

Research.

The Role of Green Accounting through the Implementation of Carbon Tax as a Climate Change Mitigation Instrument in Indonesia

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Received: May 21, 2023 Accepted: June 22, 2023 Published: June 30, 2023

To cite this article: **Indarto, BA; Ani, DA.** (2023) The Role of Green Accounting through the Implementation of Carbon Tax as a Climate Change Mitigation Instrument in Indonesia *The Accounting Journal of BINANIAGA* 8(01), 73-84. [doi:10.33062/ajb.v8i01.24](https://doi.org/10.33062/ajb.v8i01.24)

ABSTRACT: *This research aims to analyze the application of green accounting and carbon tax in the context of climate change in Indonesia. The integration of green accounting with carbon tax is a relevant instrument to reduce greenhouse gas emissions and encourage companies to move to cleaner energy sources. The research method is a literature analysis related to green accounting and carbon tax in Indonesia. Data and literature were collected to identify green accounting practices in Indonesia, their potential and impact on financial and environmental performance. The results showed that some companies have adopted green accounting practices, such as carbon emissions measurement and environmental performance reporting. However, more widespread and consistent implementation is needed across all sectors. Carbon tax policy in Indonesia is also still under development, with some sectors already subject to carbon tax. However, there is a need to strengthen the policy framework, including increased clarity on carbon tax rates and the use of revenue from such taxes to support environmental projects. It can be concluded that the implementation of green accounting and carbon tax in Indonesia is still in its early stages, with some efforts already made. However, there is still room to improve understanding, awareness and cooperation between the government, companies and communities to accelerate the shift towards a low-carbon economy and sustainable development.*

Keywords: *Climate Change, Carbon Tax, Green Accounting*

INTRODUCTION

Background

Climate change refers to long-term changes in global weather and climate patterns across the planet. These include changes in Earth's average temperature, precipitation levels, rates of sea level rise, frequency and intensity of extreme weather, as well as changes in other natural patterns. The main cause of climate change today is an increase in the concentration of greenhouse gases in the atmosphere, caused by human activities, particularly the burning of fossil fuels (such as coal, oil and natural gas), deforestation and land use change. Greenhouse gases, such as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), trap heat in the atmosphere and cause global warming. The impact of climate change is that the Earth's average temperature has increased over the past few decades, causing effects such as melting polar ice caps and rising sea levels. Extreme weather events, such as storms, floods, droughts and heat waves, are becoming more frequent and intense as a result of climate change. Some areas experience increased rainfall, while others experience drought,

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disrupting agricultural patterns, water supplies and ecosystems. Climate change affects both terrestrial and aquatic ecosystems, triggering habitat shifts and species migrations. Climate change can negatively impact human health through the spread of vector diseases, air pollution, drought and famine.

The issue of climate change has become a serious topic internationally today, with the ratification of the Paris Agreement on Earth Day, April 22, 2016. In a meeting attended by 103 countries, including Indonesia, have ratified the agreement as an effort to hold global temperature rise below 2°C from pre-industrialization levels and try to limit it to below 1.5°C. With the ratification of the agreement, the Government of Indonesia is committed to addressing the issue of greenhouse gas emissions, which is a major factor in climate change and rising global temperatures. Indonesia is among the top 10 greenhouse gas emitters in the world, ranking 8th in 2018. Indonesia produces more than 965.3 metric tons of CO₂ which is equivalent to 2.03% of global greenhouse gas emissions followed by Brazil in 7th place with 1042.5 metric tons of CO₂ or equivalent to 2.19% of the world's total gas emissions and Iran in 9th place with 827.9 metric tons of CO₂ or about 1.74% of total gas emissions in the world (World Research Institute, 2020).

Through the enactment of the Presidential Regulation (Perpres) on the Value of Carbon Economy (NEK), it is stated that the national target is 29% to reduce greenhouse gas emissions independently, and through international support 41% which is expected to be achieved by 2030. Apart from the Presidential Regulation, the Government drafted the Harmonization of Tax Regulations (HPP) Law which was passed on 29 October 2021 to further expand the scope of tax imposition. The HPP Law also contains several changes to both material (such as Income Tax Law and VAT / Sales Tax on Luxury Goods (STLG)) and formal (The General Tax Provisions and Procedures Law) tax regulations. The drafting of the law aims to address the problem of budget deficits because of the Covid-19 pandemic, which if it soars further could result in significant increases in debt financing. One of the new tax sectors contained in the COGS Law is the Carbon Tax. Carbon tax is a legal instrument that is expected to control greenhouse gas emissions as a form of support for Indonesia's Nationally Determined Contribution (NDC). NDC is a national contribution as a commitment to address global climate change in the form of ratification of the Paris Agreement to the United Nations Framework convention on climate change.

The Carbon Tax applies from July 2022 as the Government's response to reduce greenhouse gas emissions by encouraging the use of new and renewable energy and various technological and applied innovations. The implementation of Carbon Tax is expected to reduce economic activities that can pollute and damage the environment with the transformation of consumption and production methods that are environmentally friendly. According to Alper (2018), Carbon Tax is needed to maintain environmental quality for sustainable economic development, in accordance with the concept of sustainable development that future generations must have economic opportunities at least provided for the present generation in order to create their own economic prosperity. The government continues to encourage the acceleration of investment and an environmentally friendly economy through fiscal policy reforms, including tax allowances, tax holidays, and subsidies for renewable energy development. A record 4.1% of the state budget has been budgeted for climate change management in the last 5 years. The latest government policy is to provide incentives and subsidies for battery-based electric vehicles.

With the birth of the Carbon Tax policy, economic actors and various instruments that follow are expected to be able to immediately adjust to the regulation. Green accounting, also known as environmental accounting or sustainable accounting, is an approach in accounting that attempts to account for the environmental impact of economic activity. The main objective of green accounting is to measure, report, and analyze financial and non-financial information relating to the environmental aspects of an entity. Green accounting involves measuring and recording the economic value of natural resources used or affected by an entity, as well as the environmental impact of those business activities. This includes valuing natural assets, such as forests, waters,

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and biodiversity, as well as the economic value of environmental services such as carbon sequestration, clean water provision, and habitat preservation.

The methods used in green accounting attempt to integrate environmental information into traditional financial statements, such as the income statement, balance sheet, and cash flow statement. This can include recording and disclosing environmental costs, revenue generated from sustainable activities, and disclosure of environmental risks and impacts. Green accounting also seeks to identify and measure the positive and negative impacts of business activities on the environment and society, and provide relevant information to stakeholders, including investors, governments, and the general public. This can help in making decisions that are more sustainable and responsive to environmental challenges. The development and application of green accounting has received growing attention as awareness of the importance of sustainability and environmental protection increases. International organizations, such as the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiative (GRI), have developed guidelines and frameworks to assist companies in implementing green accounting and reporting environmental information in a consistent and transparent manner. The scope of accounting today is increasingly broad and is not limited to just finance, but includes environmental and social issues. The integration of finance with these issues is known as green accounting. Green accounting practices carbon accounting techniques to quantify the greenhouse gas emissions produced by an organization. This way, the organization knows the climate impact of its operations, analyzes the risks and can make decisions to start limiting or even reducing greenhouse gas emissions.

Problem Formulation

The transformation of a conventional economy that prioritizes profit alone into a more environmentally friendly economy is an activity of the production, distribution and consumption chain that considers long-term ecological impacts. An environmentally friendly economy does not pose future environmental risks to the next generation such as waste, raw material scarcity and climate change. The formulation of this research problem provides a basis for exploring the relationship between green accounting and carbon tax, and its impact on corporate behavior and financial performance. The research problem formulation regarding green accounting and carbon tax focuses on the following:

1. How can the concept of green accounting be applied in the context of calculating and reporting corporate carbon emissions?
2. How can the implementation of carbon tax encourage companies to adopt green accounting practices?
3. What is the impact of carbon tax implementation on corporate financial sustainability?
4. How can the carbon tax system be effectively designed to encourage changes in corporate behavior towards more environmentally friendly business practices?
5. How can the process of measuring, reporting and verifying carbon emissions be improved in the context of green accounting and carbon tax?
6. What is the role of the government in encouraging the adoption of green accounting practices through carbon tax policy?

LITERATURE REVIEW

Climate Change

Climate change is a shift or change in the pattern and intensity of climate elements over a 30-year period. This climate change can be in the form of abnormal weather conditions compared to normal conditions on average. Extreme weather, shifting seasonal patterns and the expansion of drought-prone areas are examples of how the climate is changing. Farmers perceive climate change as the occurrence of an uncertain dry and rainy season, disrupting planting patterns so that it has an impact on crop yields. However, fishermen interpret climate change as the difficulty of reading natural signs such as wind, temperature and irregular sea waves, making it difficult for fishermen to predict catch areas. However, the general public interprets climate change as seasonal irregularities. Law No. 31 of 2009 states that Climate change is a change in climate caused, directly or indirectly, by human activities that causes changes in the composition of the atmosphere globally as well as changes in natural climate variability observed over time that can be compared. The Ministry of Environment (2001) defines climate change as a change in the physical conditions of the earth's atmosphere, including temperature and rainfall distribution, which has a broad impact on various sectors of human life.

Carbon Tax

Carbon tax can be used as one of the important instruments to mitigate climate change. A carbon tax can be imposed by calculating an entity's carbon emissions from fossil fuel use. Carbon emission is the amount of greenhouse emissions released through activities in a certain period with a unit of measure of tons of carbon dioxide equivalent (tCO₂e) or kg of carbon dioxide equivalent (kgCO₂e). The Indonesian government seeks to reduce the negative impact of carbon emissions through the stipulation of the Taxation Harmonization Law (HPP Law) Number 7 of 2021 by imposing a carbon tax on carbon-based products or activities that generate carbon. The imposition of carbon tax is an effort to reduce carbon emissions generated from various community activities, especially the industrial and transportation sectors (Pratama et al, 2022). A carbon tax is an economic policy mechanism that aims to reduce greenhouse gas emissions by imposing a tax on each ton of carbon dioxide or other greenhouse gas produced by human activities. The tax is levied on companies or individuals that produce such emissions, with the aim of encouraging them to reduce carbon emissions and promote the use of clean and environmentally friendly energy. Stern (2007) describes a carbon tax as a way to integrate the economic consequences of climate change into business and investment decisions. Nordhaus (2012) defines a carbon tax as a tool to internalize the environmental costs of carbon emissions into the price of fossil fuels, thereby encouraging the use of cleaner energy and reducing greenhouse gas emissions. Mankiw (2015) describes a carbon tax as a tax on carbon emissions levied on fossil fuels in accordance with the amount of carbon dioxide produced. This tax is designed to incentivize companies and consumers to reduce fossil fuel consumption and switch to cleaner energy sources.

Green Accounting

Green accounting, also known as environmental accounting or sustainable accounting, is an accounting approach that considers environmental and social factors in the measurement, reporting, and evaluation of an organization's financial performance. The main objective of green accounting is to integrate economic, environmental, and social dimensions in the economic decision-making process. Schaltegger and Burritt (2000) state that green accounting seeks to measure and evaluate the economic impact of environment-related activities, such as natural resource use, pollution, or environmental damage. It involves valuing natural assets, environmental costs, and associated economic benefits. Green accounting attempts to account for greenhouse gas emissions, hazardous waste, and other pollutants in the accounting process so this can involve direct measurement or using standard emission factors to calculate the environmental impact of an organization's activities (Gray and

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Bebbington, 2000). Green accounting environmental reporting encourages more transparent and comprehensive reporting of an organization's environmental and social impacts. It involves providing more complete information regarding sustainable practices, environmental policies, and environment-related financial performance (Unerman et al, 2007). Green accounting helps organizations identify environmental and social risks that may affect their financial performance. In addition, it also helps identify opportunities for innovation, efficiency, and sustainability that can provide long-term benefits (Deegan and Rankin, 1996). Green accounting has become the focus of attention in accounting practices and regulations that are increasingly concerned with sustainability. It assists organizations in measuring and reporting their environmental and social impacts and promoting sustainability in business decision-making.

RESEARCH METHOD

This research uses a qualitative approach with the literature method as secondary data research. The method is used by conducting a systematic review to identify, assess and interpret the findings into research topics. With these stages, the systematic literature review method produces a more objective point of view. The following are the stages of the systematic literature review method used in this research:

1. Determine the research theme accompanied by the collection of topics, topics and supported by sufficient literacy as a background for research. Literacy that supports the theme is converted into a discussion to answer the urgency and importance of the research.
2. Conduct an in-depth and structured identification of the research problem. The identification gives an idea of the problems faced and finds literature that supports the research. Thus, a solution as a problem solver can be obtained.
3. Collecting data in the form of quantitative and qualitative data from credible literature sources to construct research.
4. Interpretation of results is conducted after the data is collected and the analysis is conducted. The results of the analysis are interpreted objectively.

Because this research uses a systematic literature review, the data will be dominated by secondary data in the form of literature in the form of articles in credible journals, books, previous research and official data sourced from publications of official government institutions.

RESULTS AND DISCUSSION

Carbon tax is a policy industry implemented to reduce greenhouse gas emissions, mainly carbon dioxide (CO₂), which is the main cause of climate change. The goal of a carbon tax is to encourage emissions reductions by providing economic incentives for individuals and companies to switch to cleaner and more efficient energy sources. The carbon tax is levied on fossil fuels such as coal, oil, and natural gas used in production, transportation, and other activities that generate CO₂ emissions. Each unit of carbon emission has a cost imposed by the government in the form of a tax. Thus, companies or individuals that produce high emissions will pay more carbon tax. The implementation of carbon taxes can be done at a national or regional level, and countries such as Sweden, Norway, and Canada have adopted carbon taxes in their industries to reduce greenhouse gas emissions. However, the introduction and implementation of carbon taxes remains a complex topic, as it can affect energy prices, industry competitiveness, and wealth distribution.

Table 1
Global Scale Carbon Tax Rate Per Ton CO₂e

No.	Country	Rates	No.	Country	Rates
1	Sweden	USD137 per tCO ₂ e	13	Denmark	USD28per tCO ₂ e
2	Swiss	USD101 per tCO ₂ e	14	England	USD25per tCO ₂ e
3	Liechtenstein	USD101 per tCO ₂ e	15	Slovenia	USD20per tCO ₂ e
4	Finlandia	USD73 per tCO ₂ e	16	Spain	USD18per tCO ₂ e
5	Norway	USD69 per tCO ₂ e	17	Latvia	USD14per tCO ₂ e
6	French	USD52 per tCO ₂ e	18	South Africa	USD9 per tCO ₂ e
7	Luxemburg	USD40 per tCO ₂ e	19	Argentina	USD6 per tCO ₂ e
8	Ireland	USD39 per tCO ₂ e	20	Singapore	USD4 per tCO ₂ e
Global Scale Carbon Tax Rate Per Ton CO ₂ e (continued)					
No.	Country	Rates	No.	Country	Rates
9	Netherland	USD35 per tCO ₂ e	21	Mexico	USD3 per tCO ₂ e
10	Iceland	USD35 per tCO ₂ e	22	Japan	USD3 per tCO ₂ e
11	Canada	USD32 per tCO ₂ e	23	Estonia	USD2 per tCO ₂ e
12	Portugal	USD28 per tCO ₂ e	24	Indonesia	USD2 per tCO ₂ e

Source: Ministry of Environment, 2021

The data above is a table of countries that impose carbon tax rates as of April 2021, Indonesia is ranked 24th. Thus, Indonesia is a country that imposes a relatively low carbon tax rate. The carbon tax targets coal-fired power plant companies with a rate of IDR 30,000 or around USD 2 per carbon dioxide equivalent emission (tCO₂e). Each country has different policies on the imposition of carbon tax objects, such as Finland which applies to the vehicle industry and power plants. Meanwhile, Mexico imposes it on the oil refining and aviation industries.

Table 2
Indonesia's Greenhouse Gas Emissions (CO₂e)/Tons

No.	Year	Emission	No.	Year	Emission
1	2004	849,968,000	13	2012	1,244,577,000
2	2005	891,733,000	14	2013	1,331,413,000
3	2006	1,174,957,000	15	2014	1,508,973,000
4	2007	853,378,000	16	2015	2,374,403,000
5	2008	852,342,00	17	2016	1,335,521,000
6	2009	1,197,412,000	18	2017	1,353,850,000
7	2010	809,982,000	19	2018	1,615,569,000
8	2011	1,054,079,000	20	2019	1,866,552,000

Source: Ministry of Environment, 2021

From 2004 to 2019, greenhouse gas emissions in Indonesia continued to increase. Indonesia faces a major challenge in meeting its target of reducing greenhouse gas emissions by 29% by 2030 and or 41% with international support.

Table 3
Indonesia's Greenhouse Gas Emissions by Source (2019)

No.	Sector	Value / Gg CO ₂ e
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1	Forest/Peat Fires	924,853
2	Energy	638,808
3	Waste	134,119
4	Agriculture	108,598
5	Industry/Product Consumption	60,175
6	Total	1,866,552

Source: Ministry of Environment, 2021

The data above shows that during 2019 Indonesia produced 1,866,552 gigagrams of carbon dioxide equivalent (Gg CO₂e) which was dominated by forest utilization and peatland fires amounting to 924,853 Gg CO₂e. In its implementation, carbon tax has three main advantages compared to other policies in controlling greenhouse gas emissions, especially carbon dioxide (CO₂) emissions (Ratnawati, 2016). First, a carbon tax is an economy-wide policy that can cut emissions from every major source, while other policies tend to target emissions from specific sources, such as electricity, heating, or transportation. A carbon tax can be applied to all types of fossil fuels, thus covering all major emission sources.

Second, a carbon tax provides a clear price signal to firms and households, allowing them to make better purchasing and investment decisions. With clear carbon price information, consumers and businesses are more likely to take energy-efficient measures and invest more in energy-efficient technologies. Therefore, a carbon tax can maximize its effect on consumer behavior by showing a clear price signal. Third, a carbon tax can bring two economic benefits. One benefit comes from eliminating the negative externalities of fossil fuels. The other benefit arises when carbon tax revenues are used to offset other tax revenues. This benefit is often referred to as the "double dividend" and is an important attribute of carbon taxes (Goulder, 1995).

In terms of these three benefits, a carbon tax is a broad economic policy that can cut emissions from every major energy source. A carbon tax can be applied to all types of fossil fuels, so it covers all major sources of emissions. This means that if a carbon tax is introduced, it can encourage individuals to use less fossil fuels and find new sources of energy. In other words, energy use and emissions can be lowered by this. From this, it can be said that a carbon tax can be an attractive policy option to maintain environmental quality in the transformation to a green economy and sustainable economic development. With energy savings and emission reductions from the implementation of carbon tax, the goal of green economy, which is to improve human welfare and social equality, while significantly reducing environmental risks, is expected to be achieved.

Green accounting, also known as environmental accounting or sustainable accounting, is an accounting approach that considers the environmental impact of economic activities. In the context of the carbon tax issue, green accounting can play an important role in measuring, reporting and accounting for a company's contribution to carbon emissions and its environmental impacts. Green accounting involves measuring the carbon emissions generated by a company's activities. Methods used may include calculations of direct and indirect emissions from production processes, transportation, and use of energy sources. These measurements provide the data base needed to calculate a company's carbon tax liability. Green accounting also involves transparent and reliable reporting of carbon emissions. Companies are expected to disclose information about their carbon emissions in their financial statements or corporate social responsibility (CSR) reports. This reporting provides transparency to stakeholders and enables benchmarking of environmental performance between companies.

In addition to carbon emissions, green accounting can also include an assessment of the broader environmental impacts of a company's activities in relation to carbon taxes. This includes assessing impacts on climate change, air quality, water, biodiversity and other natural resources. By considering more holistic impacts, green accounting can assist companies in making more sustainable decisions. Green

accounting can consider the recognition and management of a company's carbon assets and liabilities. This involves valuing carbon-related assets such as forests that serve as carbon sinks, as well as valuing liabilities related to carbon emissions. Good management of carbon assets and liabilities can assist companies in optimizing their environmental performance and reducing associated risks. Green accounting can provide valuable information for governments and companies in developing sustainable policies and strategies related to carbon taxes. By understanding the environmental impacts of economic activities, policies can be designed to encourage the transition to a low-carbon economy and reward sustainable business practices. Overall, green accounting in carbon tax issues plays an important role in integrating environmental aspects into accounting practices and decision-making. This helps to increase transparency

Table 4
Potential State Revenue from Carbon Tax 2004-2025

Year	Emission / Gg	Conversion of Emission to Kg	Total Revenues
2004	849,968	849,968,000.000	IDR 25,499,040,000,000
2005	891,733	891,733,000.000	IDR 26,751,990,000,000
2006	1,174,957	1,174,957,000.000	IDR 35,248,710,000,000
2007	853,378	853,378,000.000	IDR 25,601,340,000,000
2008	852,342	852,342,000.000	IDR 25,570,260,000,000
2009	1,197,412	1,197,412,000.000	IDR 35,922,360,000,000
2010	809,982	809,982,000.000	IDR 24,299,460,000,000
2011	1,054,079	1,054,079,000.000	IDR 31,622,370,000,000
2012	1,244,577	1,244,577,000.000	IDR 37,337,310,000,000
2013	1,331,413	1,331,413,000.000	IDR 39,942,390,000,000
2014	1,508,973	1,508,973,000.000	IDR 45,269,190,000,000
2015	2,374,403	2,374,403,000.000	IDR 71,232,090,000,000
2016	1,335,521	1,335,521,000.000	IDR 40,065,630,000,000
2017	1,353,850	1,353,850,000.000	IDR 40,615,500,000,000
2018	1,615,569	1,615,569,000.000	IDR 48,467,070,000,000
2019	1,866,552	1,866,552,000.000	IDR 55,996,560,000,000
2020	661,603	661,603,000.000	IDR 19,848,090,000,000
2021	685,211	685,211,000.000	IDR 20,556,330,000,000

Potential State Revenue from Carbon Tax 2004-2025 (continued)

Year	Emission / Gg	Conversion of Emission to Kg	Total Revenues
2022	709,622	709,622,000.000	IDR 21.228.660.000.000
2023*	734,985	734,985,000.000	IDR 22.049.550.000.000
2024*	761,212	761,212,000.000	IDR 22.836.360.000.000
2025*	788,375	788,375,000.000	IDR 23.651.250.000.000

Source: data processed rates 30/kg CO₂e, 2023

* Ministry of Environment projection data

The data in Table 4 shows that the potential revenue from the implementation of carbon tax is very large from year to year. From 2004 to 2019, it continues to increase although there are fluctuating years but has an increasing trend. The implementation of carbon tax in Indonesia was originally implemented starting July 1,

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2022 but has been delayed and will be implemented in 2025. Post-pandemic, namely in 2020, the Ministry of Environment projects a decrease in greenhouse gas emissions because of adjustments in industry, transportation and individual consumption. Thus, the main agenda of the carbon tax is to change the behavior of economic actors (change behavior) to be more environmentally friendly by using more green and low-carbon economic approaches.

Stakeholders need relevant, reliable, understandable and comparable information to assess greenhouse gas emissions, respond and make informed decisions. This issue makes the accounting profession need to make adjustments to be more sensitive to environmental issues. Accountants and accounting practices that still use conventional systems must transform to green accounting. Lako (2018) defines an integrated process of recognition, value measurement, recording, summarizing, reporting, and disclosure of financial, social, and environmental objects, transactions, or events in the accounting process in order to produce complete, integrated, and relevant financial, social, and environmental accounting information that is useful for users in economic and non-economic decision making and management. Currently, the scope of accounting is not limited to financial matters but includes social and environmental issues. The integration process between financial and social and environmental accounting is currently known as green accounting.

Green accounting takes part in addressing the problem of greenhouse gas emissions. Green accounting practices apply accounting techniques by quantifying greenhouse gas emissions resulting from economic actors. Thus, economic actors know and understand the environmental risks that can occur for their economic activities. The information generated by the application of green accounting is expected to provide such information in order to take action to limit or reduce greenhouse gas emissions. Green accounting calculates carbon footprints such as carbon dioxide, methane and hydrofluorocarbons for a year, summed up and then converted to units of carbon dioxide equivalent (CO₂e). With this method, economic actors know the price to be paid for activities that cause greenhouse gas emissions. Green accounting can be one of the significant breakthroughs in dealing with climate change. Analogously, green accounting is a bridge that delivers stakeholders in economic activities related to environmental issues from economic actors to the government. Green accounting is also able to calculate financial performance in terms of profit but still provides recommendations to protect the environment and social.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Green accounting is an approach that integrates environmental and social factors in the financial accounting process. Its main objective is to measure, report, and consider the environmental and social impacts of economic activities. The application of green accounting can provide significant benefits in identifying environmental risks, managing resources sustainably, and increasing transparency in financial statements. A carbon tax is an economic policy instrument used to reduce greenhouse gas emissions by providing financial incentives for companies that reduce their emissions.

The aim is to mitigate the negative impacts of climate change and encourage a shift to a low-carbon economy. The implementation of a carbon tax can improve energy efficiency, encourage green technology innovation, and generate revenue that can be used to support environmental projects.

Suggestions

Suggestions for implementing green accounting and carbon tax as climate change mitigation efforts in Indonesia are as follows:

1. Increased awareness and understanding: Governments, companies and the public need to be given a better understanding of the benefits of green accounting and carbon taxes. Effective outreach and education campaigns can help raise awareness and understanding of the importance of protecting the environment and encourage responsible action.
2. Supportive policies and regulations: Governments need to develop policies and regulations that support the implementation of green accounting and carbon taxes. This could include the development of environmental accounting standards, fiscal incentives for companies implementing sustainable practices, and the imposition of adequate carbon taxes.
3. Consistent measurement and reporting: It is important for companies to adopt consistent measurement and reporting systems to monitor their environmental impacts. This will enable companies to make better decisions in managing their resources and improve their environmental performance.
4. Incentives and rewards: Governments can provide incentives and rewards to companies that implement green accounting practices and achieve carbon emission reduction targets. These can be in the form of additional fiscal incentives, tax reductions, or public awards that enhance the company's reputation.
5. Collaboration and partnerships: Collaboration between governments, companies, financial institutions and civil society is essential in promoting the adoption of green accounting and carbon taxes. Through collaboration, there can be an exchange of knowledge and experience, as well as financing of innovative green projects.
6. Continuous evaluation and monitoring: The implementation of green accounting and carbon tax needs to be evaluated regularly.

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