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Analysis of Government Efforts to Handle Declining Petroleum Yields in Indonesia

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A R T I C L E I N F O

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A B S T R A C T

All existing innovations continue to be developed by both the government and the community to obtain future savings frHom petroleum products for the next year. The purpose of this research is to analyze how the government innovates in maintaining the limitations and availability of petroleum materials in Indonesia and the impact on how to handle the issue of petroleum problems. The discussion in this article covers the factors of depletion of Indonesia's petroleum reserves, how innovations are carried out, and the impacts they have. This analysis refers to electronic journals that can be accounted for based on discussions of the government's efforts to deal with the decline in petroleum output in Indonesia. The methodology used is a quantitative descriptive method to analyze the issues to be discussed. The data obtained came from journals using skill-free listening (SLBB) and note-taking techniques. Researchers understand the contents of the journals obtained and the results are in the form of notes with correct accountability. It is hoped that the analysis in this article will be able to increase insight and understanding, especially regarding innovations from the government and the people in dealing with the decline in petroleum output, and be able to provide a guide for readers to criticize the results of this article.

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INTRODUCTION

Indonesia towards 2045 is a golden year where the emerging generation is part of the demographic bonus. This means that the productive age of Indonesia's population will be 70% in that year. The population is productive and has abundant natural resources with various mining products, which is a form of wealth that Indonesia is very proud of. But, heading into this golden year, Indonesia, which is called a rich country, is unable to store oil reserves and is experiencing a decline every year.

Petroleum energy is increasingly being eroded and petroleum production is decreasing. The decline in petroleum in Indonesia is due to the decreasing number of fossils produced from oil and gas wells that have been used for more than 30 years. This could result in a fuel crisis. Therefore, Indonesia is the country that uses the most subsidized petroleum. Petroleum is a material that has been mixed with liquid, this mixture is a chemical compound, including hydrocarbon compounds from decomposition formed from animal and plant fossils. There are two groups of finished products formed from oil refineries, including BBBM (Bahan Bakar Bukan Minyak), and BBM (Bahan Bakar Minyak). There are various kinds of BBBM, namely solvents, asphalt, carbon black, LPG, lubricants, gumuk, paraffin wax, and coke. Meanwhile, there are various types of fuel, namely aircraft gasoline, fuel oil, motor vehicle gasoline, asphalt, LPG, petroleum wax, kerosene, and diesel gasoline. The discovery of fuel produced from fossils caused changes in human behavior.

The development of technology in the world has caused human dependence on the availability of natural resources as the main source of energy. The use of fuel in transportation means has an important function in daily community life, industry, and transportation. Therefore, currently, there are terminals and gas stations (public fuel filling stations) that are increasingly found throughout the region. So every year petroleum production in Indonesia decreases, due to the increase in petroleum consumption.

With this research, it is hoped that we will gain a broader understanding of the topic that has been written about regarding the decline in petroleum in Indonesia due to the decreasing number of fossils. This article can provide insight into how to use and utilize petroleum properly and correctly. It is also hoped that this article will make readers interested so that this article can be used as a reference in research projects.

LITERATURE REVIEW

The government has targeted oil production at the beginning of each year, but this has not been achieved in several years in a row because too much oil production originates from oil fields which are now aging. Currently, Indonesia has an oil refining capacity that was approximately 10 years ago, indicating that there will be limitations in oil production due to the need to import oil to meet domestic demand. Domestic fuel use is predicted to reach 1.5 million barrels/day, and raw materials for the refinery come from imports and exports. The contribution of natural gas and petroleum products is still superior

as a creator of foreign exchange to make a huge contribution to the Indonesian economy.

Indonesia has played a role as an importer of petroleum for approximately 20 years. This situation occurs due to the high number of living creatures consuming oil and is not followed by developing domestic oil production. To find the cause of a petroleum well not producing, an inspection must be carried out to find the problem that causes the well to no longer be produced. Increasing the number of means of transportation will increase the amount of fuel that will be consumed for use.

METHODOLOGY

The research uses the library study or literature study method. This research pays attention to the analysis of the government's efforts and innovations in dealing with cases of declining petroleum output in Indonesia by referring to various literary sources. The data used to obtain information is secondary data. Secondary data collection was carried out in various books, journals, and the internet. The author emphasizes the content of government innovation to achieve change in the cases to be discussed.

RESULTS AND DISCUSSION

One of the main commodities in Indonesia's natural resources is crude oil, and this has even become a trade commodity between countries. This petroleum raw material is then processed so that it can be processed into other products. For example, diesel, gasoline, asphalt mixture, LPG, and others. The use of petroleum which causes dependence is a natural wealth that is sought after by various countries and has earned the term "black gold" because this commodity is so valuable. Petroleum is formed because it consists of natural deposits of organic materials and carbonates. In detail, most of the composition of the contents are hydrocarbon compounds, these compounds are the result of decomposition of animal and plant fossils that have been around for many years.

This process is so complicated and takes a long time to make petroleum capable of promoting a country as a developed country and being able to play a role in controlling the global economy because it is needed and is being looked after by all other countries. If we look at the process of petroleum formation, in places of income in waters such as the seabed, many fossil fuels are found which will later become a source of oil. Indonesia is an archipelagic country that has a water area of 5.9 million km2. There is a lot of wealth in Indonesia because the area is right in the Pacific Ring of Fire or what is usually called the Pacific Ring of Fire. The Pacific Ring of Fire itself is a meeting between three of the world's tectonic plates such as the Eurasian Plate, the Indo-Australian Plate, and the Pacific Plate. As a result, Indonesia has many active volcanoes whose surroundings are rich in minerals and sulfur. Indonesia's wealth, both in the waters and on the plains, can become a guide for building a more advanced nation.

Regarding petroleum, Indonesia has petroleum-producing areas that are rich in supporting the country, including Cilacap, Central Java, the oil refinery in Cilacap has supplied around 34% of the national fuel oil needs, and 60% is used to meet oil fuel needs. on the island of Java. Second is Balikpapan, East Kalimantan, this oil refinery is capable of meeting 26% of Indonesia's fuel oil needs, especially to meet domestic needs in the eastern region. Third is Musi, South Sumatra. The oil refinery in Musi has activities for processing crude oil and processing product intermediates into finished products. Fourth Dumai, Riau. The production results from oil refineries are now distributed to various regions throughout Indonesia and also abroad, the achievement of oil barrels is 127,000 barrels of oil per day. Fifth Balongan, West Java. The production capacity achieved is 123,000 barrels of oil per day, at the Balong oil refinery, which initially converts crude oil into products such as petrochemicals, fuel oil, and non-fuel oil. Sixth is the Kasim oil refinery, West Papua. The output reaches 10,000 barrels of oil per day, the Kasim oil refinery can meet national fuel oil needs of up to 15%. Seventh Cepu, Central Java. This oil refinery can produce up to 220,000 barrels per day but the Cepu oil refinery is managed by Pertamina and ExxonMobil. The eighth is the North Sumatra Brandan base, but this oil refinery has been closed since early 2007, this happened due to a lack of crude oil and gas supplies at that point.

Income from various points in Indonesia is quite large and rich. Oil production operations in Indonesia began in the 1990s and have been around for quite a long time. However, there is a lot of news that Indonesia has experienced a decline every year in terms of oil output. Even though Indonesia's natural resources are very rich in agricultural products. The factors causing the decline in agricultural products are due to (1) large reserves not yet being discovered; (2) lengthy licensing constraints; (3) decreased performance in the production field; and (4) inadequate facilities and extreme weather. Apart from these factors, the obstacle faced is the arrangement of petroleum governance. The SKK Migas institution, which is given the task of managing upstream petroleum activities, has weaknesses. For example, the imposition of unreasonable costs on cost cover in 2014. Along with that, the limited appointment of state-owned crude oil sellers with limited tenders for foreign legal entity companies in 2009-2013.

The government has an important role in dealing with the decline in petroleum raw materials. The decline in petroleum has led Indonesian people to innovate. Innovation by maximizing the use of coal by converting solid coal into liquid downstream and synthesizing biodiversity from low-sulfur fossil fuels to overcome the decline in the amount of petroleum. Indonesian people have also succeeded in finding gas raw materials made from animal waste as a substitute for kerosene, which is now increasingly expensive. So the government is currently looking for solutions to deal with the drastic increase in oil prices. In fuel trading, the government will take a short-term program by maintaining the availability of reserves, especially in the run-up to Ramadan, increasing supervision and handling of those who misuse fuel. Currently, the condition of oil fields in Indonesia is quite old, as a result, a decline in oil raw

material production cannot be avoided. In this way, the aim is to maintain energy strength and face the decline in petroleum reserves.

The decline in petroleum production will have an impact on the macroeconomic conditions of the Republic of Indonesia. As a result, oil needs in Indonesia cannot be met and oil imports will increase which will ultimately have an impact on the scale of trade. Meanwhile, domestic energy needs will increase. Apart from that, energy is also a driving force for the economy to continue to develop. Until now, the oil and gas industry has also experienced tests in the form of seasonal changes. The government is taking several steps to deal with the problem of declining natural oil, namely by developing exploration activities, replacing gas as a means of domestic needs, diversifying energy, and uniting stakeholders. There are several positive and negative impacts of using petroleum, including positive impacts of using petroleum including (1) as a fuel for making energy. Petroleum can make fuel and gasoline can be used as energy for daily activities; (2) as a tool to drive economic growth because most activities use petroleum; (3) as an element for making asphalt.

The negative impacts of using petroleum include (1) increasing global warming because its processing produces carbon which results in air pollution. This will ultimately increase the world's global warming potential; (2) depletion of mining land because it certainly requires large areas of land; (3) disturbing health because the petroleum processing process produces dangerous gases. Apart from that, the government also has a strategy by proposing new, renewable energy, using gas for domestic needs, and maximizing the use of coal as a solution to dealing with petroleum in the future.

CONCLUSIONS AND RECOMMENDATIONS

Petroleum is a material that has been mixed with liquid, this mixture is a chemical compound, including hydrocarbon compounds from decomposition formed from animal and plant fossils. In essence, petroleum is produced by a formation process that is not very easy, it takes quite a long time, around millions of years, from the death of plants and animals buried in layers of sand and rocks, making the process of producing petroleum very challenging and complicated.

However, there are many rumors that Indonesia has experienced a decline every year in terms of oil output. Even though Indonesia's natural resources are very rich in agricultural products. As a result, oil needs in Indonesia cannot be met and oil imports will increase which will ultimately have an impact on the scale of trade. Based on the results of the data that has been implemented, it can be concluded that the government must have a strategy by proposing renewable energy for domestic needs. Meanwhile, we as a society must reduce the use of oil energy sources by using them sparingly, as well as reducing the use of private vehicles.

FURTHER STUDY

The results of this research are still in the form of a literature study obtained from various sources such as books, journals, and internet sites.

Suggestions for future research are to continue by testing the results of these conclusions in the form of hypotheses against real situations.

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