



LITERATURE REVIEW: THE IMPLEMENTATION OF GREEN TAX IN INDONESIA FROM THE PERSPECTIVE OF ACCOUNTING AND SUSTAINABLE FISCAL POLICY

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Abstract:

This study explores how environmental taxation (green tax) is implemented and reported in Indonesia, particularly in relation to sustainable fiscal policy and tax-related accounting practices. Adopting a qualitative descriptive literature review, the research synthesizes insights from national and international publications on green taxation, green accounting, and environmentally oriented fiscal frameworks. The review highlights that green taxes play a dual role: they act as economic tools for internalizing negative externalities and function as fiscal mechanisms to support long-term environmental financing. Although Indonesia has taken initial steps through the introduction of carbon taxation, several challenges remain, including regulatory gaps, institutional readiness, and the absence of explicit accounting standards governing environmental tax treatment. From an accounting perspective, integrating green taxes into both financial and sustainability reporting frameworks is crucial to enhancing transparency, accountability, and fiscal effectiveness. Overall, the study underscores the need for stronger alignment among fiscal policy, green accounting practices, and corporate governance to advance environmentally sustainable economic development.

INTRODUCTION

Climate change and environmental degradation have become increasingly urgent global issues to address through effective and sustainable policies. Governments in various countries, including Indonesia, are beginning to direct their fiscal policy focus to support the green development agenda. Previous research indicates that economic activities that do not consider or account for environmental costs can generate significant negative externalities to ecosystem sustainability and public welfare (Pigou, 1920; OECD,

2021). One of the components utilized in a green tax is a fiscal mechanism designed to alter the behavior of economic agents by applying disincentives to activities that can damage the environment (Pearce, 1991; Tietenberg & Lewis, 2018).

In Indonesia, the discourse on implementing a green tax has gained momentum alongside the government's commitment to the Sustainable Development Goals (SDGs) and the Paris Agreement. Several policies under Law Number 7 of 2021 concerning the Harmonization of Tax Regulations, such as the carbon tax, plastic excise, and emission-based vehicle tax, represent the initial forms of environmental tax implementation in the country. Nevertheless, the implementation of these policies still faces various challenges, ranging from regulatory aspects and business readiness to tax accounting and reporting systems.

From a tax accounting perspective, a green tax has important implications for the recognition, measurement, and reporting processes of tax liabilities. To date, there is no accounting standard that specifically regulates the accounting treatment of environmental taxes in Indonesia. This condition potentially leads to inconsistencies in reporting and reduces the transparency of a company's financial information regarding its incurred environmental liabilities.

This study is structured to provide a comprehensive understanding of the green tax concept, particularly within the context of Indonesian taxation and its relationship with tax accounting. Through a literature review of previous research and regulatory developments, this study is expected to serve as a reference for regulators, practitioners, and academics in strengthening their understanding as well as building policy frameworks and accounting standards that support the effective and sustainable implementation of environmental taxes.

LITERATURE REVIEW

Green Tax

A green tax or environmental tax is a fiscal policy instrument aimed at internalizing external costs resulting from economic activities that negatively impact the environment. This concept originates from the externality theory proposed by Pigou (1920) regarding necessary government intervention to correct market failures caused by social costs not being reflected in market prices. The OECD (Organization for Economic Co-operation and Development) defines

the emphasis of a green tax as a tax levied on activities that generate environmental impacts with the aim of altering the behavior of economic agents to be more environmentally friendly.

According to Pearce (1991), the functions of a green tax include:

1. An economic instrument to reduce pollution through price mechanisms; and
2. A fiscal instrument to generate state revenue for financing environmental preservation activities.

According to Tietenberg and Lewis (2018), the effectiveness of an environmental tax heavily depends on a policy design that considers economic efficiency, social equity, and the administrative capacity of the government.

In Indonesia, the concept of a green tax has begun to be implemented through various policies such as the carbon tax, plastic excise, and emission-based vehicle tax. The imposition of this environmental tax is in line with the mandate of Law No. 7 of 2021 concerning the Harmonization of Tax Regulations (UU HPP), which introduces the carbon tax as part of the greenhouse gas emission control strategy.

Green Tax from a Fiscal Policy Perspective

From a fiscal policy perspective, a green tax serves as a tool to balance economic and environmental objectives, where the environmental tax is designed not only to increase state revenue but also to correct market failures resulting from negative externalities generated by economic activities (OECD, 2021; Tietenberg & Lewis, 2018). Through environmental taxation, the government can:

1. Control negative externalities (polluter pays principle).
2. Shift the fiscal burden from factors of production (such as labor) toward environmental factors (ecological tax reform).
3. Support the achievement of the Sustainable Development Goals (SDGs), particularly Goal 13 (Climate Action) and Goal 12 (Responsible Consumption and Production).

According to Tietenberg and Lewis (2018), the effective implementation of a green tax must consider economic efficiency, social equity, and the country's fiscal administrative capacity. In Indonesia, the primary challenge is to ensure that the application of an environmental tax does not merely aim to increase state revenue, but also plays a tangible role in driving behavioral changes among the public and business agents toward a more environmentally friendly economy.

Green Tax from a Tax Accounting Perspective

From a tax accounting perspective, the implementation of a green tax is not only related to fiscal policy but also carries implications for an entity's accounting treatment, particularly regarding the recognition, measurement, presentation, and disclosure of environmental tax liabilities in the financial statements.

According to PSAK 112 concerning Income Taxes, every tax liability arising from economic activities must be reliably recognized and measured. However, for environmental taxes, there is no specific accounting standard that explicitly regulates their treatment in Indonesia. This principle is aligned with the provisions of accounting standards related to income taxes, which emphasize the recognition of tax liabilities based on the economic substance of the transaction rather than merely its legal form. To date, no accounting standard specifically regulates the treatment of green taxes in Indonesia. This condition requires entities to use a principle-based approach, such as substance over form, in determining the most relevant accounting treatment (Lako, 2020).

Several previous studies, such as those by Schaltegger & Burritt (2017) and Lako (2020), emphasize that green taxes must be integrated into the concept of green accounting, where financial reporting reflects not only financial performance but also corporate environmental responsibility. Thus, integrating green taxes into the accounting system demands not only compliance with tax regulations but also an accounting approach that comprehensively reflects the company's environmental responsibility.

Externality Theory as the Foundation of Green Tax

The primary foundation for implementing an environmental tax stems from the externality theory (Pigou, 1920), which explains that economic activities often generate social costs that are not reflected in market prices. An environmental tax (green tax) functions to internalize these negative externalities by imposing a cost burden on economic agents who cause environmental damage.

Fiscal Policy Theory

According to Musgrave (1959), fiscal policy has three primary functions: allocation, distribution, and stabilization. The imposition of a green tax is part of the allocation function, wherein the government allocates resources through tax instruments to

address environmental issues and promote a sustainable balance of economic development.

Environmental Accounting Theory (Green Accounting)

This theory focuses on the measurement and reporting of the environmental impacts of corporate activities. Green accounting emphasizes the importance of transparency and accountability over the use of natural resources, including the recognition of environmental taxes or costs as part of corporate social responsibility (CSR).

According to Gray et al. (2014), the integration of environmental taxes into the accounting system will result in more comprehensive financial reporting, enabling stakeholders to assess the extent to which a company contributes to environmental sustainability.

RESEARCH METHODS

This study utilizes a literature review method with a descriptive qualitative approach developed more systematically by referencing the principles of a Systematic Literature Review (SLR) (Kitchenham, 2004; Snyder, 2019). This approach was selected to obtain a comprehensive understanding of green tax implementation from the perspectives of fiscal policy and tax accounting. Research data were obtained from scientific articles sourced from SINTA-indexed national journals as well as reputable international journals indexed in Scopus and DOAJ. The literature search process was conducted through databases such as Google Scholar, Scopus, and national journal portals using the keywords: "green tax", "environmental tax", "green accounting", and "sustainable fiscal policy". The review process was performed systematically by selecting literature based on thematic relevance, namely green tax, environmental accounting, and sustainable fiscal policy. Each source was critically analyzed to identify the concepts, challenges, and accounting implications of environmental tax implementation in Indonesia. The analysis results were then synthesized narratively to generate a comprehensive understanding of the relationship between green fiscal policy and tax accounting in supporting sustainable development.

RESEARCH FINDINGS

The following is a summary of previous research related to environmental taxes and carbon taxes within both the Indonesian and international contexts:

Table 1
Previous Research

Research Title	Researcher and Year	Research Objective	Research Method	Research Variables	Research Results and Conclusion
<i>Contemporary Environmental Accounting</i>	Schaltegger & Burritt (2017)	To explain the importance of integrating environmental taxes into modern accounting systems.	Conceptual study based on international literature concerning environmental accounting practices..	Environmental tax, environmental accounting, sustainability reporting.	Found that merging environmental accounting and fiscal instruments such as a green tax can enhance corporate transparency and accountability toward environmental issues.
Akuntansi Hijau dan Pembangunan Berkelanjutan	Lako, A. (2020)	To analyze the relationship between the implementation of green accounting and economic and environmental sustainability.	Literature review and policy analysis.	Green accounting, economic sustainability, environmental responsibility.	Green accounting can serve as a tool to internalize environmental impacts within corporate financial statements.
Analisis Kesiapan Implementasi Pajak Karbon di Indonesia	Imam Susanto, Robi Ulpa (2023)	To analyze the readiness of the Indonesian government in implementing a carbon tax as part of sustainable fiscal policy.	Descriptive study with a qualitative approach through the analysis of regulations, policies, and institutional readiness.	Carbon tax, fiscal policy, regulatory readiness.	Indicates that institutional and regulatory readiness is still limited; however, the carbon tax has high potential as a future sustainable fiscal instrument.

Research Title	Researcher and Year	Research Objective	Research Method	Research Variables	Research Results and Conclusion
Urgensi Penerapan <i>Carbon Tax</i> sebagai Upaya Pengendalian Emisi Karbon di Indonesia	Rina Sulistyowati, Tri Winarsi, Mistri Ani, Rachmad Bayu Kurniawan (2024)	To assess the urgency and impact of carbon tax implementation in reducing carbon emissions and its contribution to sustainable development.	Policy literature review and juridical analysis of regulations related to the carbon tax in Indonesia.	Carbon tax, green fiscal policy, sustainable development.	Found that the implementation of a carbon tax can act as an effective economic instrument to reduce carbon emissions while simultaneously supporting green financing.
<i>Green Tax</i> Indonesia Untuk Keberlanjutan Lingkungan Hidup"	Putri, C.P.K. (2025)	To explore the implementation of green tax in Indonesia and compare it with other countries.	Literature review and comparative analysis.	Green tax, environmental sustainability, state revenue.	Implementation is still limited, but there is high potential for sustainability.
The Effect of Tax Accounting, Green Accounting and Carbon Accounting on ESG Performance Moderated by Green Intellectual Capital	Meidijat i, M., dkk (2022)	To examine the effect of tax accounting, green accounting, and carbon accounting on ESG performance, with green intellectual capital as a moderator.	Quantitative survey.	Tax accounting, green accounting, carbon accounting, green intellectual capital, ESG performance.	Tax accounting and green accounting have a significant impact on ESG; carbon accounting is less significant.

Source: Processed Results, 2026

Based on the results of previous studies, it is evident that the issues of green tax and environmental accounting have been widely examined from various perspectives. Schaltegger and Burritt (2017) emphasize the importance of integration between environmental taxes and modern accounting systems, where merging fiscal instruments like a green tax can enhance corporate transparency and accountability toward environmental issues. Meanwhile, Lako (2020) demonstrates that the implementation of green accounting plays a vital role in internalizing environmental impacts into financial statements, thereby promoting economic sustainability.

The studies by Imam Susanto and Robi Ulpa (2023) as well as Rina Sulistyowati et al. (2024) focus more on the readiness and urgency of carbon tax implementation in Indonesia. Both found that despite limited regulatory and institutional readiness, the carbon tax holds great potential as a sustainable fiscal instrument that can reduce emissions and support green development.

Furthermore, Putri (2025) highlights that the implementation of a green tax in Indonesia is still in its early stages, yet it possesses high potential to drive environmental sustainability if integrated with stronger fiscal policies. Conversely, Meidijati et al. (2022) indicate that tax accounting, green accounting, and carbon accounting have a significant influence on ESG (Environmental, Social, and Governance) performance, particularly when strengthened by green intellectual capital.

When compared to the literature review on the Implementation of Green Tax in Indonesia from the Perspective of Tax Accounting and Sustainable Fiscal Policy, these previous studies reinforce that a green tax is not merely a fiscal instrument, but also an integral part of environmental accounting systems and green economic policies. This study serves to deepen the understanding that the successful implementation of a green tax in Indonesia heavily depends on the synergy between fiscal regulations, institutional readiness, and the application of green accounting principles in corporate reporting and governance.

DISCUSSION

The Concept of Green Tax from a Tax Accounting Perspective

A green tax or environmental tax is a fiscal instrument designed to internalize external costs resulting from economic activities on the environment. From a tax accounting perspective, a green tax functions not merely as a source of revenue for the state, but also as an instrument to guide economic behavior to focus more on sustainability. According to Schaltegger and Burritt (2017), the integration between environmental taxes and modern accounting systems is important to enhance transparency and accountability regarding the environmental impacts generated by business entities. Merging environmental accounting reporting with green fiscal instruments can strengthen corporate responsibility toward sustainability. Nevertheless, the absence of an accounting standard that specifically regulates green taxes leads to variations in reporting practices across entities. This condition indicates a gap between

the concept of environmental accounting and its implementation within the taxation context.

From an accounting standpoint, the application of an environmental tax demands recognition, measurement, and reporting that are relevant to the economic impacts of a company's environmental activities. This aligns with the view of Lako (2020), who emphasizes that green accounting can serve as a tool to internalize environmental costs into corporate financial statements, thereby creating transparency and accountability in supporting a green economy.

Implementation of Green Tax in Indonesia and Institutional Readiness

The implementation of environmental taxes in Indonesia is still in the developmental stage. Imam Susanto and Robi Ulpa (2023) found that regulatory and institutional readiness in implementing a carbon tax is still limited, despite the great potential to make it a part of sustainable fiscal policy. Their descriptive analysis indicates that the successful implementation of a green tax in Indonesia requires strong regulatory support, administrative readiness, and alignment between fiscal and environmental policies.

Echoing this sentiment, Rina Sulistyowati et al. (2024) assess that the implementation of a carbon tax carries high urgency given its role in reducing carbon emissions and its contribution to sustainable development. However, their study also highlights that the effectiveness of a green tax heavily depends on the harmonization between fiscal and environmental policies, as well as the active participation of the industrial sector in environmental tax reporting compliance.

Green Tax as a Sustainable Fiscal Policy Instrument

From a fiscal policy perspective, a green tax serves as an important instrument in supporting the sustainable development agenda. Putri (2025) suggests that the implementation of a green tax in Indonesia is still limited, but it has high potential to drive sustainability if executed through an integrated fiscal policy approach. By comparing green tax practices in other countries, this study indicates that successful implementation is heavily influenced by regulatory clarity, incentive mechanisms, and transparent environmental financial reporting.

The research by Meidijati et al. (2022) also reinforces the importance of integrating tax accounting, green accounting, and carbon accounting toward ESG (Environmental,

Social, and Governance) performance. The results of their study show that accounting reporting practices that account for environmental aspects significantly enhance sustainability performance and strengthen responsible fiscal governance.

Tax Accounting Perspective on Environmental Tax Reporting

In the context of tax accounting, environmental tax reporting demands an accounting system capable of accurately recording and reporting environmental costs and liabilities. Environmental taxes do not only affect the calculation of a company's tax expense, but also reflect corporate social responsibility. This is aligned with the green accounting approach, which emphasizes the importance of transparency and disclosure of environmental information within financial statements. Consequently, the implementation of a green tax in Indonesia from a tax accounting perspective must encompass three primary aspects:

1. Fiscal recognition of environmental costs as part of corporate liabilities;
2. Transparent reporting of environmental tax contributions in supporting sustainable development; and
3. Integration of financial and non-financial reporting (sustainability reporting) that reflects the company's environmental responsibility.

From various previous studies, it can be concluded that the implementation of a green tax in Indonesia holds great potential to become a sustainable fiscal policy instrument, yet it faces challenges in terms of regulations, institutional readiness, and the harmonization of tax accounting and environmental reporting. Most studies highlight that the integration between environmental accounting and fiscal policy is the key to the success of a green tax.

Therefore, this literature review reinforces the idea that the implementation and reporting of environmental taxes must be developed within a sustainability-oriented tax accounting framework (sustainable tax accounting). This approach is expected to drive fiscal efficiency, reduce negative environmental externalities, and create a transparent and accountable green economic governance in Indonesia.

CONCLUSION

Based on the results of the literature review, it can be concluded that the implementation of a green tax in Indonesia holds great potential to support sustainable

development through the control of negative externalities and the generation of environmentally oriented state revenue. However, its successful implementation depends on regulatory readiness, inter-institutional coordination, and integration with a transparent tax accounting system. From an accounting perspective, the absence of a specific standard regarding environmental tax treatment necessitates a substance over form approach to ensure that the recognition and reporting of environmental tax liabilities can be reliably presented. The integration between green accounting and fiscal policy will enhance business entities' accountability toward environmental impacts. Therefore, the implementation of environmental taxes in Indonesia must be accompanied by the strengthening of the regulatory framework, the development of green accounting standards, and a comprehensive sustainability reporting system. This effort is expected to realize efficient and transparent fiscal governance while making a tangible contribution to the national green economic development agenda.

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