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Determinants of Tax Regulations Referring to ESG Principles on Company Performance in Indonesia

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A B S T R A C T

Purpose: This study examines ESG integration in Indonesia's tax regulations and their impact on financial performance, focusing on green investments.
Method: This study uses a qualitative case study method to analyze ESG integration in Indonesia's tax regulations, focusing on policies, carbon tax effectiveness, and emissions disclosure. The research is based on corporate legitimacy and institutional theories to explore the relationship between tax regulations and sustainable practices.
Findings: The study's findings reveal significant growth in green investments in Indonesia, largely driven by supportive ESG-oriented tax policies. Despite this progress, challenges such as limited corporate awareness and data availability remain barriers to fully realizing the potential of these policies. The analysis also highlights the importance of these regulations in fostering sustainable business practices, particularly in industries like palm oil that are crucial for addressing climate change.
Novelty: This research uniquely examines the impact of ESG-focused tax regulations on green investments and sustainable practices in Indonesia, using corporate legitimacy and institutional theories. It fills a literature gap by exploring how tax regulations drive ESG integration in the business sector of a developing country.
Implications: The study has important implications for policymakers, businesses, and stakeholders in Indonesia and similar economies. It shows that ESG-focused tax policies positively impact green investments, suggesting that refining and implementing these policies could strengthen sustainable business practices and support environmental goals. The study also emphasizes the need for greater corporate awareness and better data collection to address challenges and ensure effective ESG integration in the corporate sector.

1. Introduction

Climate change has become a significant issue because of its impact which causes new problems for human civilization, both slowly and through extreme events, which ultimately causes economic (income and physical assets) and non-economic (individuals, communities, and the environment) losses and damage.) (Nishihara, 2023). Several significant real-world impacts, including floods, forest fires, and extreme weather events, coupled with the decline in environmental quality, have a substantial impact on economic value, encompassing financial assets. One of the causes of climate change is the impact of

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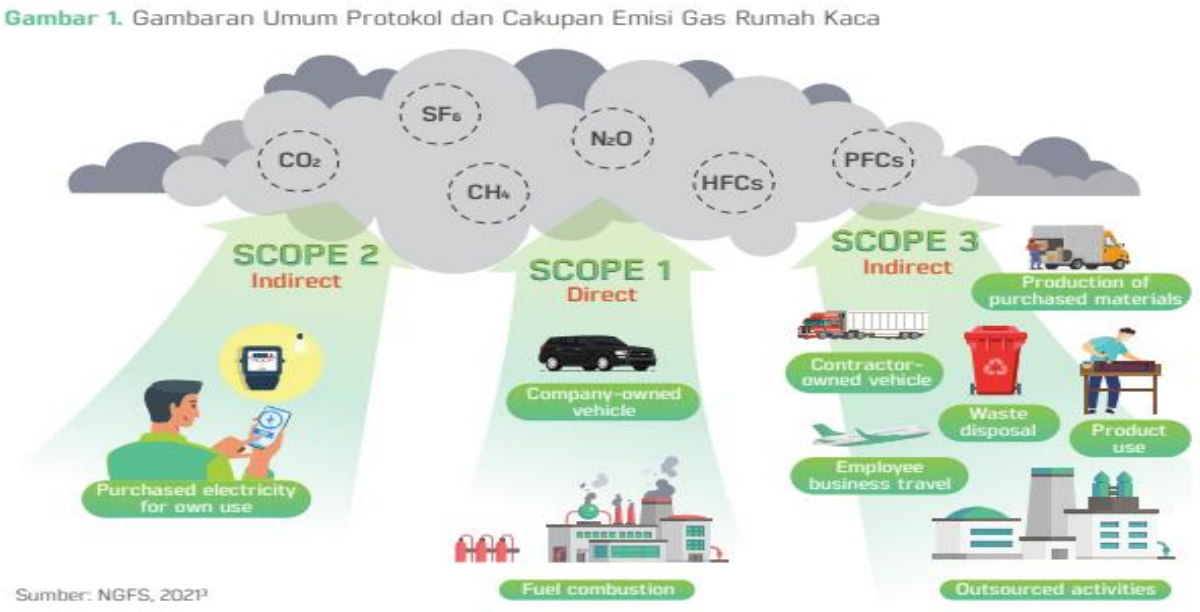
greenhouse gas emissions (Vovchenko et al., 2023). Climate change due to the impact of greenhouse gas emissions can be seen in the following illustration **Figure 1**.



Source: Financial Services Authority (FSA) (2022)

Figure 1. Greenhouse Gas (GHG) Process

Based on the image above, it can be explained that direct and indirect greenhouse gas (GHG) emissions are categorized based on three scopes determined by the GHG Protocol: Scope 1, Scope 2, and Scope 3. Scope 1 includes GHG emissions that occur indirectly, directly from sources owned or controlled by the reporting company, such as emissions from combustion in boilers, furnaces, and vehicles. Scope 2 includes indirect GHG emissions from electricity generation, steam, heating, or cooling obtained by the reporting company. Scope 3 covers all other indirect GHG emissions in the reporting company's value chain, including 15 categories such as purchased goods and services, related fuel and energy activities, transportation and distribution, and investments. In the banking industry, examples are Scope 1 for emissions from operational vehicles, Scope 2 for emissions from electricity purchases, and Scope 3 for financed emissions related to credit facilities and investment portfolios.

In Indonesia, the land use sector, especially deforestation for oil palm plantations, is the main contributor to GHG emissions (Wahyudi, 2024). This is in line with data showing that Indonesia's annual CO2 emissions are very high, especially from this sector. The dominance of palm oil in the Indonesian economy, which is a major export commodity, further strengthens the link between economic growth, deforestation, and increased GHG emissions (Wahyudi et al., 2024). The data is shown below **Table 1**.

Data shows that although Indonesia's contribution to global carbon emissions is recorded at around 1.7%, this figure cannot be underestimated. Indonesia's position as an archipelagic country with extensive tropical rainforests makes it vulnerable to the impacts of climate change (Prajapati et al., 2021). The high level of deforestation for agriculture, plantations, and infrastructure development is one of the main causes of increasing carbon emissions from Indonesia.

Amid the challenges of climate change, Environmental, Social, and Governance (ESG) principles are increasingly relevant in the business world. Companies in Indonesia, including the palm oil plantation sector, are required to adopt sustainable and environmentally friendly business practices (Nishihara, 2023). The implementation of ESG principles is becoming increasingly urgent due to pressure from various parties, such as investors who

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are increasingly concerned about climate risks, consumers who are increasingly environmentally conscious, and increasingly stringent government regulations (Kolesnikov, 2023).

By implementing ESG principles, companies can reduce greenhouse gas emissions and increase resilience to climate change. This can help prevent more drastic temperature increases and reduce their negative impact on GDP (Hasnawati et al., 2024).

It clearly illustrates the close relationship between rising global temperatures and a decline in a country's Gross Domestic Product (GDP). The higher the global average temperature, the greater the potential decline in GDP that can occur (Roberts, 2022). The trend line on the graph shows a consistent trend, where every one-degree Celsius increase in temperature is associated with a significant decrease in GDP. This indicates that climate change not only impacts the environment but also has serious economic consequences (Diaz et al., 2023).

Indonesia as a developing country faces challenges in integrating ESG principles into its tax regulations (Chaisse et al., 2021). However, the government's efforts to implement tax policies that support ESG have shown positive developments. For example, Law No.4/2023 concerning Development and Strengthening of the Financial Sector (UU P2SK) emphasizes the importance of sustainable finance, which is an ecosystem with comprehensive support in the form of policies, regulations, norms, standards, products, transactions, and financial services that align economic interests, environmental and social issues in financing sustainable activities and financing the transition towards sustainable economic growth (Kolesnikov, 2023).

To reduce the negative impacts of climate change, Indonesia has demonstrated a commitment to decarbonization through the Nationally Determined Contribution (NDC) which was updated in 2022 (Plakitkin et al., 2022). Indonesia is committed to reducing greenhouse gas (GHG) emissions unconditionally to 31.89% and conditionally (with international support) to 43.2% compared to the business-as-usual (BAU) scenario in 2030. This commitment increases from the NDC previously set a reduction in emissions of 29% unconditionally and 41% conditionally by 2030. For the long term, Indonesia through the Long-Term Strategy on Low Carbon and Climate Resilient Development 2050 (LTS-LCCR 2050) aims to reach peak national GHG emissions in 2030 and towards net-zero emissions by 2060 or sooner.

The integration of ESG principles in tax regulations is a progressive step that can encourage companies to adopt sustainable and responsible business practices (Purpura, 2023). Tax regulations that support ESG can provide incentives for companies to innovate in the sustainable use of natural resources, protect workers' rights, and increase transparency and accountability (Lot et al., 2023).

Indonesia has taken significant steps in addressing climate change by implementing a carbon tax through the Law on Harmonization of Tax Regulations (HPP) (Li & Li, 2022). This policy makes Indonesia the first developing country to implement a carbon tax, on par with developed countries such as the UK, Japan, and Singapore (Netjes & Freyer, 2022). The main goal of a carbon tax is to encourage a shift to greener, lower-carbon economic activities. The carbon tax will be imposed on the coal-fired power plant (PLTU) sector in stages, with a cap and tax mechanism that provides flexibility for companies to purchase carbon certificates. The implementation of this carbon tax is expected to accelerate the achievement of Indonesia's greenhouse gas emission reduction targets and attract green investment (Dorofeev & Tamashiro, 2023).

Indonesia has officially implemented a carbon tax, but the tariff applied is relatively low compared to other countries (Duan et al., 2024). Funds collected from this tax will be used for various sustainable development programs, including climate change mitigation and social assistance. However, when compared to countries such as Sweden, Finland, or Norway which implement much higher carbon tax rates, Indonesia's policy is still relatively new and gradual. Globally, various countries have adopted carbon tax mechanisms or emissions trading systems to reduce the impact of climate change, with varying levels of implementation and rates (Duan et al., 2024).

2. Critical Review

This research adopts the perspective of corporate legitimacy theory and institutional theory to analyze the integration of Environmental, Social, and

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Governance (ESG) principles in tax regulations in Indonesia. Corporate legitimacy theory will be used to understand how companies attempt to gain social legitimacy by adopting sustainable business practices (Park et al., 2024). Meanwhile, institutional theory will help explain the influence of institutions, both formal (such as regulations) and informal (such as norms and values), on company behavior.

1) Legitimacy Theory

Legitimacy theory explains how entities, such as companies, seek to gain and maintain social approval (Belahouaoui & Attak, 2024). In the context of your research, companies that adopt ESG principles try to show that their actions are in line with the values of a society that is increasingly concerned about the environment and society. In this way, companies can build a positive reputation, attract ESG-oriented investors, and avoid pressure from various stakeholders. This theory is relevant because it can explain why companies in Indonesia, especially those that interact with international markets, are motivated to adopt ESG principles (Belahouaoui & Attak, 2024; Hong & Lee, 2024).

2) Agency Theory

Agency theory focuses on the relationship between the owner (principal) and manager (agent) in an organization ("Patenting and Business Outcomes for Cleantech Startups Funded by The Advance Research Projects Agency Energy," 2020). In the context of ESG, this theory can explain potential conflicts of interest between owners who may be more concerned with short-term profits and managers who may be more concerned with long-term sustainability (Manurung et al., 2024). In Indonesia, diverse corporate ownership structures (e.g., family, state, foreign) can influence the extent to which ESG principles are adopted. This theory is relevant to understanding barriers to ESG implementation in several companies (Ma & Park, 2021).

3) Institutional Theory

Institutional theory explains how pressure from the social and political environment (institutions) can shape organizational behavior (Yusuf, 2014). In the ESG context, government regulations, social norms, and pressure from institutional investors can encourage companies to adopt ESG practices. In Indonesia, changes to tax regulations that integrate ESG principles can be a strong incentive for companies to change their business practices. This theory is very relevant to understanding how the institutional context in Indonesia influences ESG implementation (Prasetyo, 2016).

This research aims to understand in depth how ESG (Environmental, Social, and Governance) principles are adopted by companies in Indonesia, with an emphasis on the role of tax regulations. Through a qualitative approach, this research will dig deeper into the motivations, challenges, and opportunities that companies face in integrating ESG into their business practices. The main focus of this research is on the following five key questions:

a) *Analyzing Company ESG Performance in Indonesia: Analyzing the relationship between ESG practices, especially in low carbon leader companies, with financial performance and business sustainability.*
b) *Evaluating the Effectiveness of Government Policies in Encouraging Green Investment: Analyze the impact of government policies, especially green tax incentives and environmental regulations, on increasing investment in the green sector.*
c) *Studying the Impact of Carbon Tax Policy on the Economy and Environment: Analyzing the effect of implementing a carbon tax on economic growth, community welfare, and reducing greenhouse gas emissions.*
d) *Analyzing the Quality of GHG Emission Measurement and Disclosure: Evaluate the extent to which companies in Indonesia, especially large companies, measure and disclose GHG emissions accurately and transparently.*

4) The Research Hypothesis

H1: ESG Performance: Low-carbon leader companies in Indonesia have better financial performance and a higher level of sustainability compared to non-low-carbon leader companies.
H2: Green Investment: Green tax incentive policies and strict environmental regulations are significantly positively correlated with increased investment in the renewable energy sector and other green technologies.

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H3: Carbon Tax: Implementing a carbon tax will encourage green economic growth, improve community welfare, and significantly reduce greenhouse gas emissions.

H4: Emissions Disclosure: Large companies listed on the stock exchange in Indonesia have higher quality measurement and disclosure of GHG emissions compared to small and medium companies.

3. Method Innovation

This research uses a qualitative approach with a case study method to examine the integration of ESG (Environmental, Social, and Governance) principles in tax regulations in Indonesia. The main objective of this research is to analyze how ESG-oriented tax policies can influence green investment strategies and sustainable business practices in Indonesia.

The data used in this research is secondary data obtained from various official sources and trusted institutional publications. Primary data sources include:

a) Company Financial Reports: Data from the annual financial reports of companies listed on the Indonesia Stock Exchange, especially those included in the LQ45 index (Rizani & Respati, 2018).
b) Government Policy Documents: Including Law no. 4/2023 concerning Development and Strengthening of the Financial Sector (UU P2SK) and Indonesia's Nationally Determined Contributions (NDC) document (Rizani & Respati, 2018).
c) ESG Reports: Reports from companies and institutions documenting ESG-related implementation and achievements (Sugiarto et al., 2023).
d) Other Official Sources: Data from Bank Indonesia, Financial Services Authority (OJK), Ministry of Environment and Forestry (KLHK), as well as reports from international organizations such as Bain & Company, GenZero, Standard Chartered, and Temasek (Pambudi et al., 2023).

Data was collected through documentation techniques by reviewing relevant reports, documents, and publications. This secondary data is then analyzed to identify patterns, relationships, and implications of the application of ESG principles in tax regulations on green investment in Indonesia (Ismail et al., 2022).

Data analysis was carried out using descriptive methods and content analysis to interpret information obtained from various data sources. Analysis stages include:

a) Data Collection and Categorization: Relevant data is collected and categorized based on key research themes such as ESG tax policies, green investment strategies, and socio-economic impact.
b) Data Interpretation: Categorized data is interpreted to understand how ESG-oriented tax regulations are implemented and their impact on sustainable business practices.
c) Presentation of Findings: The results of the analysis are presented in a narrative format, describing the relationship between ESG tax policies and green investment strategies. Graphs and tables are included to visualize and clarify the findings.

4. Innovation Results and Discussion

1) ESG Performance of Low Carbon Leader Companies in Indonesia

Based on an analysis of secondary data from various official sources, it has been observed that tax policies aligned with Environmental, Social, and Governance (ESG) principles play a significant role in shaping green investment strategies in Indonesia (Lucey & Ren, 2023). Sustainalytics' ESG risk evaluation uses a risk decomposition approach, which considers two primary dimensions of ESG issues: exposure and management. Exposure refers to the material ESG risks a company faces, which influence its overall ESG risk assessment. Management reflects the company's commitment and tangible actions to address ESG concerns through various policies and corporate initiatives (Atichasari et al., 2023). Companies are subsequently categorized into one of five groups based on their ESG score evaluation. Next based on the evaluation ESG score, the company recorded grouped into one of 5 categories, as follows, **Table 2.** ESG Risk Score Categories and Descriptions.

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The firm's Controversy Research is a collection of listed companies ever implicated in activities that may have been damaging to shareholders, the environment or operations. According to the certificate controversy research, companies are split as either with no evidence of any contestation or fall into one out of five distinct categories (Saputra et al., 2024). Based on analysis controversy, the company recorded grouped by category without proof or one of 5 categories, as follows **Table 3**. Controversy Categories and Descriptions.

Based on data published by the Indonesia Stock Exchange on the idx.co.id website, the following is the ESG Performance of Low Carbon Leader Companies in Indonesia according to Sustainalytics data, concerning P/B, P/E, and ROE ratios across various industries in Indonesia. The data shows significant variations in ESG performance and financial profiles between companies, despite being categorized as 'low carbon leaders'. The industrial sector plays an important role in determining this performance. Companies in the banking and consumer sectors tend to have better ESG scores, possibly due to a focus on social responsibility and stricter governance. In contrast, the energy sector shows wider variation in terms of ESG performance. In terms of financial performance, the banking and technology sectors tend to have higher market valuations, reflected in higher P/E ratios. However, further analysis needs to be carried out to understand the factors that influence differences in financial performance between sectors and companies.

4.2Increasing Green Investment in Indonesia

Data from Southeast Asia's Green Economy 2024 Report shows that Indonesia is the largest recipient of green investment in Southeast Asia in 2023, with total investment reaching almost USD 1.6 billion. These investments are spread across various sectors, including renewable energy, waste processing and recycling, environmentally friendly transportation, land conservation, and sustainable agriculture. Tax policies that support green investment have provided incentives for investors to invest their capital in sustainable sectors (Yoon et al., 2021). Green investment, which is investment in sustainable sectors that provide long-term benefits for the economy, society, and environment, grew around 28% compared to the previous year. This capital is equivalent to 25% of total green investment in Southeast Asia. One of the projects highlighted is the Indonesia Investment Authority (INA) initiative which initiated the EV Ecosystem Fund with Chinese battery manufacturers, with a total agreement value of over USD 15 billion since 2020 to support the battery and electric vehicle industry.

4.3The Impact of Carbon Tax and Green Investment Policies on Economic Growth and Welfare in Indonesia

The graph shows that under all CPOS, TRNS, and LCCP scenarios, positive economic growth can be achieved despite emission reduction targets. With higher additional investments to support mitigation actions, macroeconomic losses would be less under strict GHG reductions (LCCP) (Saint-Jacques, 2022). Indonesia's GDP under CPOS will reach USD 3,316 billion in 2050 with an average growth of 5.04%. Meanwhile, the average GDP growth under TRNS (5.02%) and LCCP is slightly lower (5%) and will reach USD 3,282 billion and USD 3,262 billion in 2050. The economic impact of mitigation in the AFOLU and energy sectors will be greater. high level by including co-benefit opportunities to reduce GHGs and pollution that damage health. Similarly, there is an increase in GDP welfare under all scenarios. Indonesia will become a high-income country where GDP per capita increases from USD 2,983 in 2010 to USD 10,039 under CPOS, USD 9,935 under TRNS, and USD 9,876 under LCCP in 2050 (Tasnia et al., 2020).

4.4Impact of Tax Policy on Reducing GHG Emissions

Fiscal policy, particularly tax incentives for green investment, has been a significant catalyst in Indonesia's efforts to reduce greenhouse gas emissions (Mustapha et al., 2023). By providing incentives for the renewable energy, energy efficiency, and electric vehicle sectors, the government has succeeded in encouraging the growth of sustainable sectors and attracting more environmentally friendly investments (Hasnawati et al., 2024). For example, the growth in installed capacity of solar and wind power plants in recent

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years shows the effectiveness of this policy. However, to measure the impact comprehensively, more detailed data and more in-depth analysis are needed. Additionally, keep in mind that fiscal policy is only one part of the solution. Integration with other environmental and energy policies and increasing public awareness are also crucial in achieving more ambitious emissions reduction targets (Yeh & Liao, 2024).

Table 4. the regulatory framework for carbon taxation in Indonesia is outlined across various levels, each addressing different aspects of implementation and utilization. At the highest legislative level, Law 7/2021 on Harmonization of Tax Regulations, particularly Article 13, establishes the imposition of taxes on carbon emissions, targeting those detrimental to the environment. This law aims to align with broader carbon market and tax roadmaps, emphasizing fairness and affordability. The carbon tax rate is set at a minimum of IDR 30.00 per kilogram of CO2 equivalent (kg CO2e) and is designed to support climate change control, social assistance, and renewable energy subsidies. The law was enacted to be effective from April 1, 2022, initially focusing on coal-fired power plants (PLTU). At the presidential level, Presidential Decree 98/2021 on Carbon Economic Value Implementation, specifically Article 58, defines the carbon levy as state-imposed fees based on carbon content or emission potential. This decree provides a framework for implementing such levies, including existing or new forms such as the carbon tax. Draft regulations from the Ministry of Finance further detail the carbon tax framework. These include a draft regulation on carbon tax rates and taxable objects, outlining specific tax rates and the bases for taxation. Other draft regulations include the implementation procedures and mechanisms for the carbon tax, a strategic roadmap for carbon tax implementation, and guidelines on tax subjects and revenue allocation.

The implementation phases of carbon regulation began in 2021 with the establishment of the Presidential Decree and the enactment of Law 7/2021, incorporating carbon tax provisions and initiating carbon trading mechanisms. Piloting of carbon trading was conducted in the power generation sector with an initial rate of IDR 30,000 per ton of CO2 equivalent (tCO2e), followed by an evaluation by the Ministry of Energy and Mineral Resources (ESDM). In 2022, the focus shifted to synchronizing Cap & Trade and Cap & Tax systems in the electricity sector, setting emission caps for coal-fired power plants, and preparing monitoring, reporting, and verification (MRV) systems for carbon trading. The year 2025 is anticipated to see the full implementation of carbon trading through a carbon exchange, with an expanded scope for Cap & Trade and Cap & Tax systems based on sector readiness. Revenue generated from the carbon tax is earmarked for climate change control, social assistance for low-income households, renewable energy subsidies, and greenhouse gas emission reduction from emission sources. In summary, the regulations established by the government, as demonstrated by the carbon tax calculation, have the potential to contribute to climate improvement and sustainability. Implementing these carbon tax policies not only promotes environmental responsibility but has a profoundly positive impact on the overall effort to reduce greenhouse gas emissions. By effectively utilizing the revenue generated from the carbon tax, these regulations can support the development of sustainable practices and help drive the transition toward a greener economy, ultimately leading to a more sustainable and environmentally friendly future (Tsai & Lin, 2024).

Although ESG tax policies provide many benefits, there are several challenges in their implementation. These challenges include a lack of corporate understanding and awareness of the importance of ESG principles, limited data and infrastructure for measuring GHG emissions, as well as bureaucratic obstacles in implementing environmentally friendly tax policies. Therefore, further efforts are needed from the government and related parties to overcome these challenges and encourage more effective implementation of ESG tax policies (Wu, 2024).

Implementation of environmental, social, and corporate governance (ESG)-based tax policies in Indonesia faces various complex challenges. One of the main challenges is the lack of comprehensive understanding of the ESG concept among businesspeople and the wider community. This causes difficulties in measuring ESG performance accurately and consistently (Wagner & Wagner, 2005). In addition, the lack of integrated ESG reporting standards is also an obstacle in comparing

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performance between companies. Another challenge is resistance from several parties who are worried about the negative impact of this policy on the competitiveness of domestic industry (Samour et al., 2024).

Technical challenges also become obstacles in implementing ESG tax policies. One of them is the complexity of designing fair and effective tax mechanisms to encourage sustainable business behavior. Another challenge is the lack of accurate and up-to-date data regarding carbon emissions and the social impact of company activities. In addition, adequate information technology infrastructure is needed to support the management of large and complex ESG data. Finally, coordination between government agencies involved in implementing this policy is also the key to success but is often a challenge (Lee & Liang, 2024).

The results of this research indicate that tax policies oriented towards Environmental, Social, and Governance (ESG) principles have a significant positive impact on green investment strategies and reducing green greenhouse gas (GHG) emissions in Indonesia. This policy has proven capable of encouraging companies to actively participate in mitigating climate change through greener and more sustainable investments. However, the implementation of this policy still faces several challenges that require close collaboration between the government, companies, and investors ((Ace) Maizer, 2022).

To achieve more optimal results and make Indonesia a leader in green investment and sustainable development in Southeast Asia, the recommended recommendations are as follows:

The Indonesian government must set an ambitious but realistic target to reduce GHG emissions by 30%. This target is in line with Indonesia's commitment to the Paris Agreement. More targeted fiscal policies, such as larger tax incentives for companies that succeed in reducing their emissions, are needed to achieve this target. The government must also ensure that regulations related to the implementation of this policy are strictly complied with by all companies.

To support innovation in green investment, the government needs to allocate a minimum of 1% of the national budget for research and development (R&D). This budget can be increased gradually along with economic growth. With adequate funding, research institutions, universities, and the private sector can conduct in-depth research and develop new technologies that are effective in reducing emissions and increasing energy efficiency.

The government must target that 80% of large companies in Indonesia consistently report their ESG performance. This is an ambitious figure, but with clear regulations and support from various parties, this target can be achieved. Through transparent reporting, companies will be more responsible in implementing sustainable practices, which will ultimately increase Indonesia's competitiveness in the global market.

The formation of the Climate Change Control and Carbon Trading Management Agency (BP3I-TNK) by the Indonesian government is a strategic step to strengthen the national commitment to controlling carbon emissions. This initiative supports efforts to ensure that ESG-oriented tax policies can be implemented effectively, as well as encouraging the active involvement of the private sector in achieving the set emission reduction targets. This agency is also expected to become a forum for cross-sector coordination to achieve the global mission of reducing emissions and increasing green investment in Indonesia.

5. Conclusion

Opportunities and Challenges from ESG-Tax Policies in Indonesia These provisions can help expand the impact of a green investment plan and have implications for promoting emissions reduction through climate policies but several challenges to their effectiveness remain. This can be attributed to several issues such as lack of awareness about ESG amongst business stakeholder, inadequate data infrastructure for precise measurement of emissions or bureaucratic red-tape. These challenges need to be tackled by the government, businesses and investors collaboratively. What needs to be done, the report suggests is that more ambitious emission reduction targets need to be set; investment in R&D can help reduce emissions without impairing competitiveness of companies and deepening decarbonisation efforts; a significant proportion of CO2-emitting companies should disclose their ESG performance; while a

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Carbon Management Agency must also come up. Overcoming these challenges will enable Indonesia to be at the forefront of sustainable development and green investment in South East Asia.

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Author contribution

Heriantonius Silalahi designed the research and led the study design. Nandi Maulana conducted the qualitative case studies and data analysis. Budi Kurnia contributed to the theoretical framework and interpretation of findings. All authors were involved in writing, reviewing, and approving the final manuscript.

Conflict of Interest

The authors declare no conflicts of interest related to this study. There are no financial or personal relationships with other people or organizations that could unduly influence this work.

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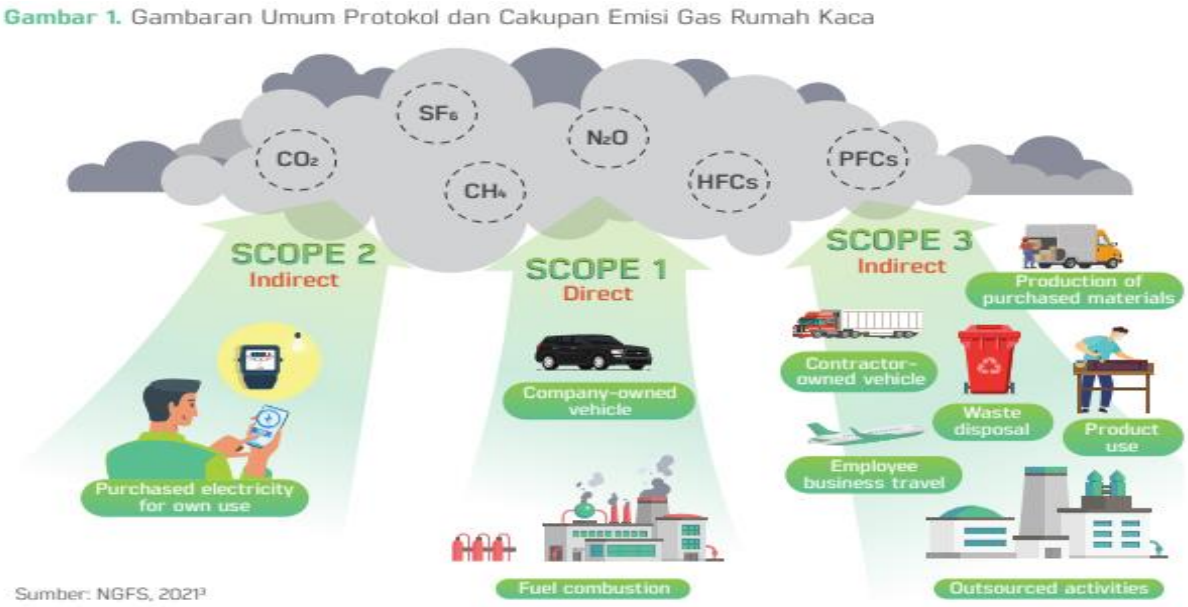
6. Image and Data Table

A. Figures Risearch Appendix Data



Source: Otoritas Jasa Keuangan (2022)

Figure 1. Greenhouse Gas (GHG) Process

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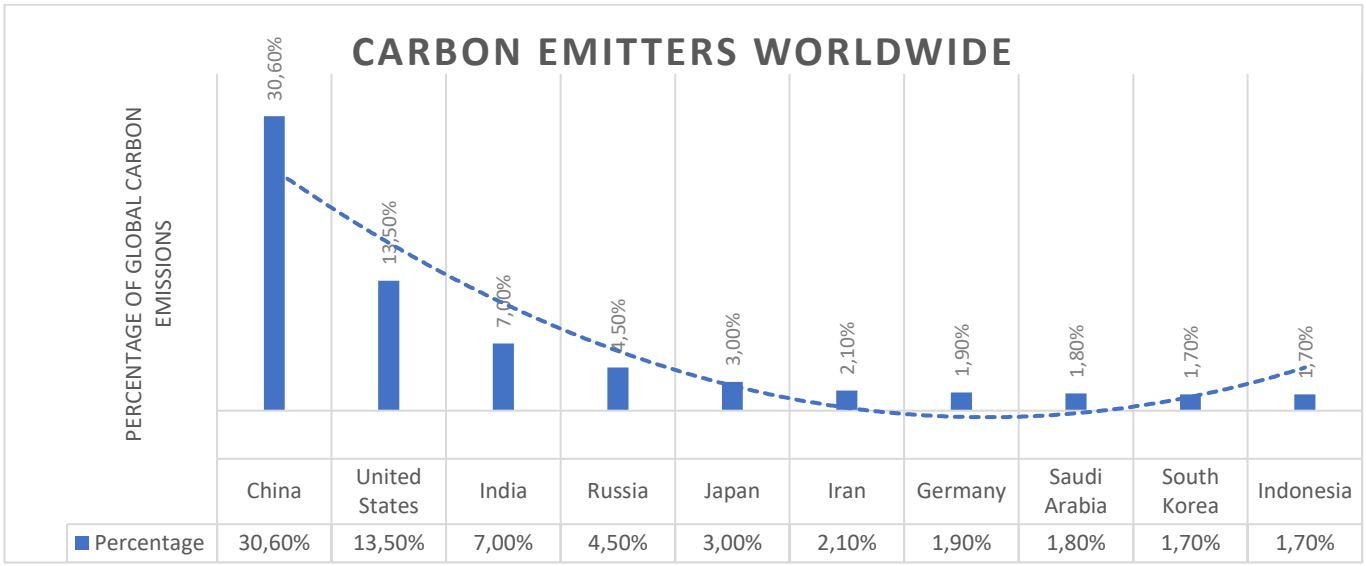

Figure 2. Carbon Emmiters Worldwide

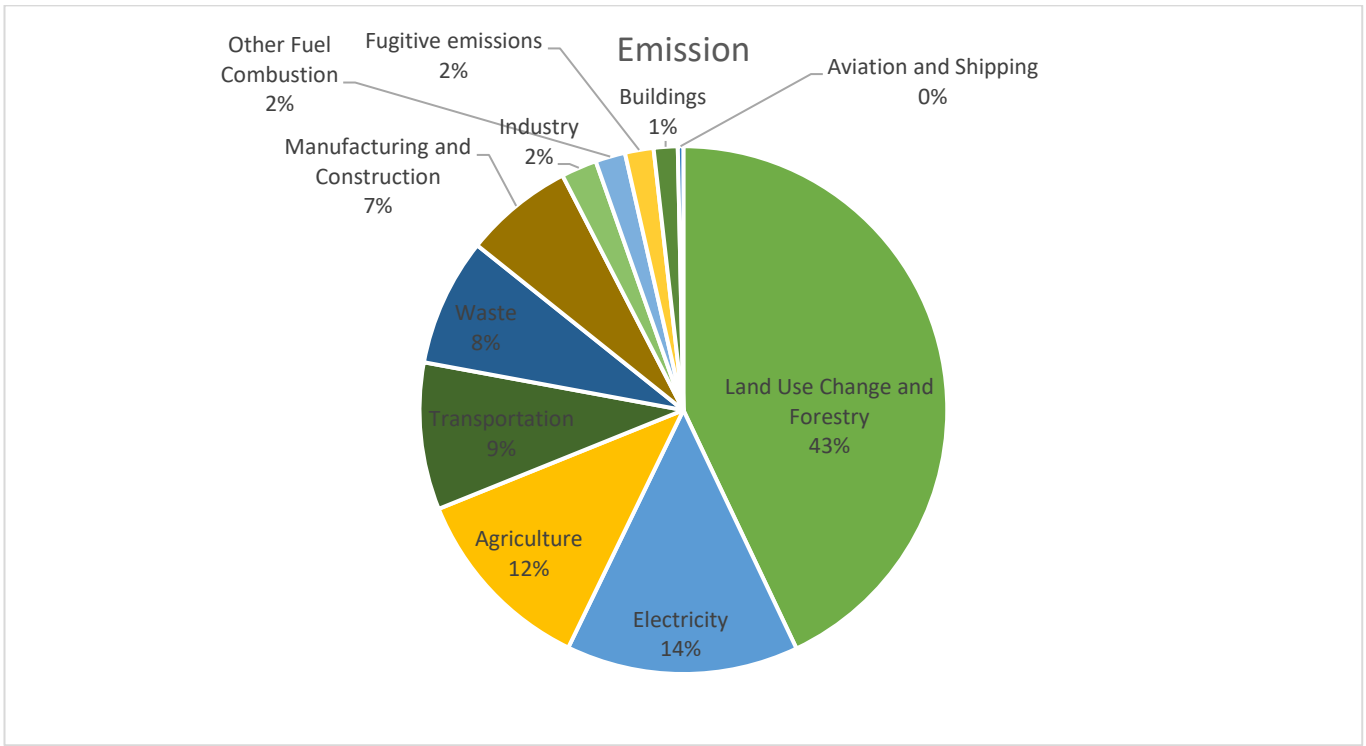

Figure 3. Sector Emission in Indonesia 2023

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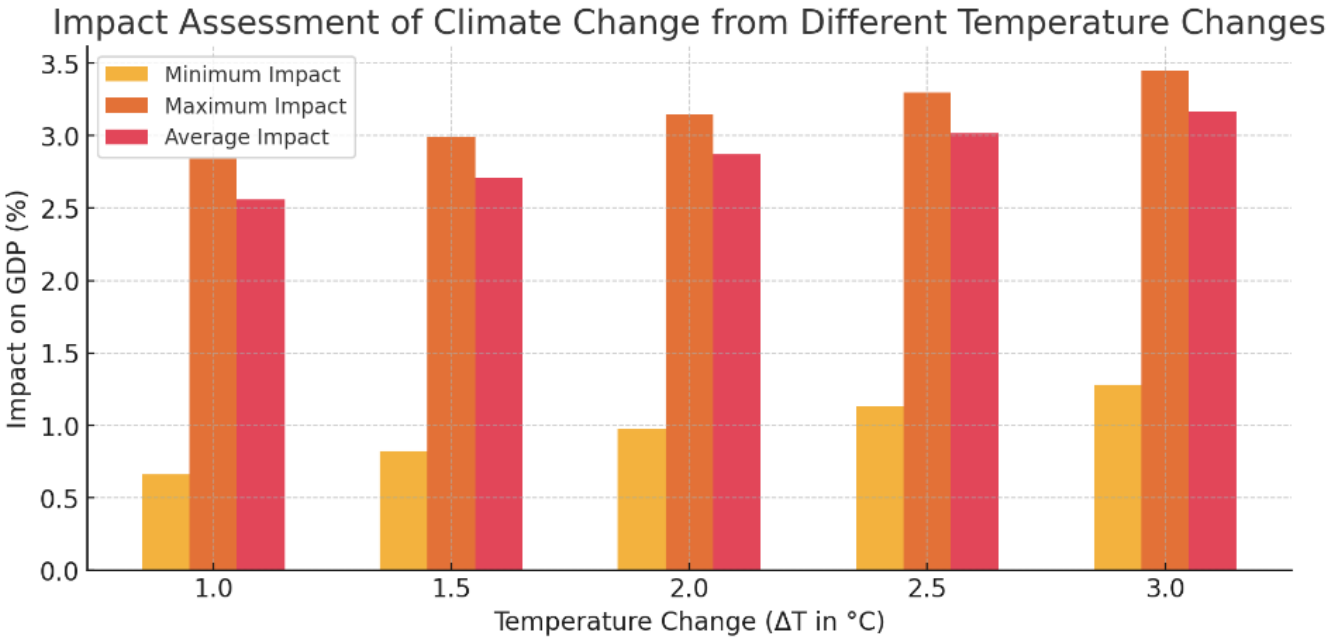

ΔT (°C)	Minimum Impact (%)	Maximum Impact (%)	Average Impact (%)
1.0	0.66	2.84	2.56
1.5	0.82	2.99	2.71
2.0	0.97	3.15	2.87
2.5	1.13	3.3	3.02
3.0	1.28	3.45	3.17

Figure 4. Impact Assessment of Climate From Different Temperature Changes

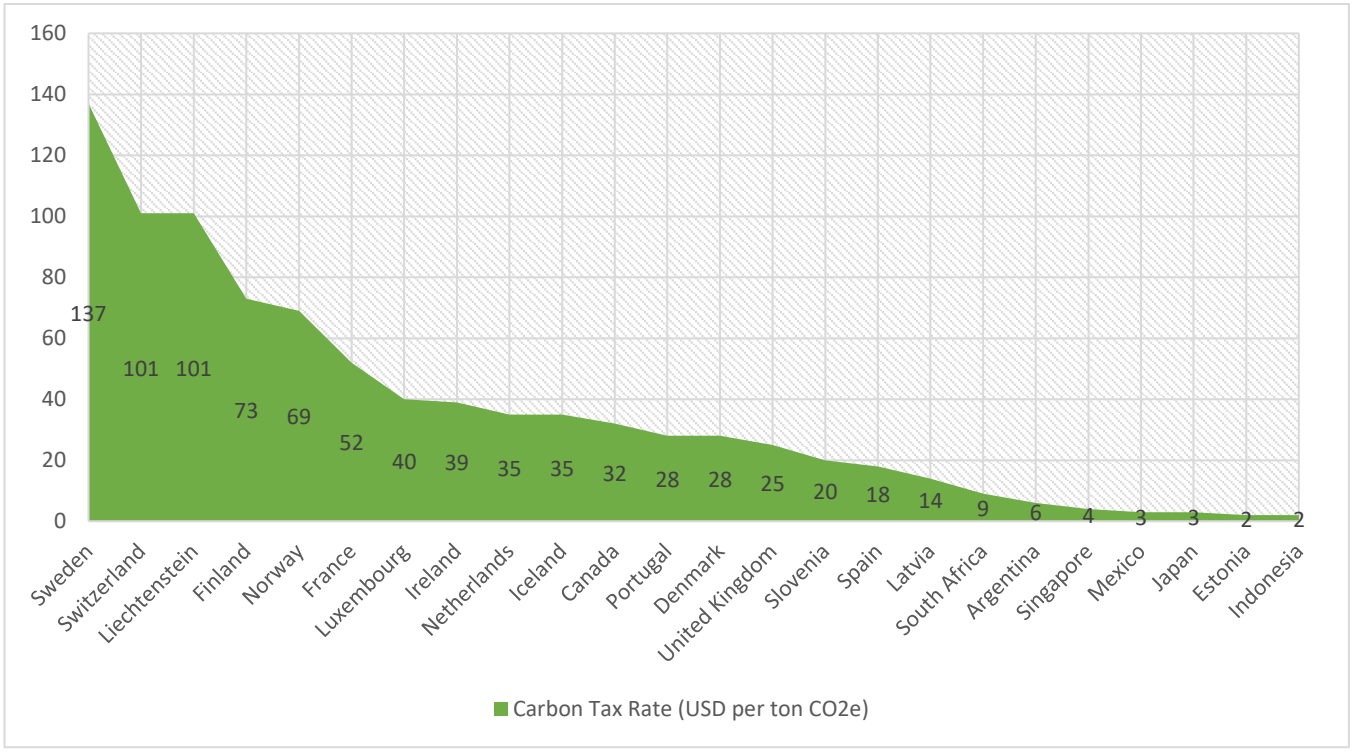

Figure 5. Carbon Tax Rate

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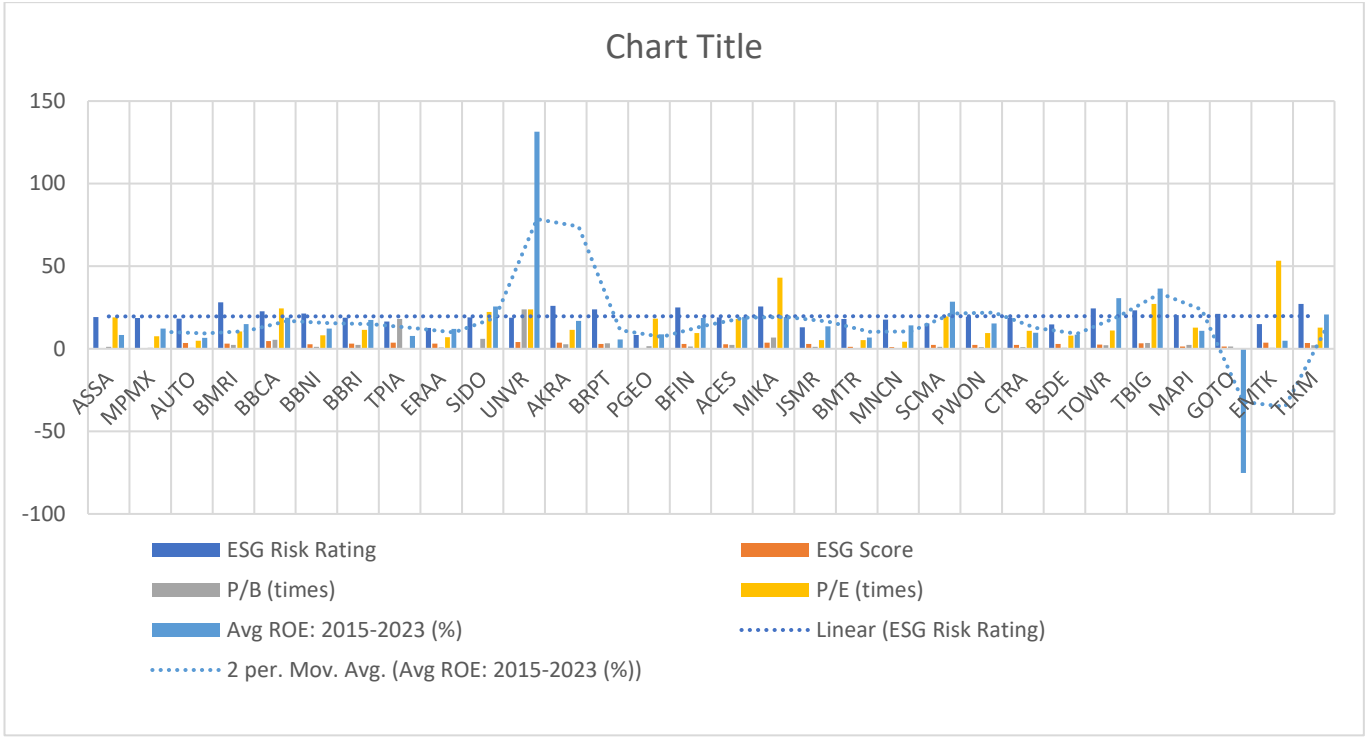

Figure 6. *Company Performance on ESG and Financial Ratio*

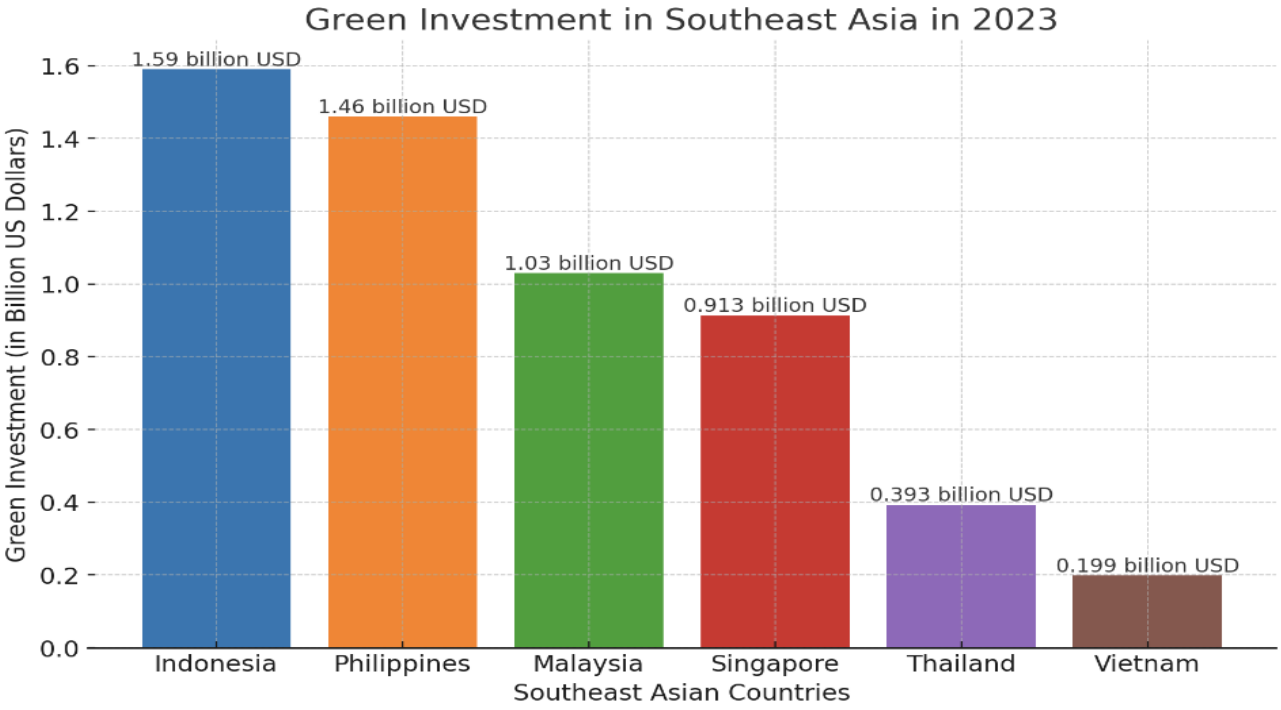

Figure 7. Green Investment in Southeast Asia in 2023

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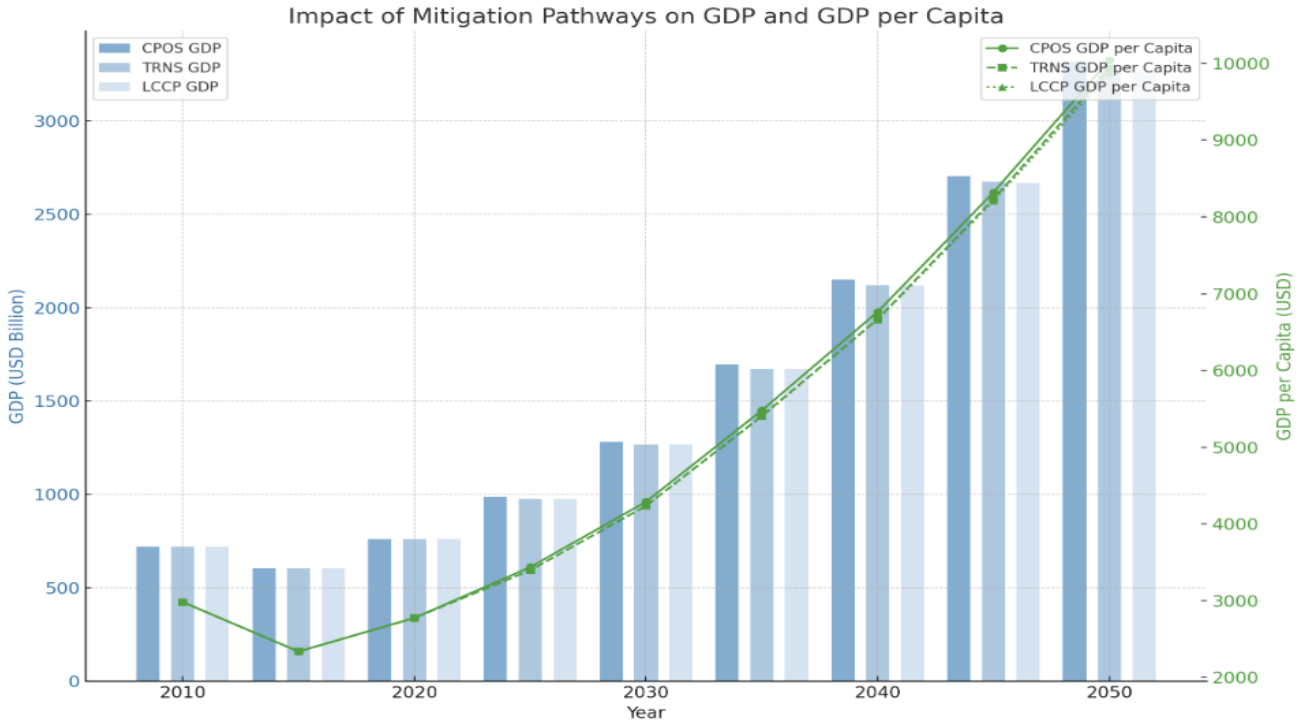
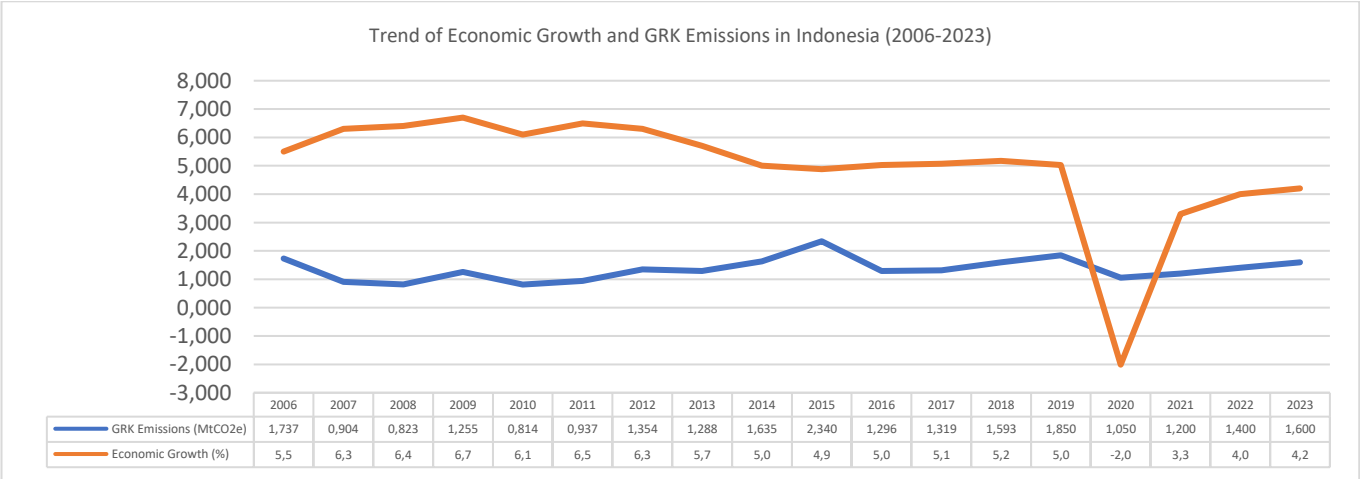


Figure 8. The Impact of Mitigation Pathways on GDP and GDP per Capital



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
GRK Emissions (MtCO2e)	1,737	0,904	0,823	1,255	0,814	0,937	1,354	1,288	1,635	2,340	1,296	1,319	1,593	1,850	1,050	1,200	1,400	1,600
Economic Growth (%)	5,5	6,3	6,4	6,7	6,1	6,5	6,3	5,7	5,0	4,9	5,0	5,1	5,2	5,0	-2,0	3,3	4,0	4,2

Figure 9. Trend of Economic Growth and GRK Emissions in Indonesia (2006-2023)

B. Table Risearch Appendix Data

Table 1. Emission Contribution in Indonesia 2023

Sectors	Emissions
Land Use Change and Forestry	734.28
Electricity	243.36
Agriculture	200.24
Transportation	154.01
Waste	133.84

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Manufacturing and Construction	114.44
Industry	37.34
Other Fuel Combustion	31.31
Fugitive emissions	29.93
Buildings	25.12
Aviation and Shipping	5.77

Data Source: Processed by the author 2024

Table 2. ESG Risk Score Categories and Descriptions.

Risk Score	Category	Description
0-10	Negligible	Considered to have negligible ESG risk.
10-20	Low	Considered to have low ESG risk.
20-30	Medium	Considered to have moderate ESG risk.
30-40	High	Considered to have high ESG risk.
>40	Severe	Considered to have severe ESG risk.

Data Source: Processed by the author 2024

Table 3. Controversy Categories and Descriptions

Category	Description
No Evidence (0)	No evidence of relevant controversy.
Category 1	Low impact on the environment and society; negligible risk to the company.
Category 2	Moderate impact on the environment and society with minimal risk to the company.
Category 3	Significant impact on the environment and society with significant business risks.
Category 4	High impact on the environment and society with high business risk.
Category 5	Severe impact on the environment and society with serious business risks.

Data Source: Processed by the author 2024

Table 4. Tax Regulation In Indonesia

Regulation Level	Regulations	Summary
Law (UU)	Law 7/2021 on Harmonization of Tax Regulations - Article 13	Imposition on carbon emissions that negatively impact the environment. - Direction aligns with carbon market and carbon tax roadmaps. - Principles include fairness and affordability. - Rate set at or above the carbon market price, minimum IDR 30.00/kg CO2e. - Utilization includes climate change control, social assistance, and renewable energy subsidies. - Implementation from April 1, 2022, initially for coal-fired power plants (PLTU).
Presidential Decree	Presidential Decree 98/2021 on Carbon Economic Value Implementation - Article 58	Carbon levy defined as state levies based on carbon content or emission potential. - Implementation governed by statutory regulations. - Forms may include existing or new levies (eg, Carbon Tax).
Draft Regulations	Draft Ministry of Finance Regulation on Carbon Tax Rates and DPP	Specific details on carbon tax rates and taxable object base (DPP).
	Ministry of Finance Regulation on Carbon Tax Implementation Procedures and Mechanisms	Detailed procedures and mechanisms for the implementation of carbon tax.
	Government Regulation on Carbon Tax Roadmap	Strategic plan for carbon tax implementation, including phased approach and sectoral targets.

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Regulation Level	Regulations	Summary
	Government Regulation on Carbon Tax Subjects and Allocation	Define who is subject to the carbon tax and how the tax revenue will be allocated.
Implementation Phases	2021	Establishment of Presidential Decree on Carbon Economic Value. - Enactment of UU HPP with a clause on carbon tax. - Development of Carbon Tax and Carbon Exchange mechanisms. - Piloting carbon trading in the power generation sector (IDR 30,000/tCO2e). - Evaluation of piloting results by the Ministry of Energy and Mineral Resources (ESDM).
	2022	Synchronization of Cap & Trade and Cap & Tax in the electricity sector. - Setting caps for coal-fired power plants. - Limited implementation of carbon tax (cap & tax) on coal-fired power plants (IDR 30,000/tCO2e). - Preparation of MRV System for carbon trading. - Preparation of technical regulations for carbon trading (KLHK).
	2025	Full implementation of carbon trading through the carbon exchange. - Expansion of Cap & Trade and Cap & Tax sectors with phased implementation based on sector readiness.
Utilization	Utilization of State Revenue from Carbon Tax	Revenue used for climate change control. - Social assistance for low-income households. - Renewable energy subsidies. - Reduction of greenhouse gas emissions from emission sources.

Data Source: Processed by the author 2024

Table 5. Company Performance

No	Tickers	ESG Risk Ratings	ESG Scores	P/B (times)	P/E (times)	Avg ROE: 2015-2023 (%)	Proposed Industry
1	ASSA	19.24	–	1.23	19.12	8.37	Automotive
2	MPMX	18.64	–	0.67	7.56	12.3	Automotive
3	AUTO	18.18	3.43	0.66	4.84	6.55	Automotive
4	BMRI	28.18	3.21	2.38	10.4	14.96	Banking
5	BBCA	22.67	4.67	5.39	24.5	18.76	Banking
6	BBNI	21.39	2.71	1.2	8.26	12.29	Banking
7	BBRI	18.84	3.09	2.37	11.48	17.57	Banking
8	TPIA	16.6	3.74	18.04	–	7.82	Chemicals
9	ERAA	12.67	3.07	0.79	7.05	12.1	Consumer Electronics
10	SIDO	19.06	–	6.13	22.33	25.58	Consumer Goods
11	UNVR	18.8	4.16	23.78	23.78	131.47	Consumer Goods
12	AKRA	26.03	3.71	2.69	11.55	16.82	Energy
13	BRPT	23.96	2.87	3.33	–	5.65	Energy
14	PGEO	8.44	–	1.53	18.21	8.84	Energy
15	BFIN	25.02	2.94	1.45	9.5	18.66	Financial Services
16	ACES	18.95	2.72	2.31	18.07	19.14	Financial Services
17	MICA	25.7	3.74	6.87	43.11	19.26	Healthcare
18	JSMR	12.92	2.86	1.27	5.25	13.66	Infrastructure
19	BMTR	18.14	1.23	0.22	5.17	6.88	Media
20	MNCN	17.7	1.06	0.2	4.27	14.17	Media
21	SCMA	15.35	2.42	1.17	19.59	28.54	Media
22	PWON	19.42	2.41	0.91	9.58	15.29	Real Estate
23	CTRA	18.87	2.43	1.02	10.94	9.78	Real Estate
24	BSDE	14.83	2.90	0.53	7.99	8.5	Real Estate
25	TOWR	24.51	2.53	2.12	11.1	30.71	Real Estate (Infrastructure)

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26	TBIG	23.25	3.34	3.58	27.19	36.54	Real Estate (Infrastructure)
27	MAPI	20.31	1.29	2.34	12.82	10.85	Retail
28	GOTO	21.12	1.46	1.43	–	-75.19	Technology
29	EMTK	14.9	3.73	0.68	53.43	4.92	Technology
30	TLKM	27.08	3.58	2.18	12.82	20.7	Telecommunications

Data Source: Processed by the author 2024

References

Maizer, A. A. (2022). The Effects of Energy Consumption and Carbon Emissions on Turkey's Initiatives in Promoting Sustainable Environmental and Economic Development. In Sustainable Futures (Vol. 4). Elsevier Ltd. https://doi.org/10.1016/j.sftr.2022.100089

Atichasari, A. S., Ratnasari, A., Kulsum, U., Kahpi, H. S., Wulandari, S. S., & Marfu, A. (2023). Examining non-performing loans on corporate financial sustainability: Evidence from Indonesia. Sustainable Futures, 6. https://doi.org/10.1016/j.sftr.2023.100137

Belahouaoui, R., & Attak, E. H. (2024). Analysis of tax compliance behavior of family businesses: combining social and psychology norms and legitimacy determinants. International Journal of Sociology and Social Policy, 44(7–8), 672 – 688. https://doi.org/10.1108/IJSSP-12-2023-0314

Chaisse, J., Choukroune, L., & Jusoh, S. (2021). Regimes Interactions: International Law Investment and ... - An Introduction. In Handbook of International Investment Law and Policy. https://doi.org/10.1007/978-981-13-3615-7_73

Diaz, S., Al Hammadi, N., Seif El Nasr, A., Villasuso, F., Prakash, S., Baobaid, O., Gracias, D., & Mills, R. (2023). Green Corridor: A Feasible Option for the UAE Decarbonization Pathway, Opportunities & Challenges. Society of Petroleum Engineers - ADIPEC, ADIP 2023. https://doi.org/10.2118/216033-MS

Dorofeev, M., & Tamashiro, K. (2023). Evolution of Pension System Financial Models for Sustainable Economic Growth. Contributions to Economics, 165 – 178. https://doi.org/10.1007/978-3-031-26596-9_14

Duan, S., Li, J., Zhang, X., & Lu, Y. (2024). Corporate sustainability: the role of environmental taxes in ESG performance. Environment, Development and Sustainability. https://doi.org/10.1007/s10668-024-05185-1

Hasnawati, S., Usman, M., AM Elfaki, F., Faisol, A., & Russel, E. (2024). Modeling the Relationship between Life Expectancy, Population Growth, Carbon Dioxide Emission, and GDP Growth in Indonesia. International Journal of Energy Economics and Policy, 14(4), 484–500. https://doi.org/10.32479/ijeep.16303

Hong, H.-J., & Lee, B. S. (2024). A Study on the Sustainability of Government R&D Subsidies. Korean Accounting Review, 49(2), 97 – 147. https://doi.org/10.24056/KAR.2024.04.004

Ismail, N., Anridho, N., Isa, M. A. M., Rahman, N. H. A., & Ismail, N. (2022). Corporate Sustainability and Firms' Financial Performance: Evidence from Malaysian and Indonesian Public Listed Companies. International Journal of Economics and Management, 16(2), 213 – 224. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138150284&partnerID=40&md5=44d344c7d554ffc6208fa5930a35e776

Kolesnikov, Y. A. (2023). Tax Incentives for Sustainable Development in the Context of Digitalization. Approaches to Global Sustainability, Markets, and Governance, Part F175, 115 – 121. https://doi.org/10.1007/978-981-19-4005-7_13

Lee, C. L., & Liang, J. (2024). The effect of carbon regulation initiatives on corporate ESG performance in real estate sector: International evidence. Journal of Cleaner Production, 453. https://doi.org/10.1016/j.jclepro.2024.142188

Li, J., & Li, S. (2022). Environmental protection tax, corporate ESG performance, and green technological innovation. Frontiers in Environmental Science, 10. https://doi.org/10.3389/fenvs.2022.982132

Lot, H., Yeow, A., Mahmood, A. B., Ismail, B. H., Abidin, M. A. Z., & Abdul Wahab, W. A. W. (2023). Business Model of Carbon Capture and Storage (CCS) Projects for High-CO2 Fields. Society of Petroleum Engineers - SPE EuropEC - Europe Energy Conference Featured at the 84th EAGE Annual Conference and Exhibition, EURO 2023. https://doi.org/10.2118/214359-MS

Lucey, B., & Ren, B. (2023). Time-varying tail risk connectedness among sustainability-related products and fossil energy investments. Energy Economics, 126. https://doi.org/10.1016/j.eneco.2023.106812

Ma, H. Y., & Park, S. J. (2021). Relationship between corporate sustainability management and sustainable tax strategies. Sustainability (Switzerland), 13(13). https://doi.org/10.3390/su13137429

SSN: 3047-4108 P-ISSN: 3048-3751
Jounal Economic Business Innovation -JEBI, Vol. 01, Issue.3 October 2024, Page: 231-248
https://doi.org/10.69725/jebi.v1i3.99

Manurung, K. A. A., Siregar, H., Fahmi, I., & Hakim, D. B. (2024). Sustainable Value Chain for Sustainable Lending of State-Owned Banks in Indonesia. Sustainability (Switzerland) , 16(12). https://doi.org/10.3390/su16124940

Mustapha, M. Z., Zakaria, Z., Rahin, N. M., & Wahab, N. S. A. (2023). Competitive Strategies for Corporate Sustainability. Foresight and STI Governance, 17(4), 45 – 53. https://doi.org/10.17323/2500-2597.2023.4.45.53

Netjes, W., & Freyer, D. (2022). Tax Transparency Is Here to Stay: An Analysis of the Public CbCR Directive. Intertax, 50(8–9). https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134967359&partnerID=40&md5=69c0465b0ef4dc8669f50f2cbd1c1095

Nishihara, M. (2023). Corporate sustainability, investment, and capital structure. Annals of Operations Research. https://doi.org/10.1007/s10479-023-05699-3

Pambudi, J. A. A., Dayana, I., Alfirman, D. M., Susanto, D., & Widianingrum, R. (2023). Accelerating Indonesia Sustainable Infrastructure Development through ESG Initiatives in PPP Ecosystem. IOP Conference Series: Earth and Environmental Science, 1266(1). https://doi.org/10.1088/1755-1315/1266/1/012020

Park, H., Lee, J., & Shin, J. (2024). How Does Taxation Affect Corporate Social Responsibility? Evidence from a Korean Tax Reform. Journal of Business Ethics, 192(4), 745 – 774. https://doi.org/10.1007/s10551-023-05536-4

Patenting and Business Outcomes for Cleantech Startups Funded by The Advance Research Projects Agency Energy. (2020). Academy of Management Journal, 5, 803–810.

Plakitkin, Yu. A., Plakitkina, L. S., & Dyachenko, K. I. (2022). Major trends shaping development of coal industry in the world and in Russia under conditions of low-carbon energy economy Part II. Low-carbon development as a factor of decline in coal demand and its implications for coal-fired power generation prospects. Gornyi Zhurnal, 2022(8), 17 – 23. https://doi.org/10.17580/gzh.2022.08.01

Prajapati, D., Paul, D., Malik, S., & Mishra, D. K. (2021). Understanding the preference of individual retail investors on green bond in India: An empirical study. Investment Management and Financial Innovations, 18(1), 177 – 189. https://doi.org/10.21511/imfi.18(1).2021.15

Prasetyo, B. , & H. D. (2016). Tax Compliance in Indonesian Government Institutions: A Case Study of West Java Province. International Journal of Trade, Economics, and Finance, 7(6).

Purpura, A. (2023). Megaproject, ESG and Taxation. Lecture Notes in Civil Engineering, 342 LNCE, 225 – 236. https://doi.org/10.1007/978-3-031-30879-6_17

Rizani, F., & Respati, N. W. (2018). Factors influencing the presentation of fraudulent financial reporting in Indonesia. Journal of Advanced Research in Law and Economics, 9(1), 254–264. https://doi.org/10.14505/jarle.v9.1(31).31

Roberts, A. D. (2022). Comparison Of Satellite-Correlated Crowdsourced And Geostatistical Temperature Projections For An Atlanta Heatwave Daily Snapshot: How Differences In Spatially-Variable Predictions May Be Correlated To Economic Status And Land Cover/Land Use. Sustainable Futures, 4. https://doi.org/10.1016/j.sftr.2022.100078

Saint-Jacques, G. (2022). A new climate club is the best way to reduce global emissions of greenhouse gases. In Does the UN Model Still Work? Challenges and Prospects for the Future of Multilateralism. https://doi.org/10.1163/9789004516489_012

Samour, A., Musah, M., Mati, S., & Amri, F. (2024). Testing the impact of environmental taxation and IFRS adoption on consumption-based carbon in European countries. Environmental Science and Pollution Research, 31(24), 34896 – 34909. https://doi.org/10.1007/s11356-024-33481-w

Saputra, K. A. K., Laksmi, P. A. S., Smark, C., & Bareto, C. A. (2024). THE INFLUENCE OF ACCOUNTING DIGITALISATION TRANSFORMATION AND SUSTAINABLE MANAGEMENT ON ESG PERFORMANCE TO ACHIEVE ENVIRONMENTAL SUSTAINABILITY. Journal of Sustainability Science and Management, 19(7), 120 – 135. https://doi.org/10.46754/jssm.2024.07.007

Sugiarto, A., Puspani, N. N., & Fathia, F. (2023). ESG Leverage towards Stock Performance in Indonesia Stock Exchange. International Journal of Energy Economics and Policy, 13(5), 593 – 606. https://doi.org/10.32479/ijeep.14384

Tasnia, M., Syed Jaafar AlHabshi, S. M., & Rosman, R. (2020). The impact of corporate social responsibility on stock price volatility of the US banks: a moderating role of tax. Journal of Financial Reporting and Accounting, 19(1), 77 – 91. https://doi.org/10.1108/JFRA-01-2020-0020

Tsai, W.-H., & Lin, W.-H. (2024). Production Decision Model for the Cement Industry in Pursuit of Carbon Neutrality: Analysis of the Impact of Carbon Tax and Carbon Credit Costs. Sustainability (Switzerland) , 16(6). https://doi.org/10.3390/su16062251

Vovchenko, N. G., Andreeva, O. V, Dmitrieva, V. D., Zaruk, N. F., & Sulzhenko, S. A. (2023). Financial Aspects of Decarbonization of the Russian and Central Asian Economies in the Context of Climate Change: Comparative Analysis. Environmental Footprints and Eco-Design of Products and Processes, 503 – 510. https://doi.org/10.1007/978-3-031-28457-1_51

SSN: 3047-4108 P-ISSN: 3048-3751
Jounal Economic Business Innovation -JEBI, Vol. 01, Issue.3 October 2024, Page: 231-248
https://doi.org/10.69725/jebi.v1i3.99

Wagner, U., & Wagner, A. (2005). Electrical shift gearbox (ESG) - Consistent development of the dual clutch transmission to a mild hybrid system. SAE Technical Papers. https://doi.org/10.4271/2005-01-4182

Wahyudi, H. (2024). The Relationship between the Renewable Energy and CO2 Emissions to the Indonesian Economy. International Journal of Energy Economics and Policy, 14(3), 349–357. https://doi.org/10.32479/ijeep.15903

Wahyudi, H., Gunarto, T., Ciptawaty, U., Aida, N., Yunita, R., & Putri, R. M. (2024). The Influence of Determinats on CO2 Emission in Indonesia for a Decade. International Journal of Energy Economics and Policy, 14(1), 61–65. https://doi.org/10.32479/ijeep.15132

Wu, Q. (2024). Power play in carbon trading market: How status of executives with R&D background incentives companies' low-carbon innovation. Energy Policy, 188. https://doi.org/10.1016/j.enpol.2024.114049

Yeh, Y.-H., & Liao, C.-C. (2024). Ownership structure and carbon emissions reduction. Pacific Basin Finance Journal, 83. https://doi.org/10.1016/j.pacfin.2024.102262

Yoon, B.-H., Lee, J.-H., & Cho, J.-H. (2021). The effect of esg performance on tax avoidance—evidence from korea. Sustainability (Switzerland), 13(12). https://doi.org/10.3390/su13126729

Yusuf, A. , & H. R. D. (2014). Determinants of Tax Compliance in Government Institutions in Indonesia. International Journal of Business and Management, 9(9), 102–109.