



ENVIRONMENTAL COST ANALYSIS TO DETERMINE THE EFFECTIVENESS AND EFFICIENCY OF ENVIRONMENTAL ACTIVITY CONTROL

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Abstract

This study aims to analyze the environmental costs incurred by PT Perusahaan Gas Negara Tbk. in controlling environmental activities from 2019 to 2023 and assess the effectiveness and efficiency of environmental cost control. The environmental costs analyzed consist of prevention costs, detection costs, internal failure costs, and external failure costs. The research method used is a quantitative descriptive approach to the sustainability reports published by the company. The results show that although the company has implemented environmental activity control, the effectiveness of this control is still suboptimal, environmental activities analysis from 2019 to 2023, only in year 2019 showing effectiveness, in year 2022 there is a significant increase in environmental costs was primarily driven by investment initiatives aimed at complying with the PROPER policy, which can be benefit for company in reducing the internal and external failure in the following year. However, in overall, environmental cost control has been efficient, as indicated by the relatively small ratio of environmental costs to total operational costs. This study provides insights for the company to improve the effectiveness of environmental cost management, focusing on enhancing preventive activities to reduce failure costs that could harm the company in the future.

Keywords: Effectiveness, Efficiency, Environmental Activity Control, Environmental Costs, Environmental Management Accounting

INTRODUCTION

This study focuses on the importance of conducting environmental cost analysis in the context of environmental activity control. In recent years, attention to the environment has increased along with awareness of the negative impacts of human activities on ecosystems. Companies, especially in the energy sector, are faced with demands to demonstrate greater environmental responsibility. The application of environmental management accounting in companies is very important, because it can help companies measure and report their environmental impacts and can increase the transparency and efficiency of the company's operational activities (Agustina et al., 2024). Environmental management accounting also encourages decision-making that takes into account the environment and improves overall performance (Fakdawer, 2024), (Cornellissen & Mukwarami, 2024). Environmental cost control is one way to achieve efficiency and effectiveness in environmental management, which can ultimately improve overall company performance (Ifada & Jaffar, 2023). PT Perusahaan Gas Negara Tbk., as one of the companies engaged in the energy sector, environmental control is a very important aspect to be managed properly. Environmental costs are an important indicator for measuring the effectiveness and efficiency of environmental activity control, with good environmental cost analysis, it can help PT Perusahaan Gas Negara Tbk. in making corporate decisions regarding improving environmental performance.

The assessment of corporate environmental performance in Indonesia is carried out by the Ministry of Environment and Forestry (KLHK), this ministry is tasked with organizing government affairs in the field of environment and forestry. One of the programs owned by KLHK is PROPER (Program for Pollution Control, Evaluating and Rating), where KLHK will assess the environmental performance of companies based on compliance with the rules, namely through PROPER. PROPER ratings are categorized by color where the gold rating (very



good), green (good), blue (moderate), red (bad), and black (very bad). PT Perusahaan Gas Negara Tbk. together with its subsidiaries, in 2023 the company won three Gold PROPERs and six Green PROPERs.

Problems faced in controlling environmental activities include difficulties in measuring and managing costs associated with environmental impacts. Many companies have not fully integrated environmental cost reporting into their accounting systems, which can hinder appropriate decision-making related to environmental management (Nurafika & Sari, 2019). Environmental costs are needed to reduce environmental problems and ensure business sustainability (Pramana & Nilamsari, 2024). Environmental costs are one of the important parts that determine the success of environmental management accounting because of the existence of environmental cost information, so that management can make financial decisions while still paying attention to the quality of environmental decisions (Meilayah Ariani & Zulhawati, 2023), (Irma Paramita Sofia & Hariyanti, 2023), (Mohd Fuzi et al., 2019).

The purpose of this study is to analyze the environmental costs incurred by companies in controlling environmental activities and to assess the effectiveness and efficiency of such control. This study was conducted by examining the proportion of expenditures related to environmental prevention measures and expenditures related to environmental failure activities individually in relation to total environmental expenditures, examining the ratio of overall environmental expenditures to total operating costs, assessing individual trends in environmental costs, and evaluating trends in total environmental expenditures.

The difference between this study and previous studies is in the research subject, namely PT Perusahaan Gas Negara Tbk. Previous studies were conducted on PT Antam Tbk (Burhany & Suwondo, 2020) and PT Timah Tbk (Amaliya & Burhany, 2022).

The benefits of this study are expected to provide useful insights for companies in formulating more effective and efficient control strategies. In addition, this study can be a recommendation for companies in managing environmental costs better. By understanding the relationship between environmental costs and activity control, it is hoped that companies can improve their environmental performance while reducing the burden.

LITERATURE REVIEW

Environmental Cost

Environmental costs are monetary and non-monetary impacts that occur due to company activities that affect the environment (Ikhsan, 2009). Another opinion defines environmental costs as costs incurred due to poor environmental quality or the possibility of poor environmental quality (Hansen et al., 2009).

Environmental Cost Category

Environmental costs are grouped into four types, namely (1) Environmental prevention costs include all financial expenses related to initiatives aimed at preventing the emergence of pollutants and waste that have the potential to cause damage to the ecosystem. (2) Environmental detection costs refer to all financial expenses related to assessing compliance between products, processes, and various activities within the organization and relevant environmental regulations. (3) Internal environmental failure expenditures consist of all costs related to the processes involved in the removal and management of pollutants or waste produced by the company as a consequence of its operational activities before being released into the environment. (4) External environmental failure expenditures include all costs incurred as a result of activities that occur after the release of pollutants and waste into the environment. (Hansen et al., 2009).



Environmental Cost Control in Environmental Management Accounting (EMA)

Environmental Management Accounting is a type of management accounting that focuses on providing information about material and energy flows, environmental costs, and the impact of those on an organization's operations and decision-making. EMA serves as an important tool for the identification, evaluation, and allocation of environmental expenditures, thereby facilitating the realization of potential cost efficiencies through management oversight (Dunakhir et al., 2024), (Jasch, 2003). Environmental costs may have a more significant proportion of total operating expenses, but with good management strategies, environmental costs can be reduced or eliminated (Fa, 2023). A separate environmental cost report will assist management in evaluating the impact of environmental expenditures on the financial performance of the organization. Environmental cost control can be improved, as companies can effectively track and manage costs related to environmental impacts (Quispe et al., 2024).

PROPER Assessment Criteria

The proper assessment criteria consist of two categories, namely (1) compliance assessment criteria and (2) assessment criteria beyond those required in the regulations (beyond compliance). The compliance assessment criteria relate to the completeness of documents and their reporting related to the environment, water pollution control, air pollution control, B3 waste management, seawater pollution control, and potential land damage. Furthermore, the beyond compliance criteria are more dynamic because they are adjusted to technological developments, the implementation of best environmental management practices and global environmental issues (KLHK, 2019). In the PROPER assessment, they are ranked in color indicators which can be seen in the table below:

Table 1
PROPER’s Rating Color Indicator

| Color Indicator | Description |
|------------------------|--|
| Gold | Consistently demonstrated exemplary environmental performance in production and service methodologies, while also engaging in ethical and socially responsible business practices. |
| Green | Engage in a high level of environmental management that goes beyond applicable regulations (beyond compliance) through the establishment of a comprehensive environmental management system and the wise use of resources, while also demonstrating a commitment to social responsibility. |
| Blue | Implementing the necessary environmental management initiatives in accordance with relevant provisions or prerequisites stipulated in applicable laws. |
| Red | Engaged in initiatives related to environmental management; however, has failed to comply with the provisions outlined in applicable laws |
| Black | Intentionally engaging in negligent acts or behavior that lead to environmental degradation or damage, as well as committing violations of related regulations and/or failure to carry out administrative penalties. |

Source : Ministry of Environment and Forestry (KLHK, 2019)

METHODS

Data Collection Technique

The data collection technique used is the documentation technique, namely the sustainability report obtained through the company's official website www.pgn.co.id. then



selecting and processing the data to be used, namely the sustainability report for the period 2019-2023

Analysis Techniques

The method used in this study is a quantitative descriptive approach, using secondary data extracted from sustainability reports PT Perusahaan Gas Negara Tbk from 2019-2023 . The analysis involves quantitative measurements of environmental cost components and their respective ratios to determine the effectiveness and efficiency of environmental activity control. There are data analysis steps to determine the effectiveness and efficiency of environmental cost control using the effectiveness and efficiency ratio analysis, there are:

- 1) Preparation of environmental cost reports for 2019-2023 in accordance with cost category reporting.
- 2) Calculating the effectiveness and efficiency of environmental costs using the analysis of the ratio of effectiveness and efficiency of environmental costs according to (Burhany & Suwondo, 2020), effectiveness is measured by looking at how much money is spent on prevention and detection compared to the cost of failure, it is said to be effective if the cost of prevention and detection is greater than the cost of failure, this indicates that the company has succeeded in preventing environmental damage so that the cost of environmental failure can be minimized (Basuki & Irwanda, 2018), (Yükçü & Korga, 2023), (Rapp, 2023). While efficiency is measured by looking at how much money is spent on environmental costs compared to other sales, general and administrative costs in a company.
 - a) Ratio of individual environmental costs to total environmental costs

The ratio of expenditure allocated to preventive actions (covering both prevention and detection) should, in the optimal scenario, exceed the proportion of expenditure related to failure activities (including internal and external failures) to be considered effective. The classification related to the ratio of costs spent on preventive actions, failure activities and effectiveness is depicted in Tables 2, 3 and 4.

Table 2

Environmental Prevention Activity Cost Ratio Cate

| No | Range Ratio | Category |
|----|------------------------|-----------------|
| 1 | Ratio \leq 40% | Not Ideal |
| 2 | 40% < Ratio \leq 50% | Less than Ideal |
| 3 | Ratio > 50% | Ideal |

Source : (Burhany & Suwondo, 2020)

Table 3

Environmental Failure Activity Cost Ratio Category

| No | Range Ratio | Category |
|----|------------------------|-----------------|
| 1 | Ratio \geq 60% | Not Ideal |
| 2 | 50% \leq Ratio < 60% | Less than Ideal |
| 3 | Ratio < 50% | Ideal |

Source : (Burhany & Suwondo, 2020)

Table 4

Effectiveness Cost Ratio Category

| No | Range Ratio | Category |
|----|-------------|---------------|
| 1 | Ratio >1 | Effective |
| 2 | Ratio <1 | Not Effective |



Source : (Burhany & Suwondo, 2020)

- b) Ratio of environmental costs to operating costs
 The environmental cost ratio ideally does not exceed the ratio of other operational costs in order to be categorized as efficient, according to (Burhany & Suwondo, 2020).
- 3) The presentation of trend graphs related to environmental expenditures shows that the increase in costs associated with prevention and detection efforts, coupled with the reduction in costs associated with internal and external failure activities, can be interpreted as a manifestation of effective cost management (Basuki & Irwanda, 2018). In addition, the observed decrease in overall environmental costs can be interpreted as a characteristic of efficient cost management, where the Company is positioned to achieve optimal results by spending minimally.

RESULTS AND DISCUSSION

PT. Perusahaan Gas Negara Tbk, in the period 2019-2023 has disclosed a sustainability report, this aims to demonstrate a strong management commitment to running business operations responsibly by paying attention to its impact on economic, environmental and social aspects. As a company engaged in the energy sector, PT Perusahaan Gas Negara Tbk. understands the importance of environmental integrity and social responsibility in every business decision.

In the sustainability report for the period 2019-2023, the Company has fully disclosed the environmental cost activities that have been incurred. Environmental costs will be classified into four groups (Hansen et al., 2009).

Table 5
Environmental Activity Classification PT PGN Tbk

| Category | Activity | Reason |
|--------------------------------|--|--|
| Environmental Prevention Costs | Preparation of AMDAL/UKL-UKP documents and management of environmental permits | Conducted prior to operational activities to identify and mitigate potential environmental risks |
| | Environmental campaign | Aims to raise awareness and encourage proactive behavior to prevent environmental damage |
| | Environmental training | Equips employees with knowledge and skills to avoid actions that may harm the environment. |
| | Environmental report | Provides early information for decision-making, supporting preventive environmental strategies. |
| | Environmental management system | A structured approach to identifying, controlling, and preventing environmental risks |
| | Environmental Studies | Conducted to assess environmental risks and determine preventive actions before harm occurs. |



| | | |
|--------------------------------------|--|--|
| | Management of environmental permits | Ensures compliance with legal requirements, preventing environmental violations and potential penalties |
| Environmental Detection Costs | Environmental monitoring | To detect early signs of environmental issues. |
| | Energy monitoring system and carbon calculator | To identify energy usage patterns and carbon emissions, enabling early detection of inefficiencies and environmental risks |
| Environmental Internal Failure Costs | B3 waste management | Treatment and disposal of hazardous waste generated from internal processes, indicating failure to prevent waste generation |
| | Calibration of environmental measuring instruments | Ensures the accuracy of tools used to detect internal environmental non-conformance or deviations before external issues arise |
| | Energy efficiency program | Indicates a corrective response to previously inefficient energy use within operations, which reflects internal process inefficiencies |
| | Environmental management facilities for B3 waste TPS | Involves infrastructure to handle hazardous waste internally, implying internal failure to eliminate or reduce waste at the source |
| | Construction of a temporary disposal site for B3 waste | Indicates internal accumulation of hazardous waste that must be managed due to lack of effective upstream controls |
| | Construction of Domestic Wastewater Treatment Plant | Reflects the need to treat wastewater resulting from internal processes, indicating failure to prevent pollutant generation |
| | Waste water management | Costs incurred to manage and treat wastewater already produced, which is the result of inefficiencies in internal environmental controls |
| | Environmental management related to PROPER | Internal improvements made in response to environmental performance evaluations, often triggered by detected internal inefficiencies or non-compliance |

Source: data processed



Table 6
Environmental Classification and Costs
(Expressed in millions of Indonesian Rupiah)

| No | Classification of Environmental Costs | Activity | Year | | | | |
|----|---------------------------------------|--|-------|-------|-------|-------|-------|
| | | | 2019 | 2020 | 2021 | 2022 | 2023 |
| 1 | Environmental Prevention Costs | Preparation of AMDAL/UKL-UKP documents and management of environmental permits | 1,370 | 1,399 | 551 | 3,690 | - |
| | | Environmental campaign | 69 | 23 | 1,387 | 1,548 | 2,057 |
| | | Environmental training | 790 | 52 | 184 | 1,432 | 268 |
| | | Environmental report | 7 | 3 | 375 | 491 | 607 |
| | | Environmental management system | 321 | 147 | | 208 | 34 |
| | | Environmental Studies | - | - | 90 | - | 130 |
| | | Management of environmental permits | - | - | - | - | 1,002 |
| 2 | Environmental Detection Costs | Environmental monitoring | 6,883 | 2,809 | 2,058 | 4,936 | 3,903 |
| | | Energy monitoring system and carbon calculator | 166 | - | - | - | - |
| 3 | Environmental Internal Failure Costs | B3 waste management | 2,617 | 1,860 | - | - | - |
| | | Calibration of environmental measuring instruments | - | - | 1,117 | 397 | 270 |
| | | Energy efficiency program | 1,206 | 350 | 20 | 469 | 143 |
| | | Environmental management facilities for B3 waste TPS | 292 | 283 | 74 | 434 | - |
| | | Construction of a temporary disposal site for B3 waste | - | - | - | 866 | - |
| | | Construction of Domestic Wastewater Treatment Plant | - | 1,403 | 915 | | 740 |



| | | | | | | |
|--|--|---------------|---------------|---------------|---------------|---------------|
| | Waste water management | - | - | - | 1,425 | 3,442 |
| | Environmental management related to PROPER | 3,784 | 3,199 | 3,548 | 22,641 | 7,607 |
| | Total | 17,505 | 11,528 | 10,319 | 38,537 | 20,203 |

Source: Sustainability Report PT Perusahaan Gas Negara Tbk 2019-2023 processed

The activity classification of environmental costs above is based on the sustainability report published by PT Perusahaan Gas Negara Tbk. The categorization aligned with classification of environmental costs expressed by (Hansen et al., 2009)

1. Environmental prevention costs, include costs incurred to prevent pollution and environmental damage in the first place, such as investing in pollution control technologies, implementing waste reduction programs, or training staff on environmental best practices.
2. Environmental detection costs, include costs associated with ensuring compliance with environmental regulations and standards, including monitoring emissions, conducting environmental audits, and obtaining necessary permits.
3. Internal failure costs, include costs incurred when pollution or environmental damage occurs within the company's operations, such as remediation of spills, disposal of contaminated waste, or costs associated with internal damage.
4. External environmental failure costs, include incurred when pollution or environmental damage occurs outside the company's operations and impacts on the wider environment, such as cleanup of pollution in the surrounding community, fines for non-compliance, and costs associated with long-term environmental impacts.

Prevention Cost Ratio

The prevention cost ratio, which consists of the costs associated with environmental prevention in addition to the costs associated with environmental detection, is juxtaposed with the aggregate total environmental costs. Ideally, this ratio should exceed the comparative ratio of costs incurred during failure activities, shown at table 7, Formula used:

$$\text{Prevention Cost Ratio} = \frac{\text{Prevention Cost} + \text{Detection Cost}}{\text{Total Environmental Cost}} \times 100\%$$

Table 7. Prevention Cost Ratio Analysis
(Expressed in millions of Indonesian Rupiah)

| Year | Prevention Cost (a) | Detection Cost (b) | Environmental Cost (c) | Ratio (a) + (b) / (c) |
|------|---------------------|--------------------|------------------------|-----------------------|
| 2019 | 2.557 | 7.049 | 17.505 | 55% |
| 2020 | 1.624 | 2.809 | 11.528 | 38% |
| 2021 | 2.587 | 2.058 | 10.319 | 45% |
| 2022 | 7.369 | 4.936 | 38.537 | 32% |
| 2023 | 4.098 | 3.903 | 20.203 | 40% |

Source: Sustainability Report PGN



Failure Cost Ratio

Failure cost ratio, consisting of internal failure costs plus external failure costs compared to total environmental costs. Ideally it should be smaller than the cost ratio for prevention activities shown at table 8. Formula used:

$$\text{Failure Cost Ratio} = \frac{\text{Internal Failure Cost} + \text{External Failure Cost}}{\text{Total Environmental Cost}} \times 100\%$$

Table 8. Failure Cost Ratio Analysis
(Expressed in millions of Indonesian Rupiah)

| Year | Internal Failure Cost (a) | External Failure Cost (b) | Environmental Cost (c) | Ratio (a) + (b) / (c) |
|------|---------------------------|---------------------------|------------------------|-----------------------|
| 2019 | 4.115 | 3.784 | 17.505 | 45% |
| 2020 | 3.896 | 3.199 | 11.528 | 62% |
| 2021 | 2.126 | 3.548 | 10.319 | 55% |
| 2022 | 3.591 | 22.641 | 38.537 | 68% |
| 2023 | 4.595 | 7.607 | 20.203 | 60% |

Source: Sustainability Report PGN

Effectiveness Cost Ratio

Effectiveness cost ratio, is a ratio used to assess how initiative-taking a company is in preventing environmental issues compared to the costs it incurs after environmental damage has occurred. The ratio of expenditure allocated to preventive actions (covering both prevention and detection) should, in the optimal scenario, exceed the proportion of expenditure related to failure activities (including internal and external failures) to be considered effective, shown at table 9 and 10, Formula used:

$$\text{Effectiveness Cost Ratio} = \frac{\text{Prevention Cost} + \text{Detection Cost}}{\text{Internal Failure Cost} + \text{External Failure Cost}} \times 100\%$$

Table 9 . Effectiveness Cost Ratio Analysis
(Expressed in millions of Indonesian Rupiah)

| Year | Prevention Cost (a) | Detection Cost (b) | Internal Failure Costs (c) | External Failure Costs (d) | Ratio (a) + (b) / (c) + (d) |
|------|---------------------|--------------------|----------------------------|----------------------------|-----------------------------|
| 2019 | 2,557 | 7,049 | 4,115 | 3,784 | 1.22 |
| 2020 | 1,624 | 2,809 | 3,896 | 3,199 | 0.62 |
| 2021 | 2,587 | 2,058 | 2,126 | 3,548 | 0.82 |
| 2022 | 7,369 | 4,936 | 3,591 | 22,641 | 0.47 |
| 2023 | 4,098 | 3,903 | 4,595 | 7,607 | 0.66 |

Source: data processed



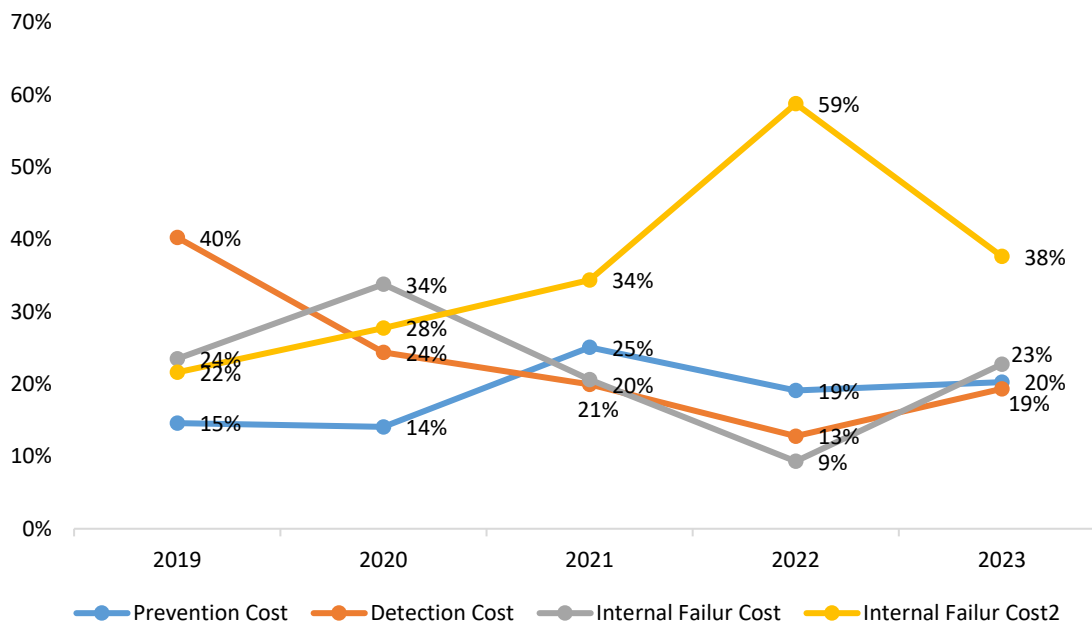
Table 10 . Analysis of the Cost Ratio of Environmental Prevention Activities and Failure Activities and Effectiveness

| Year | Prevention Activity | | Failure Activity | | Effectiveness |
|---------|---------------------|-----------------|------------------|-----------------|---------------|
| | Ratio | Category | Ratio | Category | |
| 2019 | 55% | Ideal | 45% | Ideal | Effective |
| 2020 | 38% | Not Ideal | 62% | Not Ideal | Not Effective |
| 2021 | 45% | Ideal | 55% | Ideal | Not Effective |
| 2022 | 32% | Not Ideal | 68% | Not Ideal | Not Effective |
| 2023 | 40% | Ideal | 60% | Ideal | Not Effective |
| Average | 40% | Less than Ideal | 60% | Less than Ideal | Not Effective |

Source: data processed

Figure 1

Trends in Individual Environmental Costs



Source: data processed

From Figure 1 above, environmental costs are still unstable, in 2022 external failure costs will increase quite high related to environmental management in order to comply with PROPER which is a government policy, so that the Company can improve its environmental management. In fulfilling the PROPER policy, the Company spends Rp22,641,000,000 related to B3 waste management (PGN, 2022), it is hoped that in the next few years it will decrease sharply, so that failure costs will be smaller than prevention costs.



Ratio of Environmental Costs to Operating Costs

The ratio of environmental costs when compared to general and administrative expenses, ideally environmental costs are smaller than other costs in order to be said as efficient, according to (Burhany & Suwondo, 2020). Formula used:

$$\text{Environmental Cost Efficiency Ratio} = \frac{\text{Environmental Cost}}{\text{Selling, General and Administrative Expenses}} \times 100\%$$

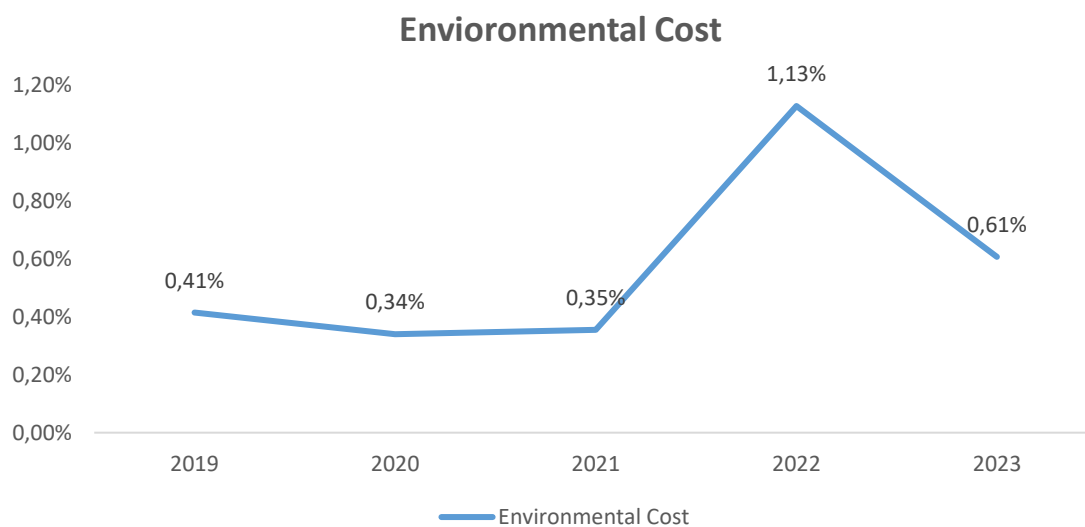
**Table 11. Environmental Cost Ratio Analysis
(Expressed in millions of Indonesian Rupiah)**

| Year | Environmental Cost (a) | Selling, General and Administrative Expenses (b) | Ratio (a) / (b) | Efficiency |
|---------|------------------------|--|-----------------|------------|
| 2019 | 17.505 | 4.225.664 | 0.41% | Efficient |
| 2020 | 11.528 | 3.395.401 | 0.34% | Efficient |
| 2021 | 10.319 | 2.911.030 | 0.35% | Efficient |
| 2022 | 38.537 | 3.420.934 | 1.13% | Efficient |
| 2023 | 20.203 | 3.331.507 | 0.61% | Efficient |
| Average | 98.092 | 4.225.664 | 2.32% | Efficient |

Source: Audit Report and Sustainability Report, processed

From Table 10 above, it can be seen that the ratio of total environmental costs incurred by the company to total sales, general and administrative costs each year is still very small, the highest ratio is in 2022, which is 1.13% where the Company carries out environmental management related to PROPER of IDR 22,641,000,000, - (PGN, 2022) and the lowest ratio is 0.41% in 2019, while the average ratio is 2.32% during the 2019-2023 period.

**Figure 2
Trend Environmental Cost**



Source: data processed



From Figure 2 above, it can be seen that there is a significant increase in environmental costs in 2022 due to environmental management costs related to PROPER.

Based on table 11 and figure 2, it can be said that the Company has allocated environmental costs in its business management, and its environmental control costs can also be said to be efficient, as seen from the small environmental costs during the research period compared to sales, general and administrative costs. This can be said that environmental costs do not interfere with the achievement of the Company's profits or even make the Company lose money due to the large ratio of environmental control costs.

CONCLUSION

Based on research with quantitative descriptive approach, it can be concluded that environmental activity control carried out by the Company in the 2019-2023 period is not effective on average, only in 2019 environmental activity control can be said to be effective, where the cost of failure activities is lower than prevention activities. In 2022 there is a significant increase in environmental costs, primarily driven by investment initiatives aimed at complying with the PROPER policy, which can be a benefit for company in reducing the internal and external failure in the following year. Regarding environmental activity control, it has been efficient on average and every year. This can be seen from the ratio of total environmental costs to total sales, general and administrative costs, which are very small.

The quantitative descriptive approach used in this study has limitations in the analysis of the data used. Limited data related to the Company's annual budget related to environmental costs and their details and limited choices of Companies that fully disclose their environmental costs.

Suggestions based on the conclusions above, it is expected that the Company can disclose the budget related to environmental costs in its sustainability report so that it will be easier for the Company and stakeholders to see information on its environmental activity programs and the measurement of budget absorption in each environmental activity is easy to understand. For efficiency related to environmental activities, the Company is efficient as seen from the environmental cost ratio which is smaller compared to its sales, general and administrative costs, so that the level of efficiency can be maintained so as not to interfere with the achievement of the Company's expected profit.

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