Influence of the Green Leadership Toward Environmental Policies Support," *Journal of Asian Finance, Economics and Business*, vol. 7, no. 11, pp. 459-467, 2020, doi: 10.13106/jafeb.2020.vol7.no11.459.
- [12]. Y. S. Chen, C. H. Chang, and Y. H. Lin, "Green transformational leadership and green performance: The mediating effects of green mindfulness and green self-efficacy," *Sustainability (Switzerland)*, vol. 6, no. 10, pp. 6604-6621, 2014, doi: 10.3390/su6106604.
- [13]. Y. Salvatira Bibi and N. Putu Dian Rosalina Handayani Narsa, "The Impact Of Environmental Management Toward Financial Performance With Green Innovation As A Mediation Variable," 2022.
- [14]. C. F. Egbunike and C. U. Okerekeoti, "Macroeconomic factors, firm characteristics and financial performance: A study of selected quoted manufacturing firms in Nigeria," *Asian Journal of Accounting Research*, vol. 3, no. 2, pp. 142-168, 2018, doi: 10.1108/AJAR-09-2018-0029.
- [15]. S. M. Masoumik, S. H. Abdul-Rashid, E. U. Olugu, and R. A. R. Ghazilla, "A strategic approach to develop green supply chains," in *Procedia CIRP*, Elsevier B.V., 2015, pp. 670-676. doi: 10.1016/j.procir.2014.07.091. [16]I. M. Ar, "The Impact of Green Product Innovation on Firm Performance and Competitive Capability: The Moderating Role of Managerial Environmental Concern," *Procedia Soc Behav Sci*, vol. 62, pp. 854-864, Oct. 2012, doi: 10.1016/j.sbspro.2012.09.144.
- [16]. [Katadata.co.id, "The Industrial Sector is the Biggest Support for the Indonesian Economy in the Second Quarter of 2022," 2022.
- [17]. L. Luo, Q. Tang, H. Fan, and J. Ayers, "Corporate carbon assurance and the quality of carbon disclosure," *Accounting and Finance*, Mar. 2023, doi: 10.1111/acfi.13060.
- [18]. A. Siddiquei, F. Asmi, M. A. Asadullah, and F. Mir, "Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China," *Int J Manpow*, vol. 42, no. 7, pp. 1161-1182, Sep. 2021, doi: 10.1108/IJM-07-2020-0350.
- [19]. [WWF-Indonesia and Nielsen, "Indonesian Consumption and Production Trends: Producers Able to Provide Ecolabeled Products and Markets Ready to Buy." [Online]. Available: www.wwf.or.id
- [20]. M. Tang, G. Walsh, D. Lerner, M. A. Fitza, and Q. Li, "Green Innovation, Managerial Concern and Firm Performance: An Empirical Study," *Bus Strategy Environ*, vol. 27, no. 1, pp. 39-51, Jan. 2018, doi: 10.1002/bse.1981.
- [21]. P. Rao and D. Holt, "Do green supply chains lead to competitiveness and economic performance?," *International Journal of Operations and Production Management*, vol. 25, no. 9, pp. 898-916, 2005. doi: 10.1108/01443570510613956.
- [22]. S. M.R and W. Dianawati, "The Effect of Environmental Commitment on Financial Performance through Green Innovation," *International Journal of Managerial Studies and Research*, vol. 6, no. 11, 2018, doi: 10.20431/2349-0349.0611003.