



Moderation of Environmental Management Accounting (EMA) on Green Innovation (GI), Environmental Social Governance (ESG), and Firm Value of Energy Companies in Indonesia

Vita Aprilina^{1,2}(✉), Agus Ismaya Hasanudin¹, Muhamad Taqi¹, and Imam Abu Hanifah¹

¹ Sultan Ageng Tirtayasa University, Kota Serang, Indonesia
vitaaprilina4487@gmail.com, {ismayaagus, muhamad.taqi, imamabuhanifah}@untirta.ac.id

² Islamic University 45 Bekasi, Jawa Barat, Indonesia

Abstract. This study aims to investigate and provide new evidence about the company's seriousness on the environment as outlined in the Green Innovation, Environmental Social Governance (ESG), and Environmental Management Accounting (EMA) strategies and their impact on Firm Value. This study uses panel data on Energy companies listed on the Indonesia Stock Exchange during the 2019–2021 period. The sampling technique used is purposive sampling with several criteria and the selected sample is 216 companies. GI is measured using (Agustia et al., 2019) disclosure, ESG is measured using (Nasdaq, 2019) disclosure, EMA is measured by ISO 14001 ownership, and Firm value is measured using Tobins 'Q. The data analysis technique used Panel Least Square with Eviews 12.0. The results of this study prove ESG has an effect on Firm Value but GI has no effect on Firm Value, EMA moderate GI on Firm Value, but not moderate ESG to firm value.

Keywords: Green Innovation (GI) · Environmental Social Governance (ESG) · Environmental Management Accounting (EMA) · Firm Value

1 Introduction

The development of an increasingly advanced industry has an impact on the increasing amount of pollution as a result of the company's production process. According to [2] Energy companies are the number one source of air pollution in the world responsible for 38% of total emissions and energy production from coal-fired power plants is the most polluting. Company waste that hurts the environment requires the company's concern to not only pursue profit but also pay attention to the surrounding environment [3, 4]. One of the efforts made by the company to develop a business that also pays attention to environmental conditions is by making environmentally friendly innovations in all its activities.

© The Author(s) 2023

T. Suryanto et al. (Eds.): ICOSTELM 2022, ASSEHR 770, pp. 149–161, 2023.

https://doi.org/10.2991/978-2-38476-112-8_15

The company will increase its value of the company in various ways to reflect the company's sustainability in the future. The existence of an effort to pay attention to the environment and social surroundings of the company is the responsibility of the company and an effort to build public trust in the company, especially operational activities that are considered not to harm the environment and the surrounding community. Companies that have new ways of producing and distributing processes and can try to create new products are considered to be winners in the face of business competition [5]. Green Innovation (GI) is a strategy where the company wants to reduce the impact of the company's business activities on the environment and how the company is responsible for the environment by including it in the company's strategic plan [6]. GI is a new technological breakthrough related to products and production processes that will improve energy efficiency, reduce air and water pollution, design environmentally friendly products, recycle waste and manage the environment [7]. When a company has a GI strategy, that's where the company will have special capabilities that will be an advantage to be able to compete with other companies, this advantage will increase the value of the company in the future.

[8] Stakeholder theory states that regulations regarding the environment and different stakeholders such as customers, suppliers, and competitors have different effects on the company's green innovation activities. According to [9] In the last 10 years, the number of publications and research developments discussing economic energy has increased, proving that many people are starting to become aware of the meaning of energy and the environment. Research results [10] provide evidence that when a company with a good GI strategy then the company's export financial performance will increase, but [11] stated that the environmental strategy requires multidisciplinary support and takes time to implement, because after all, GI requires costs in the Research and Development (R&D) process, product safety certification costs, and other costs related to environmentally friendly product innovation. But research [12] and [13] shows different results where green innovation does not affect firm value in Indonesia.

Environmental Social and Governance (ESG) is a shared goal to realize sustainable development so that climate, water, air, and natural resource resilience are good for the future. In 2021 IBCSD survey shows that Indonesia's ESG index is ranked 36th out of 47 capital markets in the world and 40% of the entities in Indonesia are still not aware how the environmental issues of the importance of implementing ESG [14]. Research shows that entities that implement ESG have a positive impact on firm value and stakeholder decision-making not only based on financial performance but also on the entity's commitment to nature and the environment [15, 16].

Environmental Management Accounting (EMA) is a management tool to get a strategic position to increase the company's competitiveness. EMA is considered capable of bridging between economic and environmental interests so that they can synergize to improve entities performance and environmental performance [17] Study [18] shows that the implementation of EMA in companies has a positive impact on company performance and shows how companies innovate to improve the performance of their entities. [16] told that in Kenya EMA application is only to meet local environmental regulatory requirements, environmental regulations and financial performance also have a positive influence on the implementation of EMA in manufacturing entities.

2 Literature Review

2.1 Stakeholder Theory

This theory explains that the business is not only an entity that operates for its own sake but must also be able to provide benefits to stakeholders including shareholders, creditors, consumers, government, and society, also develop the company's competitive advantage so that the company is increasingly adapting to its environment [13, 15].

2.2 Legitimacy Theory

Legitimacy theory assumes that the company's actions are expected to conform to socially constructed norms, beliefs, and values. This theory also focuses on the entity's alignment with the community, government, and local environment. Legitimacy theory also provides insight for companies to carry out social and environmental disclosures [19] Information is an important element for investors and business actors because this information is a description of the entity's past, present, and future travel records that will be analyzed for investment decision making in the future.

2.3 Hypothesis Development

The Effect of Green Innovation on Firm Value

The company's goal today is not only to create value for its shareholders but according to stakeholder theory also to create value for stakeholders [20]. If the value of the company is high, investors will be interested in investing their funds in the company [21]. To be able to create good corporate value, the manager's task is to maintain good financial performance, social performance, and environmental performance [7]. If an entity can strike a balance between the economy and the environment, the sustainability of the entity in the future will be achieved. Companies that implement GI will increase productivity, reduce environmental costs, and save costs because they use efficient raw materials so that these cost savings can contribute to the company's financial performance and increase company value in the eyes of investors [22]. Leveling high and regular productivity will encourage companies to maintain company value [23]. This innovation is a form of the company's concern for environmental sustainability. GI will also improve the company's performance by increasing market share and reducing operational costs [24].

H1: Green Innovation has a positive effect on Firm Value

Effect of Environmental Social Governance (ESG) on Firm Value

The publication of environmental information in the company's reports is one method of interacting with businesses that are sensitive to environmental problems in order to foster public peace and help the company achieve legitimacy [25]. Current sustainability issues will have a big impact on the organization's reputation. For the business to be viable in the future, resource management is essential. Corporate governance, ethics, and sustainability are all included in the subset of non-financial metrics known as ESG. According to studies conducted in the US between 2011 and 2016 [26]. ESG can increase

a business's value. Between 2007 and 2016, 100 Egyptian companies were listed on the EGX100 [27]. In 100 Egyptian firms listed on the EGX100 between 2007 and 2016, found evidence that the publication of social, environmental, and governance information has an effect on company value. In Asia, ESG index impacts corporate value. A Study [28] for businesses in the Asian region demonstrates that a company's increased worth is correlated with its ESG performance.

H2: ESG has a positive effect on firm value

EMA Mediates GI on Firm Value

The entity's present objective is to maximize profit while simultaneously guaranteeing the satisfaction of all stakeholders to secure the long-term viability of the business. According to the stakeholder theory, a plan must be in place that may increase firm value while abiding by the law in order to satisfy and win the support of all stakeholders [17]. Green innovation is considered one of the appropriate strategies to achieve this goal but companies need to do research and development by investing capital, resources, and time to get the best results. In developed countries, the level of concern for the environment is now relatively high, which means awareness of the physical and social environment at all levels because it will lead to the company's performance in the future [1]. EMA is a sign that the company knows how important environmental aspects are for the company's sustainability. Using ISO14001 measurement encourages business people to be more effective, because of the savings in working time and minimization costs in the production process. Therefore, the application of EMA in companies will encourage companies to develop a level of environmental performance that is equivalent to their economic performance. The implementation of EMA is a sign that the company realizes the importance of paying attention to the environment the company and the implementation of EMA encourage Green Innovation and the company's competitive advantage [7].

H3: EMA moderates the effect of GI on Firm Value

ESG is a measurement tool in the development of information disclosure to stakeholders regarding the impact of the business operations on the environment, society, and governance carried out by the entity. The company will strive for capital in running its business to be efficient in generating profits for the company. Disclosure of environmental costs in the annual financial statements is not detailed and explained in detail but the company is starting to disclose it in sustainability reporting, it is also necessary to develop an EMA to make it happen [7]. Currently, there are many demands on the company from its stakeholders so the company is more concerned with the environmental damage caused by the company's activities. Companies that ignore social and environmental responsibilities will spend a lot of resources to restore conditions so that environmental damage can be recovered so that the entity will work hard to achieve high productivity and efficiency in the management of its operations. Study [18] companies that implement EMA will encourage companies to continue to innovate and process to improve organizational performance. EMA helps companies in their efforts to reduce their environmental impact and excessive consumption of resources. Companies that pay attention to the environment through ESG disclosure will improve the company image in the eyes of the public.

H4: EMA moderates the influence of ESG on Firm Value

3 Methodology

3.1 Research population

The population in this study are all Energy companies listed on the Indonesia Stock Exchange in the 2019-2021 period as many as 76 entities. Sampling using purposive sampling with criteria. The samples obtained were 72 companies with a total of 216 observations.

3.2 This research is a quantitative study that was analyzed using the Least Square Panel with Eviews 12.0 to clarify the description of the object to be studied so that the results of the study can be concluded.

3.3 Conceptual Definition and measurement of variables

The value of the company

Firm value is a reflection of the current value of predicted future earnings and measures the entity's overall market rating [20]. The Tobins' Q method measures the value of the company by comparing the market value of the stock with the book value of the company's assets. Tobins' Q can also provide an overview of the company's fundamentals and market vision. If the value of Tobins' Q is greater than 1, then the value of the company is more significant than the listed assets, but if the value is less than 1, it indicates that the cost of replacing support is greater than the value of the company and the market value of the entity will decrease [29]. Firm value in this study uses Tobin's Q formula according to the research [29]

Green Innovation

Green Innovation is an environmental approach that is considered appropriate to improve environmental protection, waste treatment, and environmental efficiency [30]. According to [17] GI can reduce the impact on the environment because the entities will use goods that can be recycled from its business activities, GI is considered to be a way out of environmental problems by reducing the use of hazardous and environmentally unfriendly materials during the production process so that even finished goods will ensure products and quality still give a good impression to the public, GI is built for an environmentally friendly and effective production process by using efficient raw materials, this efficiency will reduce waste of raw material used so that raw materials can be used in the future. Measurement [1] The GI is by what describes how the company carries out the production process, consisting of disclosures about the use of new technologies that can reduce the use of water, and energy and minimize waste, how the company produces products with environmentally friendly raw materials and materials that can be recycled.

ESG (Environmental Social Governance)

According to [31] ESG is a series of ways in which companies manage environmental, social, and corporate governance which will have an impact on the entity's ability to carry out its business strategy to obtain long-term value. ESG is an indicator of the sustainability performance of several large companies. ESG does not only evaluate ethics, but also financial motivation to be able to create more enlightened management, best practices, and long-term returns. ESG includes 3 pillars, namely environment, social, and governance. The environment here includes the company's

contribution to climate change with its greenhouse effect, and how the company's waste is managed. The social pillar consists of labor, responsibility for the products produced, human rights, and society. The governance pillar consists of shareholders, management, and corporate strategy in social disclosure. ESG measurement using disclosure [31] consisting of 30 disclosure items.

Environmental Management Accounting (EMA)

According to [32] is a process in accounting that identifies, and collects the flow of energy, water, and materials as well as the final product and non-product produced by the company and information related to costs related to income, environment, and savings. The reasons why companies should implement EMA include [32]:

- a. Pressure from Suppliers: Managers must be able to ensure suppliers meet standards based on the agreed environmental management system.
- b. Pressure from stakeholders: companies must publish their performance regularly in financial reports or publish financial performance reports according to the Global Reporting Initiative (GRI).
- c. Financial Pressure: Investors want to invest their capital in the entities to support the growth of the company's environment.
- d. Pressure from the government: The company must maintain the environment in which the entity is located.

EMA is considered a solution to support environmental regulations and compliance with environmental policies by entities [13, 33] Using the value of eco-efficiency which is measured using ownership analysis of the ISO 14001 certificate. This measurement uses a dummy where companies that have ISO 14001 certificates are given a value of 1 while companies that do not are given a value of 0.

Control Variables:

1. Financial performance

proxied by return on asset ROA. ROA is a ratio that shows how the return on assets used by the company and shows how the company gains effectiveness in managing its assets [34]. ROA is calculated by the formula of net income divided by total assets.

2. Company size.

Is the scale of a company seen from the size of the total assets. Company size indicates the entity's ability to bear the risks that may be encountered during operations [35]. Size is measured using the total asset log (Fig. 1).

4 Results and Discussion

4.1 Classic assumption test

Classical assumption tests carried out in this study include multicollinearity, and autocorrelation tests. The test results show that the data in this study are free from multicollinearity and autocorrelation.

4.2 Data Panel Regression

To find out which approach is the best for this research, the Chow test and Hausman test are used (Table 1).

The results above, show the Prob value. Cross-section Chi Square < 0.05 , then it can be concluded that the selected model is *FixedEffectModel*.

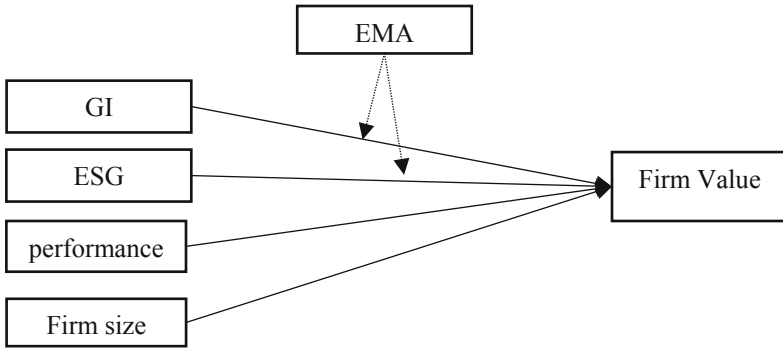


Fig. 1. Conceptual Framework

Table 1. Chow Test

Effects Test	Statistics	df	Prob
Cross-section F	4.227369	(71.138)	0.0000
Cross-section Chi-square	249.543101	71	0.0000

Source: Data Processed Eviews 12

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistics	Chi-Sq.df	Prob
Cross-section random	13.654087	6	0.0337

Source: Data Processed Eviews 12

The results in Table 2 show a probability value of $0.0337 < 0.05$. This means that the model chosen in the data estimation is the Fixed Effect Model. So that means, the model chosen in this equation is the Fixed Effect Model.

4.3 Hypothesis test

The test results in Table 3, show that the probability value of GI is $0.5764 > 0.05$. Then, it is concluded that Green Innovation does not affect Firm Value (H1: rejected).

Table 3. Hypothesis testing 1

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	1.166499	0.385727	3.024158	0.0030
GI	0.370515	0.661774	0.559882	0.5764

Source: Data Processed Eviews 12

Table 4. Hypothesis Testing 2

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	0.624750	0.129181	4.836228	0.0000
ESG	1.148116	0.439476	2.612465	0.0099

Source: Data Processed Eviews 12

Table 4 shows that the probability value of ESG is $0.009 < 0.05$. Therefore, it is concluded that ESG has a positive effect on Firm Value (H2: accepted).

Table 5 shows that the probability value of GI EMA is $0.0067 < 0.05$. So, it is concluded that EMA can moderate the effect of GI on Firm Value. This can be seen from the Adjusted R-Square value, the effect of GI on Firm Value is 0.0023, moderated by EMA so that the Adjusted R-Square value increases to 0.0466. That is the EMA variable moderates (strengthens) the effect of Green Innovation on Firm Value (H3 is accepted).

Table 6 shows that the probability value of X2Z is $0.3790 > 0.05$. Thus, it is concluded that the EMA does not moderate the effect of ESG on Firm Value (H4 is rejected).

Table 5. Hypothesis Testing 3

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	0.180132	0.325521	40.553366	0.5806
GI	0.823312	0.427086	1.927742	0.0552
EMA	1.179759	0.377601	3.124350	0.0020
GI_EMA	1.372405	0.50128	2.737797	0.0067

Source: Data Processed Eviews 12

Table 6. Hypothesis Testing 4

Variable	Coefficient	Std.Error	t-Statistic	Prob
C	0.291527	0.306705	0.950513	0.3435
ESG	0.285114	0.834565	0.341632	0.7331
EMA	0.60555	0.433314	1.385957	0.1679
ESG_EMA	0.850066	0.963231	0.882516	0.3790

Source: Data Processed Eviews 12

5 Discussion

- (1) Green Innovation does not affect Firm Value, meaning that GI in energy companies in Indonesia cannot be a prediction in measuring company value. Green Innovation which aims to increase the level of productivity by using environmentally friendly technology has not become important information for investors in assessing companies. There are still many investors who only look at financial performance for their investment decisions and pay less attention to the company's environmental performance. Public awareness of environmental issues in developing countries is still low compared to developed countries [36]. The results of this study are by the research [13, 37] because producing environmentally friendly products requires large costs and investments. The company also requires large costs for operational activities which in the end does not affect the value of the company.

- (2) ESG has a positive influence on Firm Value

Companies with good ESG indicate companies with good levels of ESG disclosure have better firm value than companies with low ESG. Stakeholder theory states that operating business entities must provide benefits to their stakeholders and one way to do this is by implementing ESG which provides important disclosures that show the resilience and sustainability of the entity. A company with a good level of ESG disclosure means thinking about environmental, social, and corporate governance aspects to meet the expectations of its stakeholders. ESG is also used as an indicator to measure the ethical impact of investing in a business and to be a good image for investors in the capital market. Companies that implement ESG can manage waste and use resources very wisely so that they can perform efficiently. The results of the study are by the research [28, 38].

- (3) EMA moderates (strengthens) the influence of GI on Firm Value

The increase in the company's economic performance due to implementing Green Innovation is strengthened by the application of EMA, if viewed from the perspective of stakeholders, GI aims to assist companies in improving company performance by producing environmentally friendly products as a competitive advantage that is highlighted by the company to increase consumer loyalty and the application of EMA can provide information to consumers that the products produced by the company are environmentally friendly with the application of ISO 14001 which shows that the company implements policies that are committed to being responsible for the environment such as resource sustainability, pollution prevention, climate change mitigation and minimizing the company's impact on the environment [39]. The results of this study are in line with research [24, 33].

- (4) EMA does not moderate the effect of ESG on Firm Value.

To be able to implement ESG, companies need EMA support as a company strategy to be able to innovate to produce environmentally friendly products so their business processes do not damage the environment. The application of EMA requires large development costs (R&D) to be able to find ways to produce environmentally friendly products and costs for the company's waste management so as not to pollute the environment. In Indonesia, obtaining ISO 14001 requires long stages and large costs so that companies can carry out distribution, product development, and business development so that the negative impact of business can be reduced, especially those

that have the potential to damage the environment. The application of EMA cannot strengthen the effect of ESG on Firm Value. Research results are not in line with research [26].

6 Conclusion

From the results of the study, it can be concluded that Green Innovation does not affect Firm Value, but different results can be seen for the ESG variable where the results of ESG have a positive effect on Firm Value. For EMA moderation, it turns out that EMA is only able to moderate (strengthen) the influence of Green Innovation on Firm Value but EMA does not succeed in moderating the effect of ESG on Firm Value. This study only uses a sample of energy companies listed on the Indonesia Stock Exchange, so the results are difficult to generalize. Further research can expand the research sample and extend the observation period. EMA measurement in this study uses the ISO 14001 ownership indicator, future research can use eco-efficiency proxies to measure EMA.

References

1. D. Agustia, T. Sawarjuwono, and W. Dianawati, "The mediating effect of environmental management accounting on green innovation - Firm value relationship," *International Journal of Energy Economics and Policy*, vol. 9, no. 2, pp. 299–306, 2019, doi: <https://doi.org/10.32479/ijeep.7438>.
2. H. Halid, "6Sources of Air Pollution in the World - Indonesia Environment & Energy Center," IEC, 2020. <https://environment-indonesia.com/6-source-pollution-air-di-dunia/> (accessed Sep. 23, 2022).
3. R. Dewi and A. Rahmianingsih, "Increasing Company Value Through Green Innovation And Eco-Efficiency," *Expansion: Journal of Economics, Finance, Banking, and Accounting*, vol. 12, no. 2, pp. 225–243, Nov. 2020, doi: <https://doi.org/10.35313/expansion.v12i2.2241>.
4. AIHasanudin, Y. Yuliansyah, J. Said, C. Susilowati, and Muafi, "Management control system, corporate social responsibility, and firm performance," *Entrepreneurship and Sustainability Issues*, vol. 6, no. 3, pp. 1354–1368, Dec. 2018, doi: [https://doi.org/10.9770/JESI.2019.6.3\(21\)](https://doi.org/10.9770/JESI.2019.6.3(21)).
5. DD Dereli, "Innovation Management in Global Competition and Competitive Advantage," *Procedia Soc Behav Sci*, vol. 195, pp. 1365–1370, Jul. 2015, doi: <https://doi.org/10.1016/J.SBSPRO.2015.06.323>.
6. Y. Eiadat et al., "Green and competitive? An empirical test of the mediating role of environmental innovation strategy," *Journal of World Business*, vol. 43, no. 2, pp. 131–145, Mar. 2008, doi: <https://doi.org/10.1016/j.jwb.2007.11.012>.
7. IMAr, "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: <https://doi.org/10.1016/j.sbspro.2012.09.144>.
8. HY Chang, LW Liang, and YL Liu, "Using environmental, social, governance (ESG) and financial indicators to measure bank cost efficiency in Asia," *Sustainability (Switzerland)*, vol. 13, no. 20, 2021, doi: <https://doi.org/10.3390/su132011139>.
9. N. Laila, ASRusydia, MI Irfany, HR Imron, P. Srisusilawati, and M. Taqi, "Energy economics in Islamic countries: A bibliometric review," *International Journal of Energy Economics and Policy*, vol. 11, no. 2, pp. 88–95, 2021, doi: <https://doi.org/10.32479/IJEEP.10763>.

10. N. Bıçakcıoğlu, V. Theoharakis, and M. Tanyeri, "Green business strategy and export performance: An examination of boundary conditions from an emerging economy," *International Marketing Review*, vol. 37, no. 1, pp. 56–75, Jan. 2020, doi: <https://doi.org/10.1108/IMR-11-2018-0317>.
11. C. Cavichi, C. Oppi, and E. Vagnoni, "Mobilising management control systems to support sustainability strategy in SMEs: the case of a waste disposal firm," *Meditari Accountancy Research*, 2022, doi: <https://doi.org/10.1108/MEDAR-07-2021-1382>.
12. Mariyamah and S. handayani, "Influence Of Green Innovation On Economic Performance With Environmental Management Accounting As Moderating Variables," *Journal of Accounting and Auditing*, vol. 16/2, pp. 105–128, 2019.
13. W. Husnaini and B. Tjahjadi, "Quality management, green innovation and firm value: Evidence from Indonesia," *International Journal of Energy Economics and Policy*, vol. 11, no. 1, pp. 255–262, 2021, doi: <https://doi.org/10.32479/ijeep.10282>.
14. IAP 2, "The Situation and Challenges of ESG Travel in Indonesia," Mar. 2022. <https://iap2.or.id/situasi-dan-tantangan-perjalanan-esg-di-indonesia/> (accessed Sep. 21, 2022).
15. N. Mohd Fuzi, NFHabidin, SE Janudin, and SYY Ong, "Critical success factors of environmental management accounting practices: findings from Malaysian manufacturing industry," *Measuring Business Excellence*, vol. 23, no. 1, pp. 1–14, Mar. 2019, doi: <https://doi.org/10.1108/MBE-03-2018-0015>.
16. MM Wachira and D. Wang'Ombe, "The Application Of Environmental Management Accounting Techniques By Manufacturing Firms In Kenya," *Advances in Environmental Accounting and Management*, vol. 8, pp. 69–89, 2019, doi: <https://doi.org/10.1108/S1479-359820190000008004>.
17. D. Agustia, "Innovation, environmental management accounting, future performance: Evidence in Indonesia," *Journal of Security and Sustainability Issues*, vol. 9, no. 3, 2020, doi: [https://doi.org/10.9770/jssi.2020.9.3\(24\)](https://doi.org/10.9770/jssi.2020.9.3(24)).
18. RN Sari, A. Pratadina, R. Anugerah, K. Kamaliah, and ZM Sanusi, "Effect of environmental management accounting practices on organizational performance: role of process innovation as a mediating variable," *Business Process Management Journal*, vol. 27, no. 4, pp. 1296–1314, 2020, doi: <https://doi.org/10.1108/BPMJ-06-2020-0264>.
19. N. Anjani and IBP Astika, "The Effect of Corporate Social Responsibility Disclosure on Company Value with Corporate Liquidity as Moderating," 2018. <https://ojs.unud.ac.id/index.php/Accountancy/article/view/36646> (accessed Oct. 02, 2022).
20. HHR Weng, JS Chen, and PC Chen, "Effects of green innovation on environmental and corporate performance: A stakeholder perspective," *Sustainability (Switzerland)*, vol. 7, no. 5, pp. 4997–5026, 2015, doi: <https://doi.org/10.3390/su7054997>.
21. N. Bıçakcıoğlu-Peynirci and M. Tanyeri, "Stakeholder and resource-based antecedents and performance outcomes of green export business strategy: insights from an emerging economy," *International Journal of Emerging Markets*, vol. 17, no. 1, pp. 1–46, Jan. 2022, doi: <https://doi.org/10.1108/IJOEM-03-2020-0245>.
22. S. Wang, H. Wang, and J. Wang, "Exploring the effects of institutional pressures on the implementation of environmental management accounting: Do top management support and perceived benefits work?" *Bus Strategy Environment*, vol. 28, no. 1, 2019, doi: <https://doi.org/10.1002/bse.2252>.
23. Winarsih, K. Fuad, and H. Setyawan, "The Mediating of Green Product Innovation on the Effect of Accounting Capability and Financial Performance of MSMEs in the New Normal Era," in *Lecture Notes in Networks and Systems*, 2021, vol. 278. doi: https://doi.org/10.1007/978-3-030-79725-6_56.
24. X. Xie, J. Huo, and H. Zou, "Green process innovation, green product innovation, and corporate financial performance: A content analysis method," *J Bus Res*, vol. 101, pp. 697–706, Aug. 2019, doi: <https://doi.org/10.1016/J.JBUSRES.2019.01.010>.

25. CK Lindblom, "The implications of Organizational Legitimacy for Corporate Social Performance and Disclosure," *undefined*, 1994.
26. A. Fatemi, M. Glaum, and S. Kaiser, "ESG performance and firm value: The moderating role of disclosure," *Global Finance Journal*, vol. 38, pp. 45–64, Nov. 2018, doi: <https://doi.org/10.1016/j.gfj.2017.03.001>.
27. A. Aboud and A. Diab, "The impact of social, environmental and corporate governance disclosures on firm value: Evidence from Egypt," *Journal of Accounting in Emerging Economies*, vol. 8, no. 4, pp. 442–458, Nov. 2018, doi: <https://doi.org/10.1108/JAEE-08-2017-0079/FULL/XML>.
28. A. Melinda and R. Wardhani, "The Effect of Environmental, Social, Governance, and Controversies on Firms' Value: Evidence from Asia," 2020, pp. 147–173. doi: <https://doi.org/10.1108/s1571-038620200000027011>.
29. SC Chang and CF Wang, "The effect of product diversification strategies on the relationship between international diversification and firm performance," *Journal of World Business*, vol. 42, no. 1, pp. 61–79, Mar. 2007, doi: <https://doi.org/10.1016/j.jwb.2006.11.002>.
30. H. Yang, X. Shi, and S. Wang, "Moderating Effect of Chief Executive Officer Narcissism in the Relationship Between Corporate Social Responsibility and Green Technology Innovation," *Front Psychol*, vol. 12, Oct. 2021, doi: <https://doi.org/10.3389/fpsyg.2021.717491>.
31. Nasdaq, "ESG Reporting Guide 2.0 A Support Resource for Companies," 2019.
32. IFAC, *Environmental management accounting: international guidance document*. International Federation of Accountants, 2005.
33. SK Singh, M. del Giudice, R. Chierici, and D. Graziano, "Green innovation and environmental performance: The role of green transformational leadership and green human resource management," *Technol Forecast Soc Change*, vol. 150, Jan. 2020, doi: <https://doi.org/10.1016/j.techfore.2019.119762>.
34. Cashmere, "Banks and Institutions Other Finance," 2014. <https://www.scribd.com/document/432924545/Dr-Kasmir-Bank-Dan-Lembaga-Keuangan-Lainnya-Edisi-Revisi-2014-intro-pdf> (accessed Oct. 02, 2022).
35. G. Good, A. Pratama, I. Gusti, and B. Wiksuana, "Influence Of Company Size And Leverage On Company Value With Profitability As A Mediation Variable," *E-Jurnal Manajemen*, vol. 5, no. 2, pp. 1338–1367, Feb. 2016, Accessed: Oct. 02, 2022. [Online]. Available: <https://ojs.unud.ac.id/index.php/manajemen/article/view/17498>
36. JW Huang and YH Li, "How resource alignment moderates the relationship between environmental innovation strategy and green innovation performance," *Journal of Business and Industrial Marketing*, vol. 33, no. 3, pp. 316–324, 2018, doi: <https://doi.org/10.1108/JBIM-10-2016-0253>.
37. VP Fabiola, "Influence Of Green Innovation And Financial Performance On Competitive Advantage And Company Value In 2015–2020," 2021, Accessed: Oct. 05, 2022. [Online]. Available: http://digilib.unusa.ac.id/data_library-29631.html
38. T. Hoang, "The role of the integrated reporting in raising awareness of environmental, social and corporate governance (ESG) performance," in *Developments in Corporate Governance and Responsibility*, vol. 24, Emerald Group Publishing Ltd., 2018, pp. 47–69. doi: <https://doi.org/10.1108/S2043-052320180000014003>.
39. G. T. Solvida and H. Latan, "Linking environmental strategy to environmental performance: Mediation role of environmental management accounting," *Sustainability Accounting, Management and Policy Journal*, vol. 8, no. 5, 2017, doi: <https://doi.org/10.1108/SAMPJ-08-2016-0046>.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

