



Implementation of Green Accounting at PT Cirebon Electric Power

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Abstract

The aim of this research was written by researchers to determine and analyze the implementation of Green Accounting at PT Cirebon Electric Power on the company's environmental performance and costs. This research was conducted because researchers wanted to analyze Green Accounting or environmental accounting at PT Cirebon Electric Power, whether the implementation of Green accounting was going well or not. Pollution that occurs due to the production process and waste produced by companies has caused the Indonesian government to plan to implement the Cirebon Steam Power Plant (PLTU) operational shutdown program sooner than initially planned. The method used in this research is a qualitative method with data collection techniques using interviews. The resource persons in this research were company employees from the environment division. The research results show that the implementation of Green Accounting at PT Cirebon Electric Power regarding environmental performance and costs has been implemented well. In implementing Green Accounting at PT Cirebon Electric Power, the performance rating obtained by the company is a green rating, which means that a company's environmental management performance assessment has achieved good environmental management performance. PT Cirebon Electric Power in implementing Green Accounting has 3 environmental costs, namely: prevention costs, planning costs and unexpected costs. These environmental costs do not have a direct impact on company profits, each year environmental costs are budgeted by each share holder for operational implementation and prevention of environmental impacts.

Keywords: green accounting, environmental, implementation, performance, costs

1. Introduction

At this time, companies are not only required to focus on improving the welfare of their owners and management. All parties such as employees, consumers, society and most importantly the environment must also be prosperous and preserved. Recently, environmental issues have become very important, along with increasing public awareness regarding environmental sustainability. Therefore, companies are required to carry out environmentally friendly practices.

Environmental pollution occurs as a result of the production process of an industrial company or factory which ignores environmental management and there is no treatment for polluted waste so that it has a big impact on the surrounding community who are near the company or factory. Like what was done by PT Cirebon Electric Power which resulted in air pollution caused by the Steam Power Plant or also known as PLTU in Indonesian term.

The Indonesian Government's plan to stop the operation of the Cirebon Steam Power Plant (PLTU) is faster than the initial plan, this framework is quite important, especially for the energy transition in Indonesia to reduce greenhouse gas emissions.

The purpose of this research is to find out the process of implementing green accounting that has been carried out by PT Cirebon Electric Power regarding its performance and costs allocated to the surrounding environment that is affected by the pollution.

In Article 21 paragraph (1) of the Industrial Law, industrial companies established in a certain location are obliged to pay attention to the balance and preservation of natural resources used in their industrial processes as well as preventing damage and pollution to the environment due to the business and industrial processes carried out.

Accounting has a very important role in disclosing environmental information, namely environmental costs incurred by a company by implementing Green Accounting (Wahyuni et al., 2019). Green Accounting is an accounting concept that links the company's economic interests and environmental preservation. The purpose of implementing Green Accounting is a way to increase the efficiency of environmental management by carrying out

activities related to the environment, costs and benefits. Managing the costs incurred to manage an environment now will help reduce large costs in the future.

The government has initiated a program through the Ministry of Environment and Forestry (Ministry of Environment and Forestry) to assess a company for its environmental management, namely PROPER (Company Performance Rating Assessment Program in Environmental Management) (Justita Dura & Riyanto Suharsono, 2022). The government will assess companies' environmental performance using color as a measuring tool, starting with black, red, blue, green and gold. Black is the color that is considered the worst and gold is the color that is considered the best (ENDIANA et al., 2020). The government's hope through this program is to encourage companies to carry out activities that have a positive impact on the environment so that they can provide a positive image for the future.

Company operational activities that cause negative impacts, such as pollution and production waste, require a Green Accounting system as a means of controlling company responsibility. Management of waste or waste from a company requires measuring, assessing, disclosing and reporting waste management costs resulting from the company's activities.

2. Literature Review

2.1. Green Accounting

Green Accounting or green accounting is a type of modern accounting, this concept in accounting supports the greening movement by companies which involves recognizing, measuring, assessing and disclosing costs related to company activities related to environmental preservation. Green Accounting can provide an overview of environmental sustainability efforts with costs from economic decisions through company financial results and can identify costs and benefits for making economic decisions through environmental conservation in company activities as support for sustainable development (Susanti et al., 2023).

Green Accounting is a type of environmental accounting that describes environmental benefits and environmental costs in decision making regarding business financial results (Tu & Huang, 2015). Implementing Green Accounting is one of the company's first steps to reduce environmental problems that occur, improve the company's good image in caring for the surrounding environment and increase the trust of the community around the company.

2.2. Environmental Performance

Disclosure of environmental information provides information about the efforts the company has made in managing the environment. Disclosure of environmental performance is a positive thing that can increase value for the company (Pintea et al., 2014). Environmental performance is a measure that shows the level of concern a company has in protecting the surrounding environment. Another definition is the achievement of a company to reduce and repair environmental damage caused by operational activities carried out by the company.

Environmental performance is shown by a rating called PROPER. The Company Performance Rating Assessment Program in Environmental Management (PROPER) issued by the Ministry of Environment and Forestry is related information about the company's success in managing the environment. Environmental performance can be said to be used to measure a company's environmental performance. The color levels used to assess the PROPER rating are gold, green, blue, red and black. The gold color indicates high environmental performance, while the black color indicates low environmental performance.

PROPER rating description (Gabrielle & Toly, 2019):

- PROPER Gold: Consistently shows environmental excellence in environmental management activities required by government regulations and carries out good social responsibility, as well as carrying out ethical and responsible business processes.
- PROPER Green: Carry out activities that are socially responsible and carry out good environmental management and fulfill the requirements set by government regulations.
- PROPER Blue: Carry out efforts to manage the environment as required by government regulations.
- PROPER Red: Carrying out environmental management and not complying with what is required in government regulations.
- PROPER Black: Failure to implement environmental management requirements or negligence resulting in environmental pollution, and violating applicable government regulations.

2.3. Financial performance

The financial performance of a company is a form of assessment or description of the level of achievement of the implementation of company activities in an effort to realize the goals and objectives of a company (Homan, 2019).

Through financial performance, companies can evaluate the efficiency and effectiveness of company activities in a certain time period.

According to Kurniasari (2014:12), financial performance is work performance in the financial sector that has been achieved by the company and is stated in the company's financial reports. The financial performance of a company can be assessed using analytical tools. Meanwhile, according to IAI (2015:69) financial performance is the company's ability to manage and control the resources it has.

Financial performance is a benchmark for investors in analyzing the financial performance of a company which is used to make investment decisions. Investors will compare the financial performance of the current period and the previous period, where if the company's performance shows good results, investors will invest their capital, and conversely, if financial performance shows poor results, investors will look for another company to invest their capital. Therefore, financial performance is the most important thing for companies in obtaining capital from investors.

2.4. Environmental Costs

Environmental costs are costs incurred to overcome existing environmental pollution resulting from company activities and prevent environmental damage which may result in poor environmental quality. Environmental costs include internal costs associated with reducing production processes to reduce impacts on the environment and internal costs associated with repairing damage from waste produced.

Environmental costs sometimes do not have added value and companies do not want to eliminate environmental degradation, but to regulate and limit the costs of such activities, it is necessary to differentiate costs and choose appropriate indicators. Environmental costs are costs incurred by companies to produce goods and services. Environmental costs and their functions may interest managers for the following reasons:

- a. Environmental accounting and environmental performance can support the development of companies and their operations in environmental management systems.
- b. Good management of environmental costs can lead to the development of environmental performance and has benefits for public health and can lead to company success.
- c. Understanding environmental costs can lead to detailed cost determination and can make it easier for companies to organize their service production processes with greater emphasis on environmental issues.

The classification of environmental costs according to Hasen & Mowen (2009) can be divided as follows:

- a. Environmental prevention costs are costs to prevent waste that will damage the environment.
- b. Environmental detection costs are costs to determine whether processes, products and activities comply with standards or not.
- c. Internal failure costs are the costs of ensuring waste is not dumped into the surrounding environment, in other words production waste that is not taken outside the company.
- d. External failure costs are waste that is thrown out of the environment. There are two costs, namely realized and unrealized costs.

3. Methods

The research method used in this research is a qualitative research method. Qualitative methodology is defined as a research process that produces descriptive data in the form of written or spoken words from people and observable behavior. This research is descriptive, which means to describe, describe factually, systematically and accurately the facts, characteristics and relationships between the phenomena being studied.

Data collection techniques were carried out by interviewing informants, namely company employees and literature studies to collect data by taking notes, reviewing literature or reading sources from books, journals and websites.

4. Results and Discussion

4.1. Research Results Data

The following is data obtained from PT Cirebon Electric Power's annual corporate social responsibility activity report for the 2019-2021 period for analysis.

PT Cirebon Electric Power strives to provide positive value and benefits to all stakeholders and the entire community around the plant. Therefore, PT Cirebon Electric Power strengthens its commitment to growing sustainable business that is positive for the company and society. PT Cirebon Electric Power has CSR programs that have been prepared and implemented since 2017 as proof of the role played by the company in fulfilling sustainable

development goals to improve community welfare. These CSR programs cover the economic, environmental, health, educational and social fields.

4.2. Discussion

4.2.1. Green Accounting on Environmental Performance

The PROPER rating (Company Performance Rating Assessment in Environmental Management) issued by the Ministry of Environment and Forestry is used to measure a company's environmental performance. The PT Cirebon Electric Power (PT. CEP) has received the PROPER Green title since 2019 from the Ministry of Environment and Forestry.

A proper Green rating is the achievement of an assessment of the environmental management performance of a company that has good environmental management performance. This achievement is the first environmental award this year after PT. Cirebon Electric Power previously received two environmental awards. Apart from that, PT. Cirebon Electric Power routinely carries out three environmental programs, namely seed banks and planting man groves and open green parks by involving the community living around the power plant as community empowerment, not only social responsibility, but this is a way to grow and develop together with the community around PT. CEP.

4.2.2. Green Accounting on Financial Performance

PT Cirebon Electric Power has CSR programs that have been prepared and implemented starting in 2017 as proof of the role played by the company in fulfilling sustainable development goals to improve community welfare. The following are PT Cirebon Electric Power programs covering aspects:

- (a) Economy
- (b) Environment
- (c) Health
- (d) Education
- (e) Social

This activity data was taken from the last 3 years of PT Cirebon Electric Power. In implementing green accounting, PT Cirebon Electric Power incurs quite a lot of costs. Below are CSR programs and activities from PT Cirebon Electric Power.

Table 1. Green Accounting Implementation Program at PT Cirebon Electric Power in 2019.

Number	Activity	Information
a)	Economic Aspects	Capital loans for 499 small and medium businesses. 15,000 people who work as fishermen have insurance.
b)	Environmental Aspects	Planting 25,000 various types of trees and 7,000 mangrove plantings.
c)	Health Aspects	Providing free dental health examination services to the community. Reaching more than 8,000 residents who received free dental examinations. Providing nutritious food for more than 12,000 children and toddlers.
d)	Educational Aspects	Cirebon Power believes that education is a determining pillar of the nation's future. Community development efforts in the field of education through: Learning cars, Storytelling Program, Awards for outstanding students and computer classes. 1,407 students received direct learning and 700 people received skills training.
e)	Social Aspects	Providing comfortable rest area facilities for people passing along the Cirebon north coast artery.

Table 2. Green Accounting Implementation Program at PT Cirebon Electric Power in 2020.

Number	Activity	Information
a)	Economic Aspects	Organizing a <i>Bazar Beras Murah</i> to reduce high rice prices for communities around the power plant.
b)	Environmental Aspects	Building domestic hazard waste so that the environment is not polluted by coal chemicals.
c)	Health Aspects	Spraying disinfectant, distributing masks and socializing

		health protocols for the community to prevent the spread of Covid-19.
d)	Educational Aspects	Dozens of Kindergarten and Play Group teachers around Cirebon Power took part in drawing training organized by Cirebon Power.
e)	Social Aspects	Cirebon Power provided around 1,300 food parcels to local communities and stakeholders.

Table 3. Green Accounting Implementation Program at PT Cirebon Electric Power in 2021.

Number	Activity	Information
a)	Economic Aspects	Cirebon Power supports the development of Micro, Small and Medium Enterprises (MSMEs) by building <i>Rumah Terasi</i> to boost people's income through the use of shrimp paste.
b)	Environmental Aspects	Cirebon Power with the Cirebon Regency Government planted various types of trees in the median of Jalan Pantura. The type of tree planted is <i>Tabebuaya</i> in an effort to green the environment.
c)	Health Aspects	Donated more than 200 blood bags to PMI in commemoration of <i>Bulan Keselamatan dan Kesehatan Kerja (K3) Nasional</i> .
d)	Educational Aspects	Providing scholarships to 1,200 students from 20 elementary schools around the Cirebon PLTU location.
e)	Social Aspects	Distributing 60 sacrificial animals to the community, there were 10 villages that received the sacrificial animals.

4.2.3. Green Accounting on Environmental Costs

PT Cirebon Electric Power has an environmental cost category, namely development for waste separately, such as hazardous waste, domestic waste, chemical waste and ash handling of residue from burning coal. In order not to pollute the surroundings and the disposal is directly managed by a party who is competent to manage the waste so that the results of the waste are not scattered which will have a broad impact on the surrounding environment.

Environmental cost components are divided into three aspects:

- a) Prevention costs
- b) Planning costs
- c) Unforeseen expenses

One of the costs incurred to prevent environmental damage is the construction of an Air Quality Management System Building to check the air quality around the impact of the PLTU, and also to prevent environmental damage is planting mangrove trees around the PLTU area and also trees around the managed power plant. together with local residents and communities empowered by the company. To allocate environmental costs, the company has a division, namely Environmental, one of which is planning, implementing, supervising work related to the surrounding environment and also with local and national governments.

After issuing a budget for environmental costs, this does not have a direct impact on the company's profits because it has been budgeted every year by each share holder, as well as from the relevant lenders, paying careful attention to the budgeting and implementation of related work, due to population or noise caused by the PLTU. For share holders here, it has a big influence in maintaining the company's commitment and also trust with customers (PLN) because every year the PLTU carries out ISO :14001 certification related to the environment.

4.3. Summary of Research Results

After conducting this research, it can be concluded that:

PT Cirebon Electric Power has received the Green PROPER title since 2019 from the Ministry of Environment and Forestry, which means it is quite good for the surrounding environment, and PT Cirebon Electric Power routinely carries out positive programs.

Table 4. Total costs from PT Cirebon Electric Power in 2019 – 2021

Number	Years	Total Cost
a)	2019	IDR 5 Billion
b)	2020	IDR 1 Billion
c)	2021	IDR 1 Billion

Source : From Employee who working at the Company based on financial reports

In 2019, PT Cirebon Electric Power's sustainable program spent a total of IDR 5 billion to borrow capital for MSMEs, plant 25,000 various trees and 7,000 mangroves, free dental health checks, develop the education sector, and provide rest area facilities.

In 2020, PT Cirebon Electric Power's sustainable program spent a total of IDR 1 billion to organize a rice bazaar, build domestic waste hazards, spray disinfectant and distribute free masks as well as socialize Covid-19, drawing training for dozens of Kindergarten teachers and Play Groups, giving away 1,300 food parcels.

In 2021, PT Cirebon Electric Power's ongoing program will cost a total of IDR 1 billion to build a *Rumah Terasi*, plant trees in the median of the Pantura road, donate 200 bags of blood to PMI, provide scholarships to 1,200 students, distribute 60 sacrificial animals.

PT Cirebon Electric Power built an Air Quality Management System Building to check the air quality around the impact of the PLTU and carries out ISO:14001 certification related to the environment every year.

5. Conclusion

Based on the data obtained from this research, the aim is to determine the application of green accounting to environmental performance and costs carried out by PT Cirebon Electric Power in 2019 - 2021. Corporate Social Responsibility (CSR) activities in implementing green accounting have been carried out well. PT Cirebon Electric Power is responsible for empowering the community to grow and develop together and provide economic effects to the community. The performance rating obtained by this company is a green rating, meaning the achievement of an environmental management performance assessment of a company that has good environmental management performance. Environmental costs are budgeted every year by each shareholder. However, data for costs is still incomplete and confidential.

For further research, the result of this research can be used as a bridge for conducting further research. By expanding the research variables so as to produce research that can be broader. This research was conducted using the interview method only with employees of PT Cirebon Electric Power's environmental division and with limited time. For the further research, it is hoped that interview methods will be the environmental division to provide more accurate information.

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