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PUSAT PENGKAJIAN DAN PENGEMBANGAN AKUNTANSI

#### The Effects of Production Cost and Environmental Cost on Sales

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# Abstract

This study aims to determine the effect of production costs and environmental sosts on sales in primary and chemical industry sector companies certified ISO 14001 listed on the Indonesia Stock Exchange. The approach used is a quantitative descriptive method with multiple regression analysis using the help of the SPSS version 27 program. Annual and sustainability reports for 5 years from 2017 to 2021 out of 8 companies that have gone through a purposive sampling process are used as research samples. Based on the multiple regression analysis that has been carried out, the results show that partially, production costs have a significant effect on sales, and environmental that have no significant effect on sales. Meanwhile, simultaneously both production costs and environmental costs have a significant effect on sales.

#### Keywords: Environmental Cost, Production Cost, Sales

#### **Abstrak**

Penelitian ini bertujuan untuk mengetahui pengaruh biaya produksi dan biaya lingkungan terhadap penjualan pada perusahaan sektor industri dasar dan kimia tersertifikasi ISO 14001 yang terdaftar dalam Bursa Efek Indonesia. Pendekatan yang digunakan adalah metode deskriptif kuantitatif dengan analisis regresi berganda menggunakan bantuan program SPSS versi 27. Laporan tahunan dan keberlanjutan selama 5 tahun periode 2017 sampai dengan 2021 dari 8 perusahaan yang telah melalui proses *purposive sampling* digunakan sebagai sampel penelitian. Berdasarkan analisis regresi berganda yang telah dilakukan, didapati hasil penelitian bahwa secara parsial biaya produksi berpengaruh secara signifikan terhadap penjualan, dan biaya lingkungan tidak berpengaruh signifikan terhadap penjualan. Sedangkan secara simultan baik biaya produksi dan biaya lingkungan memiliki pengaruh yang signifikan terhadap penjualan.

Kata kunci: Biaya Lingkungan; Biaya Produksi; Penjualan

#### 1. INTRODUCTION

To achieve the expected goals, companies today are facing new focus. Initially, a company was only focused on a single bottom line or the value of a company from its financial condition, nowadays the focus became a triple bottom line or according to Elkington, 1944 (Nababan and Hasyir, 2019) the 3P concept which includes financial (profit), environmental (planet), and social (people) dimensions which shows that companies in carrying out their operations can't





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only be targeted profits, but also in terms of environmental management and fulfillment of the community welfare.

In the manufacturing industry, there are various activities carried out by the company, one of which is production activities. This activity certainly requires an allocation of costs called production costs. (Harnanto, 2017) defines production costs as costs that are considered related to products which include direct and indirect costs for processing raw materials into finished products.

Whereas Mulyaldi (2015) in his book defines production costs as costs that are incurred to process raw materials into finished products that are ready for sale. Broadly speaking this production cost is divided into raw material costs, labor costs, direct costs, and overhead costs.

According to Raiborn & Kinney (2013) there are 3 components in production costs, which are as follows:

- 1. Direct material which is any part of the product that is available and easy to identify.
- 2. Direct labor is the effort of individuals who produce products and provide services.
- 3. Overhead is a cost that is indirectly included in the production of a product or service provided.

With the existence of production costs, it is hoped that companies can calculate the cost of making finished products and selling them to consumers to make a profit. However, over time, companies need to think about how the products that have been produced could have sustainable properties. In other words, companies need to think about the impact of their production activities and the effects on the environment and community welfare so that both natural and human resources can be used sustainably and passed on to the next generations.

Reported from metro.sindonews.com in September 2022, PT. Saranagriya Lestari Keramik, which produces floor ceramics and roof tiles, was proven to have polluted the environment so the Bekasi Regency government together with the West Java Environment Agency sanctioned the company. It is known that PT. Saranagriya Lestari Keramik has been proven to have committed 13 violations in waste management, especially liquid and air waste. The company was found not fulfilling waste treatment procedures because there were hazardous and toxic materials (B3) in the disposal of waste.

This problem was reported by the local community three months ago, and after being examined by the Bekasi District Environmental Agency, it was found that the pollution had indeed occurred and was included in the category of medium to high level of environmental damage. This means it had violated Article 100 of Law Number 32 of 2009 concerning Environmental Protection and Management.

The increasing of various environmental problems such as pollution and environmental damage made companies have to find solutions to prevent this problem. One of many solutions that can be done is to allocate environmental costs. Environmental costs are used by companies for activities that aim to improve environmental performance.

Environmental costs according to Ikhsan (2009) are cost that include internal costs and external costs that relate to all costs associated with environmental damage and protection.





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With 4 groups that are part of environmental costs according to (Hasen and Mowen, 2018), namely environmental prevention costs, environmental detection costs, and external environmental failure costs. Companies must calculate environmental costs properly because they will have an impact on company finances.

Therefore, it is expected that the allocation of environmental costs will make people put more of their trust to create a good and sustainable relationship with the company. Not only that, if the company can allocate production costs and environmental costs properly, it is expected that the company's sales volume and profits will also increase.

Over time, companies are competing to fulfill the 3P concept as evidenced by the existence of CSR (Corporate Social Responsibility), which according to (Sultoni, 2020) is a commitment by companies to behave ethically and participate in sustainable economic development.

Various programs have been carried out by companies so that environmental management and fulfillment of community welfare can be realized. One of the measuring tools commonly used by companies in fulfilling aspects of environmental management is to have ISO 14001 certification. (Introduction to ISO 14001, 2015) defines ISO 14001 as an internationally recognized standard that shows the requirements in the environmental management system. This certification can help companies to improve environmental performance by using resources more efficiently and reducing waste to gain a competitive advantage and trust from shareholders.

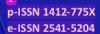
According to (Deepak and Bishnoi, 2015), ISO 14001 is an Environmental Management System (EMS) standard that was developed by the International Organization for Standardization (ISO).

To obtain this certification, (Sadiq and Khan, 2019) in their book write that companies must pay attention to clause 6.12 of ISO 14001 where companies and organizations are required to define and implement a procedure that describes how the company identifies and applies matters such as identifying all environmental laws; permits; and licenses that apply to products, processes, waste management whether solid, liquid, or gas; and periodic evaluation of environmental policies, along with the company's compliance with environmental laws and other requirements.

Based on the problems described, this research was conducted to examine the effect of production costs and environmental costs on sales volume.

# 2. LITERATURE REVIEW AND HYPOTHESES FORMULATION Triple Bottom Line

John Elkington introduce the 3P concept in 1944, known as the Triple Bottom Line (Elkington, 1997). The concept of social justice (people), economic prosperity (profit), and environmental protection (planet) show that companies need to look at these three dimensions.





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The people dimension is how the company can provide benefits and welfare for people who have ties with the company. Then the profit dimension is how the company aims to make a profit from activities such as sales carried out by the company. And the planet dimension shows that the company should be responsible for managing the environment and its resources



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#### **Production Cost**

(Mulyadi, 2015) in his book defines production costs as follows:

"Production costs are costs that are incurred to process raw materials into finished products that are ready for sale. Broadly speaking these production costs are divided into raw material costs, labor costs, direct costs, and overhead costs".

According to (Raiborn and Kinney, 2013) there are 3 components in production costs, which are as follows:

- 1. Direct material is any part of the product that is available and easy to identify.
- Direct labor is the effort of individuals who produce products and provide services.
- 3. Overhead is a cost that is indirectly included in the production of a product or service provided.

#### **Environmental Costs**

Environmental costs according to (Ikhsan, 2009) are costs that include internal costs and external costs and relate to all costs associated with environmental damage and protection.

Therefore, according to (Hansen and Mowen, 2018) to obtain optimal environmental costs, companies can allocate them through investment in prevention and detection activities or, in other words, the costs of preventing and detecting environmental damage. Such as the costs of waste treatment, reclamation, measuring waste levels, and others.

Conversely, if the company is unable to allocate its environmental costs properly, it can lead to additional costs that will affect the company's financial performance.



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#### Sales

(Albdullah, 2017) in his book defines sales as complementary activities to purchases made so that a transaction occurs. So it can be said that sales are a transaction made by consumers when they buy a product.

According to (Panjaitan, 2018) sales is a concept that focuses on existing products, using promotion as an attraction with the ultimate goal of making a profit.

The factors that influence sales according to (Hidayah and Sulakson, 2021) include the price set, the company's strategy for promotion, and the quality of the products produced.

## Sales are affected by production costs

Production costs can affect the sales volume of a product that the company has produced. (McGuian; Moyer; and Harris, 2016) argue if production costs increase, then companies must increase selling prices to maintain margin standards. This can affect market demand and reduce sales volume. However, on the other hand, if the company can reduce production costs, market demand, and sales volume will increase.

In portrast (Rupaida and Bernardin, 2016) have conducted research on this matter and found that there is a positive and significant influence between production costs on sales. This shows that when production cost increase, sales will also increase.

From the explanation above, the first hypothesis can be formulated, namely:

H1 = Production costs have a positive effect on sales volume partially.

## Sales affected by environmental costs

In some cases, environmental costs can have a significant impact on a company's sales volume.

According to (Callan and Thomas, 2013), every resource used for economic activities ends up as a residue that has the potential to cause environmental damage. Although this process can be delayed through environmental restoration, it cannot be stopped. Therefore, companies need to make policies regarding environmental management.

Taking active steps to meet environmental regulations and demonstrating a commitment to environmental sustainability, can have a positive effect on sales volume. In a study conducted by (Suki, 2016), it was found that consumer attitudes towards environmentally friendly products. So it can be concluded that if consumers have a strong preference for environmentally friendly products, then the allocation of higher environmental costs propositively affect sales volume.

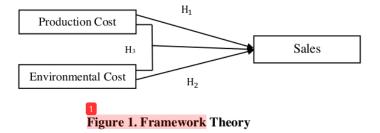
From the explanation above, the second hypothesis can be formulated, namely:

H2 = Environmental costs have a positive effect on sales volume partially

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Based on the two hypotheses above, the researcher also formulates a third hypothesis, namely:

H3 = Production costs and environmental costs have a positive influence on sales simultaneously.



## 3. RESEARCH METHODS

The objects that will be examined are production costs, environmental costs, and sales. The research is conducted in quantitative form and the data is taken from annual reports and sustainability reports of companies listed on the IDX in the primary and chemical industry sectors that have ISO 14001 certification.

## Population and Sample

The population in this study is the primary and chemical industry sector companies that have been listed on the Indonesian Stock Exchange and are also ISO 14001 certified which publish sustainability reports and annual reports for the period 2017-2021. For sample determination, this study will use the purposive sampling method. This method was chosen because of the research limitations that require the selected sample to be following the existing objectives. The criteria used in determining the research sample are as follows:

**Table 1. Purposive Sampling** 

No.	Criteria	Total
1.	Primary and chemical industry sector companies that	73
	are ISO 14001 certified	
2.	Companies that did not publish sustainability report	(65)
	and annual report in 2017-2021	
Num	ber of sample companies:	8
The	amount of data used during 2017-2021	40

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Based on the data obtained in table 1 above, there are 73 companies included in the basic and chemical industry sector and ISO 14001 certified. A total of 65 companies do not meet the criteria. And 8 companies with 40 sample data can be studied further after the elimination process.

#### Variable Measurement

## Independent Variable (X<sub>1,2</sub>)

Independent variables are variables that have an influence on the dependent variable. The independent variables in this study are production costs and environmental costs.

## Dependent Variable (Y)

The dependent variable is the variable that is influenced by the independent variable. The dependent variable in this study is sales volume.

**Table 2. Summary of Research Variables** 

Variables	Dimensions	Disclosure Indicator	Measurement
Production	Total production	Production Cost = Direct Raw	Nominal
Cost (X <sub>1</sub> )	cost of the	Material Cost + Direct Labor Cost	
	company	+ Variable Factory Overhead Cost	
		+ Fixed Factory Overhead Cost	
Environmental	Total	Total environmental costs in the	Nominal
Costs (X <sub>2</sub> )	environmental	company's sustainability report	
	cost of the	for the period 2017-2021	
	company		
Sales Volume	Total revenue	Total revenue generated from	Nominal
(Y)	generated from	sales in the company's annual	
	sales	report for the period 2017-2021.	

## Research Model

The data analysis techniques used in this study according to (Sugiyono, 2013) are as follows: (1) Classical Assumption Test; (2) Correlation Test; (3) Hypothesis Test; (4) Coefficient of determination using multiple regression techniques. Data analysis and processing will be carried out with the IBM SPSS Statistics 27 application.

# 4. RESULTS AND DISCUSSION

**Descriptive Statistics** 

Table 3. Descriptive Statistics



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	N	Minimum	Maximum	Mean	Std. Deviation
Production	40	163512400	6153867715706	802373990044.42	1556507837236.4
Costs					76
Environmental	40	744000000	391000000000	18671215416.98	60777650183.773
Costs					
Sales	40	183195700	8000149423527	1276575993475.7	2000485709143.0
		0		5	93
Valid N	40				
(listwis <sub>2</sub> )					
0000					

Source: SPSS version 27 processed data

Based on table 3 above, it is found that production costs as one of the independent variables in this study have a minimum value of IDR 163,512,400. From the calculation of production costs, the maximum value obtained IDR 6,153,867,715,706. While the average value obtained is IDR 802,373,990,044.42 and a standard deviation of IDR 1,556,507,837,236.476.

Another independent variable that uses descriptive statistical calculations environmental costs which have a minimum result of IDR 744,000,000. Through the results of the calculation of environmental costs, the maximum value obtained is IDR 391,000,000,000. While the average obtained is IDR 18,671,215,416.98 and a standard deviation of IDR 60,777,650,183.773.

And for sales as the dependent variable, the minimum result is IDR 1,831,957,000. Then through the calculation of total sales the maximum value is IDR 8,000,149,423,527. For the average value obtained of IDR 1,276,575,993,475.75 and a standard deviation of IDR 2,000,485,709,143.093.

# 6 Classical Assumption Test

Before conducting hypothesis testing using multiple regression analysis, the researcher need to ensure several assumptions that must be met to reach conclusions from unbiased multiple regression analysis. The tests carried out include the normality test, heteroscedasticity test, autocorrelation test, and multicollinearity test

# **Normality Test**

Table 4. Classical Assumption Testing Results One-Sample Kolmogorov-Smirnov Test PUSAT PENGKAJIAN DAN PENGEMBANGAN AKUNTANSI

			Unstandardized Residual
N			39
Normal Parametersab	Mean		0000814
	Std. Deviation		606559599776.14980000
5			
Most Extreme	Absolute		.307
Differences	Positive		.307
	Negative		235
Test Statistic			.307
Asymp. Sig. (2-tailed)			.000
Monte Carlo Sig. (2-	Sig.		.000
tailed) <sup>a</sup>	99% Confidence	Lower	.000
	Interval	Bound	
		Upper	.000
		Bound	

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

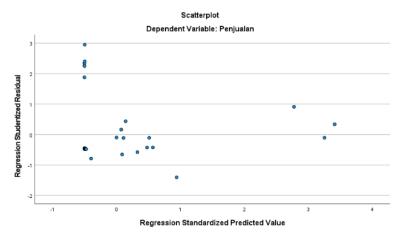
Source: SPSS version 27 processed data

Based on table 4 above, it is known that the significance value of the resulting *Test Statistic is* 0.307 and when referring to the criteria of the Kolmogorov-Smirnov test, it is found that the value of 0.307 is greater than 0.05 so it is concluded that the data that has been processed has a normal distribution.

# **Heteroscedasticity Test**

Figure 2. Heteroscedasticity Scatterplot Graph

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Source: SPSS version 27 processed data

Based on Figure 2 above, it is known that the points are scattered irregularly or randomly, so it is concluded that the data does not occur heteroscedastic problems.

#### **Autocorrelation Test**

This autocorrelation test is carried out by the researcher to determine whether there is a correlation between observations of research data measured over time (time series) in the regression model. This test is carried out using the Durbin-Watson (DW) value.

Table 5. Autocorrelation Assumption Test Results

# Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.9771	.954	.951	339594003084.29640	1.707

Predictors: (Constant), Environmental Costs, Production Costs

b. Dependent Variable: Sales

Source: SPSS version 27 processed data



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Based on table 5 above, the Durbin-Watson value that has been obtained is between the values of  $d_u$  and 4-  $d_u$  (1.600<1.707<2.400). Thus it can be concluded that the regression model to be formed has met the criteria because the regression between the independent variables Production costs ( $X_1$ ) and Environmental Costs ( $X_2$ ), against Sales (Y) has been free from autocorrelation problems.

# **Multicollinearity Test**

Table 6. Multicollinearity Testing Results

Coefficients <sup>a</sup>					
Collinearity Statist					
Model	Tolerance	VIF			
1 (Constant)					
<b>Production Cost</b>	1.000	1.000			
4 Environmental Costs	1.000	1.000			
a. Dependent Variable: S	Sales				
Source: SPSS version 27	processed data				

Based on table 6 above, it is known that the resulting *tolerance* value is 1.000. This figure is greater than 0.10, also found a VIF value of 1,000 which is less than 10, so it can be concluded that there is no multicollinearity problem.

# Besults

# Multiple Linear Regression Analysis

In this study, the researcher will form a regression equation as follows:

Se = 
$$\alpha + \beta_1 PrC + \beta_2 EnC$$

Where:

Se(Y) = Sales

 $\alpha$  = Constant

 $\beta_i$  = Coefficient of Regression

 $PrC(X_1)$  = Production Costs

 $EnC(X_2)$  = Environmental Costs

4

The results of the calculation of multiple linear regression analysis using the SPSS version 27 program will be presented in the following table:



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Table 7. Multiple Linear Regression Results
Coefficients

		•	Joenneich			
		Unstandardize				
Model		В	Std. Error Beta		t	Sig.
1	(Constant)	296901749098.924	116237650328.533		2.554	.015
	Production Costs	1.224	.064	.954	19.060	.000
4	Environmental Costs	479	1.642	015	292	.772

a. Dependent Variable: Sales

Source: SPSS version 27 processed data

The regression equation used to explain the effect of production costs and environmental costs on sales is as follows:

## Sales = 296,901,749,098.924 + 1.224 PrC - 0.479 EnC

Based on the regression equation above, it is known that production costs have a positive regression coefficient, indicating that the higher the production costs, the more sales will increase. Conversely, environmental costs are known to have a negative regression coefficient, indicating that the higher the environmental costs, the sales will decrease.

#### T test

The researcher conducted partial hypothesis testing as a method used to determine the effect of each independent variable on the dependent variable. The t value in this test with  $\alpha = 5\%$  is as follows:

$$t_{\text{table}} = t \ (\alpha/2; \text{ n-c-1}) = t \ (0.025; 37) = 2.021$$

First, the researcher will test H<sub>1</sub>

Table 8. T Test Results of the Effect of Production Costs Partially Against Sales

		Coefficients <sup>a</sup>			
	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	287710529387.269	110489515424.607		2.604	.013
Production	1.224	.063	.954	19.304	.000
8 Cost					

a. Dependent Variable: Sales

Source: SPSS version 27 processed data



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Based on the table 8 above, it can be seen that the t value obtained is 19.304, which is greater than  $t_{table}$  3.021. So it is concluded that with a confidence level of 95%,  $H_1$  can be accepted, which means that production costs have a significant effect on sales.

Next, the researcher will test H<sub>2</sub>

Table 9. T Test Results of the Effect of Environmental Costs Partially Against Sales

# Coefficients-

			Standardized		
	Unstandardized	d Coefficients	Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	1292182465611.010	335481523362.868		3.852	.000
Environmental	836	5.338	025	157	.876
Costs					

a. Dependent Variable: Sales

Source: SPSS version 27 processed data

Based on the table 9 above, it can be seen that the t value obtained is -0.157 which is smaller than  $t_{table}$  2.021. So  $t_{table}$  concluded that with a confidence level of 95%,  $t_{table}$  cannot be accepted, which means that environmental costs do not have a significant effect on sales.



Testing the third hypothesis simultaneously in this study was carried out by the researcher with the following results

F table = F (c; n-c) = F (2; 40) = 3.23

Table 10. F Test Results of the Effect of Production Costs and Environmental Costs
To Sales Simultaneously

# ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1411678434708236500	2	705839217354118300000	181.751	$.000^{b}$
	000,0000000		000.0000		
Residuals	1398075282706284400	36	388354245196190130000		
	000.000000		000.000		
Total	1551485962978865000	38			
	000.0000000				

a. Dependent Variable: Sales

b. Predictors: (Constant), Environmental Costs, Production Costs

Source: SPSS version 27 processed data



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Based on table 10, it is known that the value obtained from the comparisors of F and F<sub>table</sub> is equal to (181.75>3.23). So it is concluded that H<sub>3</sub> can be accepted, which means that production costs and environmental costs have a significant effect on sales simultaneously.

# Coefficient of Determination

The researcher tested the coefficient of determination which aims to show how much influence the independent variable has on the dependent variable. The test results are listed in the following table:

Table 11. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.954a	.910	.905	623180748415.891

a. Predictors: (Constant),  $(X_2)$  Environmental Costs,  $(X_1)$  Production Costs Source: SPSS version 27 processed data

In table 11 above, it can be seen that the *R Square* value obtained is 0.910. Based on these results, it is found that Production Costs, and Environmental Costs contribute 91% of the influence on Sales, while the remaining 9% is a large contribution of influence derived from other factors not examined.

The researcher also tested the coefficient of determination partially by using the Effective Contribution value which can be found through multiplying the *standardized coefficients beta* by the correlation coefficient. The results of the calculation will be presented in the following table:

Table 12. Partial Determination Coefficient

Model	Standardized Coefficients Beta	Correlations	Partial Coefficient of Determination
Production Costs (X) <sub>1</sub>	0.954	0.954	0.910116
Environmental Costs (X) <sub>2</sub>	-0.015	-0.025	0.000375
Total Effect			0.910491

Source: SPSS version 27 processed data

Table 12 provides information about the amount of influence contribution given by each variable partially. It is known that the contribution of the influence given by Production Costs is 0.910116 to Sales and Environmental Costs which contribute 0.000375 to sales, so it can be concluded that the variable that provides the largest total contribution of influence is Production Costs. This corroborates the results of the T test that was tested previously.



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#### Discussion

#### **Effect of Production Costs on Sales**

Based on the results of hypothesis testing, the conclusion that can be drawn is that production costs have a significant effect on sales. Where the higher the production cost, the impact on increasing sales. This statement can be proven by the partial T test results where the t value obtained is 19.304 which is greater than  $t_{table}$  2.021. This hypothesis is of course also supported by the results of the coefficient of determination test, where production costs contribute 91.05% of the influence on sales.

The research results that have been obtained are juline with research conducted by (Dzakiyyah and Ishak,2022) where production costs have a positive and significant effect on sales.

## The inffect of Environmental Costs on Sales

Based on the results of hypothesis testing obtained from the partial T test where the t value obtained is 0.157 which is smaller than  $t_{table}$  2.021 with a significance level of 0.876> 0.050, it is concluded that environmental costs have no significant effect on sales. This statement illustrates that if environmental costs increase, then sales in the company will not necessarily increase, sales can be fixed or even decrease.

## The Effect of Production Costs and Environmental Costs on Sales Simultaneously

Based on the results of hypothesis testing obtained from the F test and the coefficient of determination, the effect of production costs and environmental costs on sales from F<sub>tabel</sub> is (181.75> 3.23). And from the coefficient of determination which is 0.9105 or 91.05% with the remaining 8.9% is a factor not examined in this study, also a significance level of 0.000 <0.050, it is concluded that production costs and environmental costs have a significant effect on sales significantly. This happens because production costs and environmental costs are interconnected with one another, so that sales will increase, and if sales continue to increase, production costs and environmental costs will also increase.

#### 5. CONCLUSIONS AND SUGGESTIONS

#### Conclusion

Based on the results of the research and discussion that has been described, the researcher draws the following conclusions:

a. In the sample taken from ISO 14001 certified primary and chemical industry sector companies listed on the IDX for the 2017-2021 period, production costs have a significant effect on sales partially with a contribution of the influence given of 91.05%,. This shows that the higher the production cost, the impact on increasing sales.



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- b. Environmental costs do not have a significant effect on sales partially. This shows that if environmental costs increase, then sales in the company will not necessarily increase, sales can be fixed environmental costs.
- c. Simultaneously, production costs and environmental costs have a significant effect on sales with an influence contribution of 91.05% and the remaining 8.9% is a factor not examined in this study.

# Suggestions

#### a. For the Company

Companies can increase efforts to prevent environmental problems by setting policies and allocating environmental costs. Although this adds to production costs, if it is allocated in a planned and efficient manner, the sustainability of the company will be guaranteed and the value of the company with consumer confidence will increase.

#### b. For Investors

Investors can consider investing in companies that pay attention to environmental issues by allocating environmental costs and having certifications that are environmentally friendly. Thus, investors can avoid the risk of business continuity disruption. In other words, investors can be free from companies that are exposed to legal problems due to the impact of environmental problems, people who do not trust the company and protest, or other things that can harm the company as well as investors.

c. For the Government (Ministry of Environment and Forestry)

The government is expected to urge all companies to pay attention to environmental issues and obtain ISO 14001 certification or other environmentally friendly certifications.

## d. For Future Researchers:

It is hoped that future researchers can make developments such as increasing the number of samples or can use other environmentally friendly company specifications so that management accounting knowledge can also increase and develop in the future.



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PUSAT PENGKAJIAN DAN PENGEMBANGAN AKUNTANSI

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