

## Corporate Environmental Responsibility: An Effort To Develop A Green Accounting Model

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**Abstract:** This study aims to detail environmental costs based on the relevance and accuracy of the information, and formulate a green accounting reporting model based on the characteristics of the company. Qualitative research uses a constructivism critical approach with PT Semen Tonasa in South Sulawesi as an analysis unit. Data collection is done by interview techniques and other secondary data support. The results showed that the company classifies environmental costs based on its activities and does not specify environmental costs, so the information is hidden and managers have difficulty controlling environmental costs. Environmental related costs are classified into environmental prevention costs, environmental detection costs, internal environmental failure costs, external environmental failure costs, and research and development costs. Presentation of environmental costs and disclosure of environmental activities contribute to maximum environmental performance. The formulation of the green accounting model is the fulfillment of environmental responsibility and the realization of accountability to stakeholders.

**Keywords:** Green accounting, Environmental Cost, Environmental Performance, Environmental Responsibility

### INTRODUCTION

Current economic activity directly or indirectly has become a factor causing global warming (Ja'far and Kartikasari, 2009). Modern economics, has raised various issues related to the environment such as global warming, eco-efficiency, and other industrial activities having a direct impact on the surrounding environment (Agustia, 2010). Companies often do not pay attention to environmental problems because corporate leaders think paying attention to problems means that companies must spend costs, so that environmental policies in preventing and reducing the effects harmed on natural resources are no longer considered (Damayanti and Pentiana, 2013). Natural resource-based economic development that does not pay attention to environmental sustainability aspects will ultimately have a negative impact on the environment itself, because basically natural resources and the environment have limited carrying capacity. In other words, economic development that does not pay attention to the capacity of natural resources and the environment will cause development problems in the future. Therefore, the company must direct its development to sustainable development which is very concerned about the social and environmental problems. An effort to increase productivity and efficiency involves decrease of environmental quality, in the form of air pollution, water pollution

and reduction in soil functions (Kusumaningtias, 2013). Ignoring the company's environmental problems will face a greater impact that can threaten the sustainability of business.

The rapid level of development in each region by the existence of this autonomy sometimes overrides the environmental aspects realized or not will eventually become the main cause of environmental problems (Susilo and Astuti, 2014). Tarmiziet *al.* (2012) stated that the development of the business world is increasingly broad, more factories and companies are established to carry out their activities, namely producing raw materials and semi-finished goods or finished goods. Companies in carrying out their activities use available resources to achieve their goals, in achieving these goals the company always interacts with the environment. The current company movement leads to a green company, the industry is not only required to generate maximum profit but also to pay attention to waste treatment so that environmental sustainability is maintained.

The negative impact of the company's operations, requires an environmental accounting system as a control of environmental responsibility because waste treatment carried out by the company requires measurement, assessment, disclosure, and reporting of waste treatment costs of the company's operational activities meant in this case is green accounting (Minimol and Makesh, 2014). Strong pressure from stakeholders is the main trigger encouraging companies to raise awareness of the environment, even though currently more and more 'green companies' or green firms (Gale, 2006; Islam and Deegan, 2008). Kusumaningtias (2013) said that accounting is a science that influences and is influenced by the environment. The role of accounting in managing environmental costs is so needed that these costs are more efficient and concern for the environment. Environmental accounting disclosure should not only reveal environmental problems, but also report how to manage the improvement of its social environment (Susilo and Astuti, 2014).

The government has made regulations related to environmental problems. The regulation is contained in constitution No. 40 of 2007 concerning incorporated companies and Bank Indonesia regulation No. 7/2 / PBI / 2005 concerning the determination of the quality rating of assets for commercial banks. In addition, the Indonesian government, through the Ministry of Environment, established the Regulation of the Minister of Environment of the Republic of Indonesia Number 6 of 2013 concerning corporate environmental performance rating program in the management of the environment, has done rating of company *environmental performance* through a program called *program for pollution control, evaluation and rating* or PROPER (Burhani, 2014).

The cement company conducts activities ranging from taking raw materials, processing raw materials into cement products and distributing or delivering products. PT Semen Tonasa is a kind of cement industries. The raw material for cement comes from nature by utilizing natural resources as production material, which produces a lot of waste in its production activities and certainly affects the environment. The production process of a product, from taking raw materials to the disposal of a product after consumption (used) does not damage the environment (Idris, 2012), especially if the company is able to specify the environmental cost. It means that the company does not generalize indirect costs including environmental costs into overhead costs so that it make it hidden and managers find it difficult to trace and control these costs (Descalu et al., 2010). Anggriani (2006) revealed several financial management difficulties reporting the company's

environmental responsibilities, among others: the demand for disclosure of environmental information on financial reporting has not been explicitly stated, costs and benefits in presenting environmental information in financial statements felt imbalanced, introduction of conditional obligations and difficulties in identifying environmental costs. The accounting system in which there are accounts related to environmental costs is referred to as green accounting or environmental accounting (Aniela, 2012).

The results of research conducted by Burhani and Nurnia (2014), showed that management accounting is quite familiar with environmental accounting, but in practice the recording and reporting of environmental aspects has not been integrated into an environmental accounting system. Based on the problems stated above, formulating a specific standard governing environmental accounting is something that must be done by the Indonesian Accountants Association (IAI). The government not only needs to draft standards on environmental accounting but also to make a regulation requiring (mandatory) business actors to disclose their environmental performance. Regulations made by the government and the preparation of specific standards for green accounting, are expected in the future to implement green accounting. The implication of implementing green accounting by companies means that the company has supported sustainable development and this will certainly improve the good image of the company in the community and other stakeholders. Because of the importance of environmental-based accounting, in this case called green accounting, it needs an effort to improve its application, one of which is the need for a standard on green accounting, because there is no standards governing green accounting so that the application of green accounting in companies in Indonesia is still questionable. Based on this background, this study intends to find out the development of environmental accounting (green accounting) in companies processing natural resources, then to formulate a green accounting model that can bridge the interests of the company with its stakeholders.

## **THEORETICAL REVIEW**

**Stakeholder Theory.** Collection of policies and practices related to stakeholders, values, fulfillment of legal provisions, community and environmental awards, as well as business commitments for sustainable development contributions. Stakeholders are divided into two, namely internal stakeholders consisting of owners, management and employees ; and external stakeholders consisting of the government, community, environment and future stakeholders (Hernadi, 2012 and Cohen et al., 2009).

The company will strive to achieve the expectations of the ruling stakeholders by submitting disclosures, including reporting on social and environmental activities. The company must pay attention to its environmental problems. By paying attention, the company has fulfilled some of its stakeholders concerns. The company is not an entity that can operate for its own interests and only has an advantage on profit, but should provide benefits to its stakeholders, so it can be said that the existence and sustainability of a company is strongly influenced by the support provided by stakeholders to the company.

Anggarwal (2013) stated that corporate social and environmental responsibility can help strengthen the relationship between the company and the community in which it operates. Ignoring the interests of stakeholders can pollute the company's public image,

which will not affect the company's financial performance. Lindawati and Puspita (2015) concluded stakeholder theory is a theory which says that the sustainability of a company cannot be separated from the role of stakeholders both internally and externally with different backgrounds of interests from each existing database.

**Legitimacy Theory.** Legitimacy theory encourages companies to ensure that their activities and performance are accepted by the community, the acceptance of the company by the community is so expected to increase the value of the company that it will increase company profits. Lindawati and Puspita (2015) revealed that the legitimacy of stakeholders is very important for the company because legitimacy gap has a great potential protests from stakeholders towards the company which has an impact on the company's existence and disrupts operational stability and ends in profitability.

The implication of legitimacy theory on corporate responsibility related to environmental and social problems is the disclosure of environmental and social responsibility carried out by the company in its efforts to gain legitimacy where the company is located. This legitimacy in the next stage will secure the company from undesirable things. Furthermore, legitimacy will enhance the company's reputation which will ultimately affect the company's value. The company seeks to gain legitimacy from the community by implementing programs that are in line with the expectations of the community. The real implementation is through the implementation of corporate social responsibility programs, the application of environmental accounting, and expressing it both in the annual report and sustainability report as a form of information needed by investors to make decisions related to company performance in accordance with the values in the community.

The company strives to gain legitimacy from the community by implementing programs being in line with community expectations, such as the real implementation is through the implementation of corporate social responsibility programs, the application of environmental accounting, and expressing it both in the annual report and sustainability report as a form of information needed by investors to make decisions related to the company's performance in accordance with the values in the community. Legitimacy theory is the basis for disclosing environmental information to stakeholders.

**Discretionary Disclosure Theory.** A good environmental performance actor will reveal his performance, because it is good news for market participants and can differentiate himself with the bad environmental performance actor, which will minimize or do not disclose. The better the environmental performance will be wider environmental disclosure. Companies with good environmental performance need to disclose better environmental quantity and quality information than companies having poor environmental performance (Yanti, 2015).

Voluntary / discretionary disclosure theory companies tend to express good news and hide bad news voluntarily. Public companies have not fully realized the importance of disclosing voluntary information. The awareness of public companies in Indonesia is only of fulfilling mandatory obligations. Environmental performance covers all efforts made by the company in order to create a good environment or green.

The disclosure of environmental information referred here is not disclosed in the financial statements that are been mandatory and regulated in the Financial Accounting

Standards, but voluntary disclosures as a form of the company's responsibility towards the environment. The company's environmental performance will certainly attract competitiveness in the market world. The disclosure of environmental costs has become an investor's needs and need to do to meet investors needs.

**Green Accounting as A Corporate Environmental Responsibility.** The negative impact of the company's operating activities, requires an environmental accounting system as a control of corporate responsibility because the waste treatment carried out by the company requires measurement, assessment, disclosure, and reporting of waste management costs from the results of the company's operational activities. Green accounting is an accounting identifying, measuring, assessing, and disclosing costs associated with companies related to the environment (Aniela, 2012). Accounting is a discourse influenced and influences its environment. Accounting cannot be separated from the environment. The problem of waste treatment is important in controlling the company's responsibility for its environment. The success of many companies is at least determined by three factors, namely quality, profitability, and environmental responsibility. Environmental management in business has evolved over time with a better understanding of the environment related to finance, costs and benefits as input for conventional management accounting.

Environmental costs are often referred to as environmental quality costs, namely costs that occur due to poor environmental quality that may occur. Thus, environmental costs relate to the creation, detection, repair, and prevention of environmental degradation. The company will not be able to incorporate environmental changes until the accountant identifies and integrates the problem into management decisions. Sambharakreshna (2009) said conventional management accounting practices emphasize identifying and controlling costs associated with the company's business processes to produce and set product prices. Management does not realize the business processes done involve environmental factors and affect the environment. Understanding the environmental costs and performance of processes and products can encourage more accurate pricing and product prices and can assist companies in designing production processes, more goods and services environmentally friendly for the future (Kusumaningtias, 2013).

The company's environmental policy is a commitment in realizing natural resource management that is effective and efficient. The company's environmental policy is a commitment to realize effective and efficient natural resource management, it is carried out as an awareness of the company's existence in anticipating the effects of global warming including energy efficiency efforts and utilization of B3 and Non-B3 waste, reduction of air pollution, water conservation, protection biodiversity, and try to prevent pollution and control of environmental impacts.

Measurement techniques that can be used in green accounting are: total cost assessment (TCA) is a technique providing facilities for identifying and analyzing internal project costs and maintenance to overcome business problems; full cost assessment (FCA) is a technique for identifying, evaluating and allocating conventional costs and environmental costs into the company; and life cycle analysis (LCA) is a technique to identify internal and external environmental costs related to products, processes, or activities of all stages (Sambharakreshna, 2009). The three techniques are based on the Activity Based Costing (ABC) approach in identifying and calculating costs related to the

environment, by using these three techniques the company can easily disclose the environmental costs.

Fasua (2011) divides environmental accounting functions into: a) internal functions, as a business management tool to use by managers and related business units, b) external functions that reveal the results of measurement of environmental conservation activities, external functions allow companies to influence stakeholder decision making. Disclosure by allocating environmental costs based on the type of costs will contribute to the company's environmental performance. The publication of the results of environmental accounting will function well as a tool for the organization to fulfill the entity's environmental responsibilities for accountability to stakeholders and indirectly as a means for proper evaluation of environmental conservation activities.

### **Green Accounting Disclosure Model Realizing Environmental Performance**

Suhardjanto and Miranti (2009) stated disclosure based on standard is called required / regulated / mandatory disclosure. Mandatory / mandatory disclosure is the minimum disclosure required by authorized institutions (Government, IAI, or BAPEPAM-LK). Another type of disclosure that is voluntary is called voluntary disclosure. The benefit of voluntary disclosure obtained by the company is to increase credibility, helps investors understand business management strategies, attracts analysts to improve market accuracy and reduces market information asymmetries. Disclosure of voluntary environmental responsibility has not been widely carried out, while mandatory disclosure needs to be studied further.

Hernadi (2012) and Idris (2012) said that traditional accounting is related to the financial aspects of corporate activities. This traditional accounting does not present social and environmental aspects, so that is the weakness of traditional accounting. Disclosures related to environmental problems are found in Financial Accounting Standards, but there is no specific standard governing green accounting, so reporting of related costs is still voluntary. The publication of results from environmental accounting will function well as a tool for the organization to fulfill the entity's environmental responsibilities for accountability to stakeholders and indirectly as a means for proper evaluation of environmental conservation activities. IFAC (2005) environmental costs can be classified into six categories, namely:

"Material costs of product output (product costs of product outputs), material costs of non-product outputs (materials costs of non-product outputs), waste and emission control costs, prevention costs and environmental management (prevention and other environmental management costs), research and development costs and less tangible costs.

Environmental costs are categorized into 6 (six) main cost elements. The explanation of the six environmental costs is shown in Table 1 below.

**Table 1.** Environmental Cost Categories

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1. Materials Costs of Product Outputs  
Including the cost of providing resources such as water and the cost of purchasing other materials that will be produced being product output.
  2. Materials Costs of Non-Product Outputs
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- Including the cost of purchasing and managing resources and other materials being non-product outputs (waste and emissions).
3. **Waste and Emission Control Costs**  
Including costs for handling, processing and disposing of waste and emissions; repairing and compensating costs related to environmental damage, and any costs incurred due to compliance with applicable government regulations.
  4. **Prevention and other Environmental Management Costs**  
Including costs caused of preventive environmental management activities. This includes other environmental management costs such as environmental improvement planning, environmental quality measurement, communication with the community and other relevant activities.
  5. **Research and Development Costs**  
Including costs caused of research and development projects related to environmental issues.
  6. **Less Tangible Costs**  
Including intangible internal and external costs. For example, costs incurred due to the obligation to comply with government regulations so that in the future there will not be environmental problems, costs incurred to maintain the company's image, costs incurred due to maintaining relationships with stakeholders and externalities.

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Source: (IFAC, 2005)

Hansen and Mowen (2005) developed a model to encourage the practice of green accounting, in which there are four cost categories in the preparation of the report that must be presented, namely: (1) environmental prevention costs, means costs for activities carried out to prevent the production of waste / garbage that can cause environmental damage; (2) the cost of environmental detection, means the costs for activities carried out to determine whether the product, process and other activities in the company meet applicable environmental standards or not; 3) internal environmental failure costs, which means costs for activities carried out due to waste / waste production but not disposed of in the external environment; 4) external environmental failure costs, namely costs for activities carried out after removing waste or garbage into the environment. Expectations of publications from environmental accounting can have a meaning for companies to account for them and corporate transparency for stakeholders. The grouping of environmental costs is shown in Table 2 below.

**Table 2.** Clasifying of Environmental Cost

<b>Environmental Prevention Cost</b>	<b>Environmental Detection Costs</b>
1. Employee training cost	1. Cost for auditing environmental activity
2. The cost of evaluating and selecting suppliers	2. Liquid waste inspection cost
3. Product desain cost	3. The cost of a banned chimney

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- |   |                                       |
|---|---------------------------------------|
| 4. Product recycle cost                                       | examination                           |
| 5. Cost of evaluating and choosing tools to control pollution | 4. Emission inspection cost           |
| 6. Desain process cost  | 5. Cost of measuring pollution levels |
| 7. Cost of auditing environmental risks                       |                                       |
| 8. The cost of developing an environmental management system  |                                       |
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**Environmental Internal Failure Costs**

1. Cost of managing and disposing of waste / toxic waste.
2. Cost of operating pollution control equipment
3. Maintenance cost of pollution control equipment
4. The cost of obtaining facilities to produce waste
5. The cost of recycling the remaining ingredients

**Environmental External Failure Cost**

1. The cost of cleaning the polluted river
  2. Cost of cleaning contaminated soil
  3. The cost of damaging the ecosystem
  4. The cost of sales downtime due to the bad reputation of the environment
  5. The cost of using raw materials and electricity inefficient
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**Research and Development Costs**

1. Costs arising from the obligation to fulfill government regulations so that environmental problems do not arise in the future.
  2. Costs incurred to maintain the company's image
  3. Costs arising from maintaining relationships with stakeholders and externalities.
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Source: Hansen dan Mowen (2005) and IFAC (2005)

IFAC (2005) classifies environmental costs into research cost and development cost. the basis for these costs because in carrying out environmental management is preventive. So it raises costs associated with research and development projects related to environmental issues. The costs of research and environmental development can complement the grouping of research costs conducted by Hansen and Mowen. Disclosure of environmental costs will have a positive impact on environmental performance. Companies with good environmental performance will reveal their performance, because this is a good news for market participants.

**METHOD**

This research is a qualitative research because emphasizes the phenomenon that exists in the company. This phenomenon is investigated to understand what happened,

why it happened, and how it happened, thus it can be known about the situation, events and interaction of existing groups. This study uses a critical paradigm approach trying to explain accounting theories and practices currently developing in accordance with the creativity of researchers in accounting that aims to criticize, transform, recover, emancipate, dismantle a phenomenon under study so that it can be understood well. Critical accounting research is expected to fight for the idea of researchers who want to bring substantial changes, which are supported by the understanding obtained by researchers about fact-based accounting phenomena in the field equipped with analysis and opinions based on personal beliefs, supported by adequate arguments (Riharjo, 2011).

The data obtained in this study is primary data by conducting interviews with the relevant informants and secondary data in the form of sustainability reports, and other supporting documents. Data analysis techniques used are critical-constructivism, knowledge must be built or put forward, by asking questions to informants, constructivism researchers try to capture what is in the mind of the subject, and construct it into a concept of science. Two types of constructivism, namely individual constructivism - researchers explore knowledge in the minds of individuals, and sociocultural constructivism - researchers guide the subject to reconstruct reality in society. But both are the same, constructing the reality that is potentially already there (Atmadja, 2013). Data collection was carried out with primary and secondary data on PT Semen Tonasa. The company engaged in the cement industry processes raw materials from the environment (environment) and the production process has an impact on the surrounding environment. The validity of the data in this study is triangulation of data sources and triangulation of the theory.

## **RESULT AND DISCUSSION**

**Conservation by Identifying Environmental Costs.** The companies in carrying out their production activities must pay attention to the existing conditions, namely the entity's value system congruent with the broader community value system, so that the company gains legitimacy from the community. Public trust will increase the fulfillment of corporate responsibility as a form of eco-efficiency, namely production activities that are beneficial by reducing environmental impact, saving resource consumption and costs simultaneously (Setiawan, 2016).

"Various efforts have been made to pay attention to environmental issues, all have been reported in the sustainability report. We have revealed how the company treats the environment. (Source: informant)

Explanation from the results of the interview can be seen that the company has tried to pay attention to the preservation of the environment. The company must pay attention to its environment, so that the company might get legitimacy from the community. The company conducts its production activities is an obligation to pay attention to environmental preservation. That is because the company must pay attention to the existing value system in the company must be balanced with the value system in the community, in order to minimize lag gap. Legitimacy gap has a large potential for the

occurrence of protests from stakeholders towards the company which will have an impact on the company's existence, operational stability and end in the company's profitability.

"Actually, in Tonasa there is a reclamation fee, where we have the obligation to report to the mining department every quarter what costs are incurred. This reclamation fee does not appear in the financial statements. (Source: Informant)

The actual reclamation costs incurred by PT Semen Tonasa make it hidden from the financial statements, so that management, investors and other stakeholders have difficulty identifying these costs. The difficulty in identifying costs related to the company's environment will certainly have an impact on the company going forward. The Company carries out biodiversity protection by utilizing ex-mining products, including reclamation of the former limestone Biring Ere and Bontoa clay mining areas by means of reforestation and artificial ponds; construction of a fruit garden and Forest Park (TAHURA) in Tonasa village; and the construction of Taman Sipong, Kehati village, Insitu Bulu Bontoa, by planting endemic plants, steps and local (Anonim, 2015b).

"Regarding the current Environmental constitution for the management of B3 waste, we must have reserves in the bank reported to the government in the amount of Rp. 5 billion. We also have an after-sales unit where we can be compiled if a mistake is found by a person, we group it at marketing costs ". (Source: Informant)

PT Semen Tonasa's after-sales unit is classified as marketing costs. Hansen and Mowen (2005) said costs incurred due to research and development projects related to environmental issues can be categorized as research and development costs. PT Semen Tonasa after-sales unit costs are in line with the costs incurred to maintain the company's image, where these costs are incurred in meeting customer satisfaction in order to maintain the company's image.

"The company refers to the AMDAL document in managing and monitoring, and the company also refers to Semen Tonasa's UKL-UPL, in that document the company has an obligation in environmental monitoring, where we monitor each semester". (Source: Informant)

Efforts to deal with environmental impacts are carried out in advance referring to the management and monitoring aspects contained in the company's AMDAL document. Impact management is arranged in an awareness framework to reduce the utilization of raw materials available inside and to reuse waste generated both internally and externally. The activities carried out by PT Semen Tonasa in an effort to preserve the environment will cause costs, this is where the role of green accounting is as disclosure. The application of green accounting can preserve the environment, because by applying green accounting the company will voluntarily comply with government policies in environmental conservation. Environmental conservation can be done by identifying costs associated with the company's environment.

Environmental costs occur due to poor environmental quality. PT Semen Tonasa distributed funds to the company's Social and Environmental Responsibility program in the amount of Rp. 15.55 billion or 106% of the RKAP (Anonim, 2015a). The activities

carried out by PT Semen Tonasa related to the environment, the costs associated with the environment can be grouped into five costs, namely: environmental prevention costs, environmental detection costs, internal failure costs, external failure costs, research and development costs.

"Prevention costs, detection costs, internal failure costs, external failure costs and costs with the environment, actually these costs already exist in Tonasa. But in Tonasa, environmental costs have not been grouped. Tonasa does not specifically specify environmental costs, even though in Tonasa the environmental costs are issued. This is because Tonasa still uses the concept of activity not a functional concept ". (Source: Informant A)

Activity Based Costing (ABC) approach is not a factor causing environmental costs have not been grouped, because there are three techniques that can be used in identifying and calculating environmental costs, including: Total Costs Assessment (TCA), Full Costs Assessment (FCA ), and Life Cycle Analysis (LCA) (Sambharakreshna, 2009). These three techniques can be used by PT Semen Tonasa in classifying their environmental costs. Cost management strategy describes an important relationship between business strategy and green accounting or environmental accounting that includes cost assessment techniques such as TCA, FCA and LCA. Stakeholders are more likely to look at companies that are environmentally sound, therefore PT Semen Tonasa in meeting the needs of stakeholders can classify costs related to the environment and can disclose these costs. This is because the company has a tendency to satisfy stakeholders and in continuing its operations the existence of stakeholders is needed, as explained by stakeholder theory.

**Formulation of the Green Accounting Model in Supporting Environmental Performance.** Accounting activities make information about a company in the form of financial statements being management responsibility to the owner of the company and important and relevant input in economic decision making. The financial statements must be presented in accordance with the Statement of Financial Accounting Standards (PSAK). PSAK 1 paragraph 14 explains:

"Some entities also present, from the financial report, environmental reports and value added reports, especially for industries where environmental factors are significant, and when employees are considered a group of financial report users who hold important wars. Reports that are presented outside of these financial reports are outside the scope of SAK".

PSAK 69 on agriculture in paragraph 53 explains that:

"Agricultural activities are often exposed by climate, disease and other natural risks. If an event occurs resulting in a material income or expense, the nature and amount of income and expenses are disclosed in accordance with PSAK 1: Presentation of Financial Statements. Examples of such events are outbreaks of deadly diseases, floods, severe drought or freezing, and insect outbreaks.

Involvement in environmental problems is needed in fulfilling their environmental responsibilities, this must be followed by reporting environmental problems around the company, especially the company's performance in overcoming the impact of the existence of the company in the surrounding environment. This stage will be perfect if an environmental audit can be carried out for the company that measures its performance. Aminah and Noviani (2014) said that to improve environmental awareness of company could present environmental reporting reports in addition to the financial statements.

PT Semen Tonasa's environmental activities incur costs, but the costs associated with these activities have not been grouped according to their categories. Based on the data obtained by the researchers grouping costs related to environmental activities of PT Semen Tonasa, which consists of five cost categories; environmental prevention cost, environmental detection costs, internal environmental failure costs, environmental of PT Semen Tonasa's environmental cost report:

**Table 3.** Environmental Cost Reporting Formula

No.	Biaya Lingkungan	Unit Moneter
<b>1.</b>	<b>Environmental Prevention Costs</b>	
1.11	Training assistance cost for each work unit	XXX
1.12	Craft paper entry cost	XXX
1.13	The cost of auditing environmental risk	XXX
1.14	Environmental management system costs	XXX
	Total	XXX
<b>2.</b>	<b>Environmental detection Costs</b>	s
2.11	Auditing costs for environmental activities	XXX
2.12	Liquid waste inspection costs	XXX
2.13	Chimney inspection cost	XXX
2.14	Examination costs for emission disposal	XXX
2.15	The cost of measuring the level of environmental pollution	XXX
	Total	XXX
<b>3.</b>	<b>Environmental Internal Failure Cost</b>	
3.11	Cost of copper slag management	XXX
3.12	The cost of managing WWTP sludge	XXX
3.13	Management costs for iol sludge	XXX
3.14	The cost of managing used lubricants	XXX
3.15	Fly ash management costs	XXX
3.16	Bottom ash management costs	XXX
3.17	Cost of garden waste management	XXX
3.18	Household waste management costsPrincipitator	XXX
3.19	The cost of operating an Electronic Principitator (EP)	XXX
3.20	Cost of operating Dust Collector (DC)	XXX
3.21	The cost of operating the coalunloadingandphomogenization facilities	XXX
3.22	The cost of operating a Sequential Timer	XXX
3.23	The cost of operating a reservoir pump	XXX
3.24	The cost of operating a raw water tank	XXX
3.25	The cost of installing an electricity-saving sticker	XXX
3.26	The cost of operating a fine coal transport line	XXX
3.27	Electronic principitatormaintenancefee	XXX
3.28	Maintenance costs for Dust Collector (DC)	XXX
3.29	Coal Unloading and phomogenization facilities maintenance costs	XXX
3.30	Sequential timer maintenance costs	XXX

3.31	Reservoir pump maintenance costs	XXX
3.32	Raw water tank maintenance costs	XXX
3.33	Cost of maintaining the fine coal transport line	XXX
3.34	The cost of recycling the remaining ingredients	XXX
	Total	XXX
<b>4.</b>	<b>External Environmental Failure Costs</b>	
4.11	Planting costs	XXX
4.12	The cost of making artificial ponds	XXX
4.13	The cost of building a fruit garden	XXX
4.14	The cost of building a Grand Forest Park	XXX
4.15	The cost of building the Sipong Park	XXX
4.16	The cost of procuring VitexCofassus plants	XXX
4.17	Environmental insurance costs	XXX
	Total	XXX
<b>5.</b>	<b>Environmental Research and Development Costs</b>	
5.11	The obligation to comply government regulation so that in the future no environmental problems arise	XXX
5.12	After-sale unit costs	XXX
5.13	Cost of the environmental management plan implementation report document	XXX
	Total	XXX

Measurement of the company's environmental performance is based on environmental conservation activities carried out by the company during the productivity process by identifying environmental costs. The disclosure of all costs related to the environment both internal and external and allocating these costs based on their categories will have a good impact on the company's environmental performance. There is an influence of environmental accounting on environmental performance in Hendri and Journeault (2010) study found that providing environmental information to management has a positive effect on environmental performance. The success of many companies is at least determined by three factors; quality, profitability and environmental responsibility. The application of green accounting at PT Semen Tonasa will have a positive effect on its environmental performance, because it can reveal its environmental costs so that it will win market competition. It is hoped that the publication of the results of environmental reports of PT Semen Tonasa will function properly as a tool for the organization. fulfill the company's environmental responsibility for accountability to stakeholders and indirectly as a means for proper evaluation of environmental conservation activities.

**Ending.** Based on the results of the research above, it can be concluded that PT Semen Tonasa has issued environmental costs. The company's treatment of these environmental costs has not been grouped by category. As a result, the environmental costs become hidden, as well as other environmental costs. Cost categories that can be used by PT Semen Tonasa in realizing the company's environmental performance and better meet stakeholder needs, including: prevention costs (environmental prevention costs), environmental detection costs (environmental detection costs), environmental internal failure costs, costs external external failure costs, and research and development costs. The publication of reporting environmental costs will function well as a tool for organizations to fulfill the company's environmental responsibilities for accountability to stakeholders, and indirectly as a means to evaluate environmental conservation activities.

The implication of this research; reporting the details of environmental costs encourages corporate accountability and improves environmental transparency. Increases the company's commitment to environmental improvement as an embodiment in supporting sustainability development. Providing more positive value so that the company can attract investors, along with the ethical demands of investors which is increasing, and enhancing the company's good name in the eyes of the public. Encouraging consumers to buy green products, because the company has a more competitive marketing advantage than companies that do not disclose. Therefore it is important for the existence of special standards governing green accounting and certainly must be strengthened by the regulator by making a regulation that binds the company to disclose its environmental performance.

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