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The Impact of Green Taxes on Regional Tax Revenue and Environmental Sustainability: Evidence from Makassar City

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Abstract

The global environmental crisis demands innovative solutions that integrate economic and ecological objectives. Green tax has emerged as a strategic fiscal policy instrument that not only aims to correct negative externalities but also has the potential to increase regional revenue. This study aims to examine the effect of implementing a green tax on regional tax revenue and environmental sustainability, focusing on the non-cyclical consumer sector. The research method used was a quantitative approach with stratified random sampling of 50 respondents (tax officials, business actors, and the public). Data were collected through questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that the green tax has a positive and significant effect on both dependent variables. Specifically, the green tax has a strong effect on environmental sustainability (path coefficient = 0.645; p-value = 0.000) and a significant effect on regional tax revenue (path coefficient = 0.532; p-value = 0.000). These findings confirm that green taxes can be a dual solution: a source of fiscal revenue and a tool to encourage the transition to sustainable development.

Keywords

Carbon Tax, Fiscal Policy, Green Tax, Regional Tax Revenue, Sustainability.

1. Introduction

The current environmental crises, including climate change, pollution, and the decline of biodiversity, require proactive measures (Meila et al., 2024). Green taxes encourage individuals and companies to reduce their environmental footprint particularly carbon emissions and to invest in sustainable solutions. By providing incentives for more environmentally friendly practices, these taxes can help achieve long-term environmental sustainability goals.

The implementation of environmental taxes in Indonesia is regulated under Government Regulation (*Peraturan Pemerintah*/PP) Number 46 of 2017 concerning Environmental Economic Instruments (Ariyani & Heriqbaldi, 2023). This regulation encourages companies to internalize environmental costs when their economic activities have the potential to cause environmental pollution, so that environmental expenses can help compensate for the damage caused. Regional tax revenues generated from this regulation can be used for environmental rehabilitation, such as reforestation or waste management.

Green taxes are fiscal policies applied to community activities that generate environmental pollution, one of which is carbon emissions. Green taxes are designed to account for environmental costs that are often not reflected in the market prices of goods and services (Zega & Agus, 2025; Peng et al., 2025). This tax concept compels companies to consider environmental costs in their decision-making and serves as a strategy for regional tax revenue. Examples of green taxes include carbon taxes, pollution taxes, and taxes on the use of natural resources.

Local taxes are among the most important sources of regional revenue, and green taxes serve as a policy instrument to increase revenue while promoting environmental sustainability (Adi et al., 2022). As public and corporate environmental awareness grows, the implementation of green taxes can be effectively realized, enhancing sustainability outcomes. Environmental sustainability refers to the capacity of ecological systems to maintain balance and essential functions over the long term, and it is closely linked to green taxes, which encourage environmentally friendly practices and reduce negative impacts on ecosystems (Norouzi et al., 2022; Chikezie et al., 2023).

Understanding the role of green taxes in increasing regional tax revenue and environmental sustainability is crucial for creating effective strategies to address climate change and encourage environmentally conscious corporate behavior. This aligns with the Asta Cita, particularly in promoting national self-reliance and creating new opportunities through a green economy. Strong environmental sustainability is an important factor in building a nation free from environmental harms (Basthiani & Pangestuti, 2024; Iqbal et al., 2025; Al Kautsar & Bandiyono, 2025). As part of their social responsibility, companies need to prioritize environmental aspects to support ecosystem protection efforts. Thus, the needs of the present generation can be met without compromising the ability of future generations to meet their own needs (Mpofu, 2022).

Green taxes are an important factor that affects environmental sustainability. Their implementation motivates companies to pay greater attention to environmental issues, particularly those arising from corporate activities. However, many companies remain reluctant to pay green taxes because they are perceived as not contributing to increased profits and instead adding to the company's cost burden in the form of environmental expenses. Relevant findings by Jabeen et al. (2025) and Aprillia et al. (2025) show that revenue from environmental taxes significantly contributes to reducing greenhouse gas emissions in developing countries. Conversely, the study by Bretschger and Grieg (2024) indicates that green taxes, in this case, carbon taxes, do not have a significant effect on economic growth.

To encourage companies to increase regional tax revenues, firms must be required to implement policies for environmental management, one of which is the adoption of regional taxes. By aligning economic incentives with environmental goals, green taxes can play a key role in driving the increase in regional tax revenues required (Yang et al., 2024; Meila et al., 2024).

The difference between this study and previous research lies in the research object, which focuses on companies in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange (IDX) during the 2019–2024 period, specifically those domiciled in Makassar City. These differing characteristics will show how companies carry out economic activities that are mindful of environmental issues, especially in the implementation of regional taxes. Therefore, based on the above background, the purpose of this study is to determine how green taxes affect regional tax revenues and how green taxes affect environmental sustainability.

2. Literature Review and Hypothesis Development

2.1. The Effect of Green Taxes on Regional Tax Revenue

In Indonesia, the discourse and implementation of green taxes are still in the early stages, especially at the regional government level. Law Number 28 of 2009 on Regional Taxes and Regional Levies grants authority to local governments to determine certain types of regional taxes, including those based on environmental aspects, such as groundwater tax, swallow's nest tax, and advertisement tax. However, their implementation is often more focused on short-term revenue rather than long-term goals of environmental sustainability (Suryanto & Yanti, 2024). Research by Dewi et al. (2022) shows that although the potential revenue from environmental taxes at the regional level is substantial, compliance and collection effectiveness remain low due to limited public outreach, insufficient monitoring infrastructure, and weak policy integration between central and regional governments.

This hypothesis is based on the fundamental principle of public economics that taxes constitute a primary source of government revenue. Green taxes, although designed to correct negative externalities, remain fiscal instruments that generate revenue streams (Wang & Yu, 2021). Empirical studies in various countries, as reported by Shaikh et al. (2025), show that environmental taxes can serve as a stable and significant source of income. In the context of regional autonomy in Indonesia, local governments that successfully implement green taxes such as groundwater taxes, waste taxes, or emission taxes effectively will be able to increase their revenue base. This aligns with the findings of Suryanto and Yanti (2024), which state that the revenue potential from this sector is substantial, although challenges in collection still persist. Therefore, the broader and more effective the implementation of green taxes, the greater their expected contribution to total regional tax revenue.

H1: Green taxes has a significant positive effect on regional tax revenue.

2.2. The Effect of Green Taxes on Environmental Sustainability

The Environmental Kuznets Curve (EKC) theory is often used to explain the relationship between economic growth and environmental degradation. This theory states that in the early stages of development, environmental damage tends to increase; however, after reaching a certain income level, society begins to demand a cleaner environment, prompting the government to respond with stricter environmental policies, including green taxes (Dokholyan et al., 2024; Antari et al., 2025). In the context of Indonesian regions, the EKC hypothesis can be expanded by considering the role of regional autonomy. Local governments with strong fiscal and

administrative capacity are more likely to adopt and enforce green taxes effectively, which in turn will increase tax revenue while improving environmental quality.

This hypothesis is rooted in Pigouvian externality theory and the primary function of green taxes as a disincentive against environmentally harmful behavior (Shafi et al., 2023; Suryati & Mooduto, 2024). By increasing the cost of polluting activities, green taxes encourage economic actors both individuals and corporations to shift to cleaner technologies, reduce resource consumption, or modify their behaviors to avoid tax burdens. This effect has been demonstrated in various studies, including those conducted in Scandinavian countries that implement carbon taxes, where significant reductions in greenhouse gas emissions were achieved without sacrificing economic growth (Al-Jayed & Khadim, 2025; Shaikh et al., 2025).

In regional contexts, the targeted implementation of green taxes is expected to reduce pollution levels, preserve local natural resources, and ultimately improve the environmental sustainability index of the respective region. The Environmental Kuznets Curve theory also supports the notion that environmentally friendly fiscal policies, such as green taxes, are essential mechanisms used by governments to reach a turning point where economic growth no longer has to be sacrificed for environmental improvement (Antari et al., 2025).

H2: Green taxes has a significant positive effect on environmental sustainability.

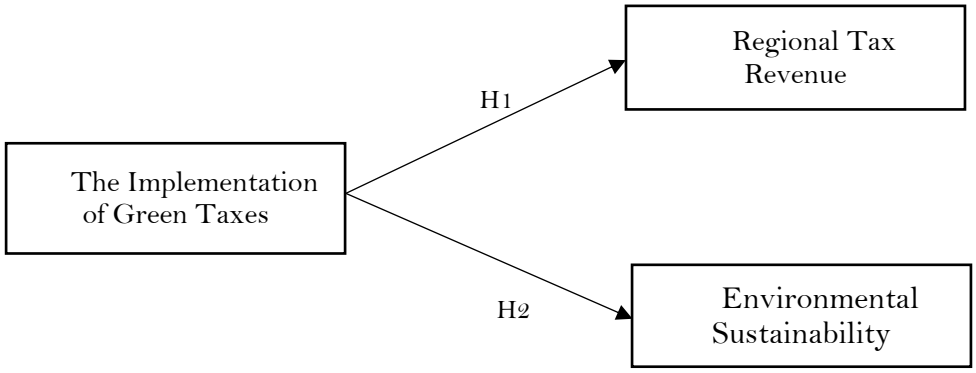

Figure 1. Research Framework

Figure 1 illustrates a conceptual research model that shows the relationship between the implementation of green taxes and two dependent variables: regional tax revenue and environmental sustainability. The arrows from the green tax to both dependent variables indicate the effects being tested, with the assumption that increased green tax implementation is expected to increase regional tax revenue while improving environmental sustainability. This model visually emphasizes the role of green taxes as an instrument with dual impacts on both fiscal and ecological aspects.

3. Methods

This study employs a quantitative research approach grounded in the positivist paradigm, which emphasizes the use of numerical data to examine relationships between variables and test hypotheses. The positivist paradigm assumes that reality is objective and measurable, allowing researchers to collect empirical data and apply statistical techniques to draw conclusions (Takona, 2024). In this study, the approach focuses on obtaining measurable data from selected respondents to ensure that the findings can be generalized and are supported by statistical evidence.

The research employs stratified random sampling as its sampling technique. This method involves dividing the population into distinct subgroups, or strata, based on specific characteristics relevant to the research topic, and then randomly selecting respondents from each subgroup. The rationale behind using stratified random sampling is to ensure that all significant categories of stakeholders are adequately represented in the sample.

The sample size was calculated using the Slovin formula, which is commonly applied in social science research to determine an appropriate number of respondents based on the population size and a specified margin of error. Based on this calculation, a total of 50 respondents were selected. The sample composition included 10 regional tax officials, 20 business actors, and 20 taxpayers from the general public. This distribution was designed to reflect the key stakeholders involved in or affected by the implementation of green taxes, ensuring that the data collected provides comprehensive insights into both the fiscal and environmental aspects of the study.

Data collection was conducted using structured questionnaires, which allowed for standardized measurement of responses and facilitated statistical analysis. For data analysis, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust multivariate technique suitable for testing complex relationships between latent variables. The analysis was assisted by SmartPLS software, Version 4, which provided tools for evaluating the measurement and structural models, estimating path coefficients, and testing the significance of the hypothesized relationships.

4. Results

The results indicate that green taxes have been widely recognized in environmental economics as effective fiscal policy instruments for internalizing the negative externalities of economic activities on the environment (Rasoulinezhad, 2025). The data show that these taxes provide financial incentives for economic actors to reduce environmentally harmful behavior while simultaneously generating government revenue. Furthermore, evidence from developed countries, such as Sweden and Germany, demonstrates that the implementation of various forms of green taxes, including carbon and fuel taxes, has successfully reduced greenhouse gas emissions and contributed significantly to state revenue (Zulfa & Murwendah, 2025).

Table 1. Validity and Reliability Test

Construct	Number of Items	CA	rho_a	rho_c	AVE
Green Taxes	8	0.942	0.945	0.952	0.712
Regional Tax Revenue	6	0.928	0.930	0.943	0.734
Environmental Sustainability	5	0.901	0.905	0.924	0.704

Prior to evaluating the structural model, the measurement model was assessed to ensure the reliability and validity of the constructs. All outer loadings exceeded the recommended threshold of 0.70, ranging from 0.771 to 0.938 for green taxes (X), 0.854 to 0.926 for regional tax revenue (Y1), and 0.733 to 0.912 for environmental sustainability (Y2). Table 1 presents the detailed results of the reliability and validity tests. As shown, all constructs demonstrate strong internal consistency (Cronbach's Alpha and Composite Reliability > 0.90) and good convergent validity (AVE > 0.70). Discriminant validity was also confirmed through the Heterotrait-Monotrait (HTMT) ratio, with all values below 0.85.

The structural model was tested to determine the extent to which the dependent variable (Y) can simultaneously explain the independent variables (X), as indicated by the coefficient of determination (R-squared) value. The R-square value is

categorized as follows: > 0.67 is considered strong, 0.19–0.67 is moderate, and < 0.19 is weak. Table 1 presents the results of the coefficient of determination test.

Table 2. Coefficient of Determination Test (R-Square)

Variable	R-square	R-square adjusted
Environmental Sustainability	0.430	0.415
Regional Tax Revenue	0.322	0.304

Table 2 shows that the R-square value for the environmental sustainability variable is 0.430, indicating that the model, namely the effect of green taxes, explains 43% of environmental sustainability, which is categorized as moderate. Meanwhile, the R-square value for the regional tax revenue variable is 0.322, indicating that the effect of green taxes on regional tax revenue accounts for 32.2%, also categorized as moderate.

The Effect Size test is used to show the impact of independent variables on dependent variables, measured by the Effect Size (F^2) value. The magnitude of the effect is divided into three categories: small ($0.02 \leq F^2 < 0.15$), medium/moderate ($0.15 \leq F^2 < 0.35$), and large ($F^2 \geq 0.35$).

Table 3. Effect Size Test

Relationship	Effect Size	Magnitude of Effect
Green Tax -> Regional Tax Revenue	0.567	Large
Green Tax -> Environmental Sustainability	0.656	Large

Based on the effect size test results listed in Table 3, it appears that green taxes have a significant effect on two key variables in the context of regional finance and the environment. Specifically, the relationship between green taxes and regional tax revenues shows an F^2 value of 0.567, which is categorized as a large effect size, indicating that the implementation of green taxes not only contributes substantially to increasing tax revenues at the regional level but also has the potential to be an effective instrument for strengthening the regional fiscal base through sustainable environmental incentive mechanisms. In addition, the interaction between green taxes and environmental desires produces a higher F^2 value, namely 0.656, with a large magnitude, which highlights the crucial role of green taxes in supporting environmental conservation efforts, such as reducing carbon emissions or more environmentally friendly natural resource management, so that it can encourage the transition to a more resilient green economy in the future. Hypothesis testing in this study was examined using the path coefficient and p-value. With a 95% confidence level and an alpha value of 5%, a p-value < 0.05 is considered statistically significant. The research results are presented in Figure 2 and Table 4.

Based on the results of the structural model analysis in Figure 2, green tax as an independent variable shows a strong and positive influence on regional tax revenue with a path coefficient of 0.532, which contributes approximately 32.2% to the variability of the variable (R-squared = 0.322), indicating that this environmentally based tax policy can significantly increase regional fiscal revenue through mechanisms such as levies on polluting activities or green incentives, where the green tax variable itself is reliably measured by eight indicators (X1 to X8) with high loading factors ranging from 0.771 to 0.938, reflecting good construct validity; Meanwhile, the influence of green tax on environmental sustainability is even more dominant with a path coefficient of 0.645 and R-squared of 0.430, explaining 43% of the variability, which confirms the strategic role of green tax in encouraging sustainable practices such as emission reduction, resource conservation, or renewable energy transition, with this dependent variable supported by five indicators (Y2.1 to Y2.5) which have external loadings between 0.733 to 0.912, as

well as regional tax revenue measured by six indicators (Y1.1 to Y1.6) with loadings of 0.854 to 0.926.

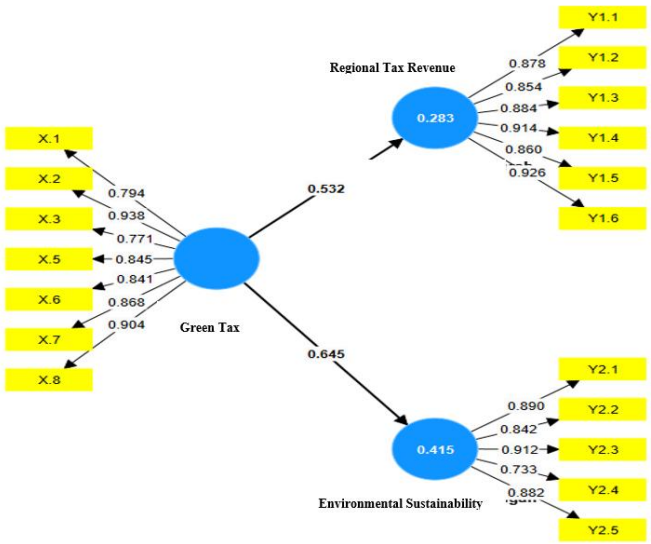

Figure 2. PLS-SEM Output Results

Table 4. Hypothesis Testing

Relationship	Path Coefficient	P-Value
Green Tax ->Regional Tax Revenue	0.532	0.000
Green Tax-> Environmental Sustainability	0.645	0.000

Based on Table 3, the hypothesis testing shows that the effect of green taxes on regional tax revenue has a path coefficient of 0.532 and a p-value of 0.000 < 0.05. This indicates that green taxes have a positive and significant effect on regional tax revenue. The higher the implementation of green taxes, the higher the regional tax revenue in a given area. Furthermore, the effect of green taxes on environmental sustainability has a path coefficient of 0.645 with a p-value of 0.000 < 0.05. This indicates that green taxes have a positive and significant effect on environmental sustainability. The higher the implementation of green taxes, the greater the public's awareness and concern for environmental sustainability.

5. Discussion

The findings of this study indicate that green taxes have a positive and significant effect on regional tax revenue. This confirms Hypothesis 1 (H1) and aligns with the fundamental principles of public economics, which suggest that any fiscal instrument, including environmentally targeted taxes, remains a potential source of government revenue (Shaikh et al., 2025). These results also support the empirical study by Suryanto and Yanti (2024), which states that the revenue potential from environmentally based taxes at the regional level is substantial, despite implementation challenges.

A recent study by Marcos et al. (2023) found that regions in developing countries that consistently implement environmental taxes such as vehicle emission taxes or industrial waste taxes experienced an average annual growth of 12% in sectoral tax revenue. They concluded that this success heavily depends on transparency in fund utilization and public accountability. In the context of Makassar City, these findings imply that the local government needs to establish a clear reporting system to the

public regarding the allocation of green tax funds, for example, for waste management or reforestation, in order to enhance taxpayer compliance and trust.

Furthermore, the World Bank in its regional fiscal policy report emphasized that green tax instruments, when well-designed and communicated, can become stable and predictable revenue streams for subnational governments, especially in resource-rich regions. This is relevant to the context of this research, where the non-cyclical consumer sector (such as food, beverages, and daily necessities) in Makassar is a significant contributor to economic activity and waste. Implementing a proportional green tax in this sector is not only ecologically fair but also fiscally efficient (Barro et al., 2024).

The second finding shows a stronger positive and significant effect of green taxes on environmental sustainability, supporting Hypothesis 2 (H2). This is in line with Pigouvian externality theory and empirical evidence from Scandinavian countries, where carbon taxes have successfully reduced emissions without hindering economic growth (Suryati & Mooduto, 2024). A recent study by Hidayat et al. (2025) and Aprillia et al. (2025), published in Nature Sustainability, analyzed 78 cities in Southeast Asia and found that cities implementing incentive-disincentive-based environmental taxes (e.g., high taxes for polluters combined with incentives for green technologies) recorded an 18–25% reduction in air and water pollution indices over a three-year period. The study refers to this approach as a fiscal nudge using fiscal policy to encourage environmentally friendly behavior without imposing strict prohibitions.

In the local context, these findings provide a strong rationale for the Makassar City government to focus not only on revenue aspects but also on policy designs that drive behavioral change. For example, a plastic waste tax could be combined with subsidies for SMEs that switch to biodegradable packaging. Such an approach would strengthen the dual effect of green taxes: increasing regional tax revenue while accelerating the transition to a circular economy.

In addition, the IPCC (2023) in its AR6 report emphasized that subnational fiscal policies, including environmental taxation, are critical levers for achieving net-zero targets in urban areas by 2050. Thus, implementing a green tax at the city level is not merely a fiscal or environmental issue, but part of a long-term climate resilience strategy. Makassar, as a coastal city vulnerable to the impacts of climate change, has a greater urgency to systematically adopt this policy.

6. Conclusion

The research results show that green taxes have a positive and significant impact on regional tax revenues. This finding confirms that green taxes are not only an environmental policy instrument but also a potential source of fiscal revenue for regional governments. Furthermore, green taxes have a positive and significant impact on environmental sustainability. This demonstrates that the financial disincentive mechanism established through green taxes is effective in encouraging behavioral changes among economic actors, including government, businesses, and the public, toward more environmentally friendly practices.

This study has several limitations that need to be addressed in further research. It focused only on Makassar City and the non-cyclical consumer sector, making it impossible to generalize to all regions and sectors. Furthermore, the data used is subjective, as it uses a questionnaire, so it does not fully reflect the objective reality of tax revenues or physical environmental indicators. For future research, it is recommended to expand the study to multiple regions and diverse economic sectors to improve generalizability and capture broader impacts. Additionally, integrating objective data sources, such as official tax records and measurable environmental indicators, would enhance the robustness and accuracy of the findings.

References

Adi, B. P., Ramadhani, M. A., Lubis, P. M., & Firmansyah, A. (2022). Implementasi pajak karbon di Indonesia: potensi penerimaan negara dan penurunan jumlah emisi karbon. *JURNAL PAJAK INDONESIA (Indonesian Tax Review)*, *6*(2), 368–374.

Al Kautsar, G. A., & Bandiyono, A. (2025). Peran regulasi dan kebijakan pemerintah dalam implementasi pajak karbon dan pajak hijau di Indonesia. *Indonesian Accounting Research Journal*, *5*(2), 158-168.

Al-Jayed, M. N. H., & Khadim, H. J. (2025). The role of green taxation in achieving sustainable economic growth article review. *International Journal of Economic, Finance and Business Statistics*, *3*(2), 67-82.

Antari, R. B., Ratnasari, E. D., & Islami, F. S. (2025). Eksplorasi kurva kuznets: determinan emisi co2 dalam pembangunan ekonomi kawasan ASEAN Periode 2014-2023. *Economie: Jurnal Ilmu Ekonomi*, *7*(2), 72–87.

Aprillia, I. S., Parapat, F. R., Anastasya, V., Fadloli, M., Rohma, I. A., Erdiyanto, R. P., ... & Malkan, D. B. (2025). Efektivitas penerapan pajak karbon dalam mengurangi emisi gas rumah kaca di Indonesia. *Journal of Business Inflation Management and Accounting*, *2*(1), 91-98.

Ariyani, W. H., & Heriqbaldi, U. (2023). Pengaruh stringency, korupsi, dan pajak lingkungan terhadap foreign direct investment inflow: sebuah pollution heaven hypothesis. *Ekuitas (Jurnal Ekonomi Dan Keuangan)*, *7*(4), 457–478.

Barro, R. J., Bianchi, F., Alfaro, L., Alvarez, F., Bassetto, M., Bulow, J., Chodorow-Reich, G., Cochrane, J., Fernandes, A., House, C., Laibson, D., Lane, P., Leeper, E., Mei, P., Miller, D., Mulligan, C., Steinsson, J., Stern, R., & Stokoe, P. (2024). *Fiscal Influences on Inflation in OECD Countries*, Cambridge: NBER Working Paper 2020-2023.

Basthiani, I. A., & Pangestuti, I. R. D. (2024). The role green economy in sustainable development as long-term environmental and economic stability: a literature. *Research Horizon*, *4*(4), 187-196.

Bretschger, L., & Grieg, E. (2024). Carbon taxes, CO2 emissions, and the economy: The effects of fuel taxation in the UK. *Energy Policy*, *195*(3), 114-123.

Chikezie Ekwueme, D., Lasisi, T. T., & Eluwole, K. K. (2023). Environmental sustainability in Asian countries: Understanding the criticality of economic growth, industrialization, tourism import, and energy use. Energy & Environment, *34*(5), 1592-1618.

Dewi, S. P., Alsakinah, R., Sara, S. A., & Amrina, D. H. (2022). Pajak lingkungan sebagai upaya pengendalian pencemaran udara dari gas buang kendaraan bermotor di Indonesia. *Jurnal Ilmiah Ekonomi Dan Pajak*, *2*(1), 7–13.

Dokholyan, S., Khasanova, S., & Musaeva, A. (2024). Green taxation as a driver for sustainable development. *Reliability: Theory & Applications*, *19*(81), 1653-1659.

Hidayat, J. T., Waskitaningsih, N., & Balqis, M. A. (2025). Analisis penggunaan lahan kawasan sempadan dan arahan pengendaliannya: studi kasus sempadan di antara sempadan sungai cipakancilan dengan sempadan rel kereta di Kelurahan Kebon Pedes Kecamatan Tanah Sareal Kota Bogor. *Jurnal Locus Penelitian Dan Pengabdian*, *4*(8), 7477-7489.

IPCC, I. (2023). *AR6 Synthesis Report: Climate Change 2023 — IPCC*. AR6 Synthesis Report: Climate Change 2023. Retrieved on July 6, 2025, from https://www.ipcc.ch/report/sixth-assessment-report-cycle/

Iqbal, M. M., Ali, M., & Bakhtawar, S. (2025). Green taxes as a catalyst for net-zero emissions: policy design, implementation challenges, and global opportunities for climate action. *Research Journal for Social Affairs*, *3*(3), 177-189.

Jabeen, G., Wang, D., Pinzón, S., Işık, C., Ahmad, M., Rehman, A., & Anser, M. K. (2025). Promoting green taxation and sustainable energy transition for low-carbon development. *Geoscience Frontiers*, *16*(1), 101-105.

Marcos, A., Barrutia, J. M., & Hartmann, P. (2023). Carbon tax acceptance in a polarized society: bridging the partisan divide over climate policy in the US. *Climate Policy*, *23*(7), 885–900.

Meila, K. D., Dianty, A., & Veronica, L. (2024). Penerapan pajak karbon dalam mewujudkan sustainability development goals serta dampaknya terhadap penerimaan pajak di Indonesia. *Owner : Riset Dan Jurnal Akuntansi*, *8*(2), 1849–1864.

Mpofu, F. Y. (2022). Green Taxes in Africa: opportunities and challenges for environmental protection, sustainability, and the attainment of sustainable development goals. *Sustainability*, 14(16), 102-103.

Norouzi, N., Fani, M., & Talebi, S. (2022). Green tax as a path to greener economy: A game theory approach on energy and final goods in Iran. *Renewable and Sustainable Energy Reviews*, *156*(5), 111-1149.

Peng, Y., Bai, R., & Guan, Y. (2025). Impact of green taxes and fees on corporate ESG performance. *International Review of Financial Analysis*, *100*(3), 567-569.

Rasoulinezhad, E. (2025). Green taxes innovation and energy imports in advancing renewable transitions in developing countries. *Resources Policy*, *102*(4), 105-115.

Shafi, M., Ramos-Meza, C. S., Jain, V., Salman, A., Kamal, M., Shabbir, M. S., & Rehman, M. U. (2023). The dynamic relationship between green tax incentives and environmental protection. *Environmental Science and Pollution Research*, *30*(12), 32184-32192.

Shaikh, S. S., Amin, N., Shabbir, M. S., & Song, H. (2025). Going Green in ASEAN: Assessing the role of eco-innovation, green energy, industrialization, and environmental taxes in achieving carbon neutrality. *Sustainable Development*, *33*(3), 3596–3614.

Suryanto, F., & Yanti, L. D. (2024). Korelasi antara kinerja keuangan dan kebijakan pajak agresif. *ECo-Sync: Economy Synchronization*, *1*(2), 88–97.

Suryati, T. F., & Mooduto, W. I. S. (2024). Internalization of carbon tax externalities: systematic literature review. *Paser Institute Of Accounting and Finance*, *2*(1), 98–107.

Takona, J. P. (2024). Research design: qualitative, quantitative, and mixed methods approaches / sixth edition. *Quality and Quantity*, *58*(1), 1011–1013.

Wang, Y., & Yu, L. (2021). Can the current environmental tax rate promote green technology innovation?-Evidence from China's resource-based industries. *Journal of Cleaner Production*, *278*(4), 123-133.

Yang, Y., Zheng, T., & Wu, J. (2024). Green taxation, regional green development and innovation: Mechanisms of influence and policy optimization. *Humanities and Social Sciences Communications*, *11*(1), 1-21.

Zega, Y., & Agus, M. (2025). Penerapan pajak hijau dalam sistem perpajakan: tinjauan perusahaan manufaktur di Indonesia. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah Учредители: Institut Agama Islam Nasional Laa Roiba Bogor*, *7*(2), 76-79.

Zulfa Yudhanto, D., & Murwendah, M. (2025). Bridging the Gap: Local tax regulations and the future of green tax in Indonesia. *BISNIS & BIROKRASI: Jurnal Ilmu Administrasi Dan Organisasi*, *32*(1), 84-88.

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Data Disclosure Statement
The data that support the findings of this study are available from the corresponding author upon reasonable request.