

#### How to Cite

Iskandar, S., Wahab, Z., Widiyanti, M., & Adam, M. (2020). Price perception and product quality on gas purchasing decisions in PT. Pertamina EP asset 2. *International Journal of Business, Economics & Management*, 3(1), 134-139.  
<https://doi.org/10.31295/ijbem.v3n1.161>

## Price Perception and Product Quality on Gas Purchasing Decisions in PT. Pertamina EP Asset 2

#### Sofyan Iskandar

Master of Management in Faculty of Economics, Sriwijaya University  
Corresponding author email: [kmtigaplaju@gmail.com](mailto:kmtigaplaju@gmail.com)

#### Zakaria Wahab

Lecturer in Master of Management at the Faculty of Economics, Sriwijaya University

#### Marlina Widiyanti

Lecturer in Master of Management at the Faculty of Economics, Sriwijaya University

#### Mohamad Adam

Lecturer in Master of Management at the Faculty of Economics, Sriwijaya University

**Abstract---***This research was conducted aimed to determine the effect of price perception and product quality on purchasing decisions at PT. Pertamina EP Asset 2. The population in this study are all companies that are consumers who purchase gas at PT. Pertamina EP Asset 2 in 2019 as many as 17 companies. The sample used in this study were 102 respondents using a purposive sampling technique. The data collection method uses a questionnaire. The results of the multiple linear regression analysis showed that price perception had a positive and significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2. Product quality has a positive and significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2. By looking at competitors, it is better to immediately improve gas quality. So it has more appeal for consumers so far and prospective customers to continue to make gas purchases from PT. Pertamina EP Asset 2. With good cooperation between PT. Pertamina EP Asset 2 with consumers who are companies that have done so far, it is necessary to increase the quality of the gas produced to give a sense of wanting to make gas purchases.*

**Keywords---***companies, price perception, product, purchasing decisions, quality.*

#### Introduction

PT. Pertamina EP is a subsidiary of PT. Pertamina (Persero), which is a contractor of cooperation contract under the supervision of SKK Migas, conducts business activities in the upstream oil and gas sector, which include exploration and exploitation activities. The working area of PT. Pertamina EP covers an area of 113,613 square kilometers and when viewed from its geographical range, PT. Pertamina EP operates in almost all regions of Indonesia from Sabang to Merauke. The working area of PT. Pertamina EP is divided into five Assets and 22 fields.

Based on the results of an initial survey at PT. Pertamina EP Asset 2 shows that the price factor and the quality of the gas offered can influence consumers' decisions when purchasing gas. This can be demonstrated by consumers' perception of the price of gas offered to influence purchasing decisions. The data in Figure 1.1 below shows the price offered by PT. Pertamina EP Asset 2 which changes every month. Also, the quality of the product produced needs to be adjusted to the price given. Because consumers feel that if the gas quality is good and the price is appropriate, then the consumer will be interested in purchasing the gas. The average gas price at PT. Pertamina EP Asset 2 changes every month. The average gas price began to stabilize in September 2019 until December 2019 of US \$ 5,391/mmscf while in August 2019 it showed the lowest gas price in 2019 which was US \$ 4,931.

In January the highest gas purchases occurred in the amount of 349 MMSCFD. While the lowest gas purchases occurred in December 2019, amounting to 324 MMSCFD. The realization of gas production is higher when compared to the realization of consumer purchases from PT. Pertamina EP Asset 2 in 2019. The target of purchasing changes every month. The highest target occurred in January 2019 amounting to 347.20 MMSCFD while the lowest target occurred in November 2019 amounting to 335.92 MMSCFD. There was an increase and decrease in the target each month following the realization of gas production.

The percentage of gas purchases in January 2019 is close to the gas purchase target. Furthermore, it continued to decline until April 2019 and began to rise again in June 2019 until August 2019. Based on the data presented above, it was found that consumer gas purchases were still lower than the consumer gas purchase target that the company wanted to achieve. The low gas purchase when seen is thought to be influenced by the gas price set. This gas price sensitivity occurs due to the process carried out on the gas and then resale with different products from each consumer plant. Besides, there are competitors in this case PT. Conoco Phillip Indonesia (CoPhi), which participated in selling gas at competitive prices. The biggest consumer of PT. Pertamina EP Asset 2 in the Palembang area is PT. Pusri where gas purchases are 107 MMSCFD or 32% of the total monthly purchases. With the lack of gas absorption by PT. Pusri will greatly influence the gas sales of PT. Pertamina EP Asset 2. Determination of the price by the seller must be adjusted to market conditions while business consumers see the price as a material consideration in making purchasing decisions because the price of a product affects the cost of producing products sold. PT. Pertamina EP Asset 2 sets gas prices carefully based on market conditions and the costs incurred to produce the gas. So that the price of gas sold can have competitiveness with existing competitors.

#### *Problem Formulation*

1. What is the effect of price perception on gas purchasing decisions at PT. Pertamina EP Asset 2?
2. How does the effect of product quality on gas purchasing decisions at PT. Pertamina EP Asset 2?

#### *Purpose*

1. To find empirical evidence and analyze the effect of price perception on gas purchasing decisions at PT. Pertamina EP Asset 2.
2. To find empirical evidence and analyze the effect of product quality on gas purchasing decisions at PT. Pertamina EP Asset 2.

#### *Literature Review*

##### *Price Perception*

Price is the amount of money billed for a product or service or the amount of value exchanged by customers to get the benefits of owning or using a product or service (Kotler & Armstrong, 2015). Price perception is an assessment of consumers and associated emotional forms about whether the price offered by the seller and the price compared to other parties makes sense and can be accepted or justified (Lee & Lawson, 2011).

##### *Product Quality*

Product quality is the ability of a product to demonstrate its function and is one of the most reliable factors by a marketer in marketing a product (Kotler & Armstrong, 2015).

##### *Buying Decision*

The purchase decision is a stage where the consumer has a choice and is ready to make a purchase or exchange between money and a promise to pay with ownership rights or use of an item or service (Kotler & Keller, 2016).

## **Research Methods**

The population in this study are all companies that are consumers who make gas purchases at PT. Pertamina EP Asset 2 in 2019 as many as 17 companies. In this study, the total population of the study was 17 companies, so the number of samples was 6 times the number of questions or as many as  $6 \times 17 = 102$  respondents. The target respondents used in this study were 102 respondents by distributing questionnaires to 17 companies that were the population in the study. The sampling technique in this study used a purposive sampling technique. Respondents in

this study are consumers who purchase gas at PT. Pertamina EP Asset 2 in 2019. Questionnaires were distributed through representatives of several companies that made gas purchases in 2019.

The data used in this study were collected using data collection methods through questionnaires. The samples used in this study were 102 samples distributed to consumers who purchase gas at PT. Pertamina EP Asset 2. A list of questions contained in this research questionnaire are questions related to variables that influence purchasing decisions.

## Result and Discussion

Table 1  
Results of multiple linear regression analysis

Model	Coefficients		
	Unstandardized Coefficients	Std. Error	Standardized Coefficients
1	B		Beta
	Constant	.601	.347
	Price Perception	.582	.077
	Product Quality	.188	.076

$$Y = 0,601 + 0,582X_1 + 0,188X_2 + e$$

The linear regression equation above can be explained as follows:

- The constant value shows a positive value with a value of 0.601. This shows that the gas purchasing decision at PT. Pertamina EP Asset 2 is considered that without the influence of perceived price and product quality, the size of the purchase decision variable is 0.601.0,601.0,601.
- The regression coefficient value of the price perception variable is 0.582 with a value of 7.572 stating that price perception has a positive effect on purchasing decisions. This shows that the higher the price perception, the more positive the impact will be, namely the higher purchasing decisions made by gas consumers.
- The regression coefficient value of product quality variable is 0.188 with a value of 2.455 which states that product quality has a positive effect on purchasing decisions. This shows that the higher the quality of the product produced, the higher the positive impact, namely the higher purchasing decisions made by gas consumers.

Table 2  
Results Correlation Coefficient (r) and Determination Coefficient (R<sup>2</sup>) | Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.668	.446	.434	.736673

Correlation coefficient test results (r) seen that the magnitude of the influence of the variable price perception and product quality on purchasing decisions is equal to 0.668 or 66.8%. The amount of R square (R<sup>2</sup>) is 0.446 or 44.6%, the figure is used to see how the perception of price and product quality influences gas purchasing decisions at PT. Pertamina EP Asset 2.

This figure has the intention that how the variable price perception and product quality in indicating what factors can influence gas purchasing decisions at PT. Pertamina EP Asset 2 and 44.6% together while the remaining 55.4% is influenced by other factors such as the company's image in protecting the environment, promotion of what the company has done, consumer confidence in the company, and others.

Table 3  
Test the significance of Individual Parameters (t-test)

Model	Variable	Coefficients			
		B	$t_{table}$	$t_{count}$	Sig.
1	Price Perception	.582	1.984	7.572	.000
	Product Quality	.188	1.984	2.455	.016

The value of degree of freedom (df) =  $n-k = 102-3 = 99$  and 0.05 is obtained value  $t_{table}$  for this research data is 1.984. The analysis results can be explained as follows:

Value  $t_{count}$  the price perception variable (X1) 7,572 and the significance value of 0,000 then the value  $t_{count} > t_{table}$  specifically ( $7.572 > 1.984$ ) or value (Sig.)  $0.000 < 0.05$ . This means that price perception has a significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2. This proves that the first hypothesis on the variable perception of price has a positive and significant effect is acceptable.

Value  $t_{count}$  product quality variable (X2) 2.455 and the significance value of 0.016 then the value of  $t_{count} > t_{table}$  that is ( $2.455 > 1.984$ ) or the value (Sig.)  $0.016 < 0.05$ . This means that product quality has a significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2. This proves that the second hypothesis on the product quality variable has a positive and significant effect is acceptable.

## Discussion

### *Effect of Price Perception on Purchasing Decisions*

The results showed that price perception is a driving force for consumer decisions in purchasing gas at PT. Pertamina EP Asset 2, can be related to several dimensions used in this study including the dimensions of price affordability, price suitability with gas quality, price competitiveness, and price suitability with benefits. Based on the results of the study and analyzed using multiple linear regression analysis assisted by SPSS 22.0 software, the price affordability dimension shows the highest average score. It is seen that the price that is affordable when compared to competitors of producers with similar products greatly affects consumers in making purchasing decisions. Additionally, the price determined following the gas sale and purchase agreement, then consumers are more interested in the commitments made by PT. Pertamina EP Asset 2 in the agreed agreement, one of which is for determining the price of gas. The results of this study are in line with the results of research from (Amalia & Nurseto, 2019); (Wicaksana, 2018); (Hendro & Hidayat, 2018) which found the same results that the variable price perception has a positive and significant effect on purchasing decisions (Putra *et al.*, 2020; Alford & Biswas, 2002; Yu, 2008).

### *Effect of Product Quality on Purchasing Decisions*

The results of this study indicate that in addition to price perception, product quality is also a driving force for consumer decisions in purchasing gas at PT. Pertamina EP Asset 2, this can be related to several dimensions used in this study including dimensions of conformity with specifications and quality perceived by consumers. Based on the results of the study and analyzed using multiple linear regression analyses assisted with SPSS 22.0 software, the indicators of PT. Pertamina EP Asset 2 has a good image in the eyes of consumers showing the highest score of 4.20. This shows that PT. Pertamina EP Asset 2 has a good image for consumers and the public. The good image of the company has a good impact on consumers' decisions in purchasing gas. The results of this study are in line with the results of research from (Supriyadi, Fristin, & Indra, 2016); (Fure, Lapian, & Taroreh, 2015); (Dharma & Sukaatmadja, 2015); (Rahman, 2015); (Pratama, 2014) found the results that product quality has a positive and significant effect on purchasing decisions.

## Conclusion

- 1) Price perception has a positive and significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2.
- 2) Product quality has a positive and significant effect on gas purchasing decisions at PT. Pertamina EP Asset 2.

### Suggestion

For PT. Pertamina EP Asset 2. On the price perception variable on the question PT. Pertamina EP Asset 2 provides gas prices according to the quality of the gas showing the lowest average value. Gas prices at PT. Pertamina EP Asset 2 has not been able to meet the quality as expected by gas consumers. PT. Pertamina EP Asset 2 can improve gas quality, especially for decreasing the composition of H<sub>2</sub>O in gas, one of the efforts is to repair existing dehydration plant (DHP) units or build new ones. By looking at competitors, it is better to immediately improve gas quality. So it has more appeal for consumers so far and prospective customers to continue to make gas purchases from PT. Pertamina EP Asset 2. On the product quality variable on the indicator question of gas products produced by PT. Pertamina EP Asset 2 has good quality, which shows the lowest average value. This shows that the quality of gas products produced by PT. Pertamina EP Asset 2 still does not meet the expectations of gas consumers. PT. Pertamina EP Asset 2 needs to improve the quality of gas products produced in the hope that it will arouse the consumer's desire to make gas purchases.

Future studies are expected to use variables according to other experts so that later on what variables are most influential to purchasing decisions such as company image, sales promotion, trust (Kotler & Keller, 2016; Courchane *et al.*, 2008; Liu & Lee, 2016; Lii & Sy, 2009; Martin *et al.*, 2009). Also, further research is expected to use a wider population scope and more samples so that it gives better results.

### References

- Alford, B. L., & Biswas, A. (2002). The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention. *Journal of Business research*, 55(9), 775-783. [https://doi.org/10.1016/S0148-2963\(00\)00214-9](https://doi.org/10.1016/S0148-2963(00)00214-9)
- Amalia, E., & Nurseto, S. (2019). Pengaruh Harga Dan Citra Merek Terhadap Keputusan Pembelian Smartphone Samsung (Studi pada Pengguna Smartphone Samsung di Kota Semarang). *Jurnal Ilmu Administrasi Bisnis*, 9(2), 91-97.
- Courchane, M., Gailey, A., & Zorn, P. (2008). Consumer credit literacy: What price perception?. *Journal of Economics and Business*, 60(1-2), 125-138. <https://doi.org/10.1016/j.jeconbus.2007.08.003>
- Dharma, N. P. S. A., & Sukaatmadja, I. P. G. (2015). Pengaruh Citra Merek, Kesadaran Merek, dan Kualitas Produk terhadap Keputusan Membeli Produk Apple. *E-Jurnal Manajemen Universitas Udayana*, 4(10), 3228 – 3255.
- Fure, F., Lapian, J., & Taroreh, R. (2015). Pengaruh brand image, kualitas produk dan harga terhadap keputusan pembelian konsumen di j. co Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 3(1), 367-377.
- Hendro, C. R., & Hidayat, W. (2018). Pengaruh Kualitas Produk, Harga dan Citra Merek Terhadap Keputusan Pembelian Konsumen Handphone Merek Iphone Kota Semarang. *Jurnal Ilmu Administrasi Bisnis*, 7(4), 177-184.
- Kotler, P., & Armstrong, G. (2015). *Marketing an Introducing* Prentice Hall.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education, Inc.
- Lee, S., & Lawson, B. A. (2011). Perceived Dynamic: Pricing. *Journal Of Industrial Management & Data System*.
- Lii, Y. S., & Sy, E. (2009). Internet differential pricing: Effects on consumer price perception, emotions, and behavioral responses. *Computers in Human Behavior*, 25(3), 770-777. <https://doi.org/10.1016/j.chb.2009.02.005>
- Liu, C. H. S., & Lee, T. (2016). Service quality and price perception of service: Influence on word-of-mouth and revisit intention. *Journal of Air Transport Management*, 52, 42-54. <https://doi.org/10.1016/j.jairtraman.2015.12.007>
- Martin, W. C., Ponder, N., & Lueg, J. E. (2009). Price fairness perceptions and customer loyalty in a retail context. *Journal of Business Research*, 62(6), 588-593. <https://doi.org/10.1016/j.jbusres.2008.05.017>
- Pratama, Y. (2014). Pengaruh Marketing Mix Terhadap Keputusan Pembelian Konsumen Produk Prima XP Pertamina di Makassar. *Universitas Hasanuddin*.
- Putra, P., Mizani, H., Basir, A., Muflihini, A., & Aslan, A. (2020). The Relevancy on Education Release Revolution 4.0 in Islamic Basic Education Perspective in Indonesia (An Analysis Study of Paulo Freire's Thought). *Test Engineering & Management*, 83, 10256-10263.
- Rahman, W. (2015). Pengaruh Kualitas Produk Pertamina Terhadap Keputusan Pembelian Konsumen. *Universitas Muhammadiyah Luwuk Banggai*.
- Supriyadi, F. Y., dan Indra, G.,(2016). Pengaruh Kualitas Produk dan Brand Image Terhadap Keputusan Pembelian. *Jurnal Bisnis dan Manajemen*, 3(1).

- Wicaksana, B.S. (2018). Analisis Pengaruh Kualitas Produk, Harga, Celebrity Endorser, dan Desain Produk Terhadap Keputusan Pembelian Sepeda Motor Yamaha Mio M3 di Kota Semarang. *Jurnal Universitas Diponegoro*.
- Yu, S. F. (2008). Price perception of online airline ticket shoppers. *Journal of Air Transport Management*, 14(2), 66-69. <https://doi.org/10.1016/j.jairtraman.2007.11.002>