Palm Journal

paspi
Palm oil Agribusiness Strategic Policy Institute

Analysis of Palm Oil Strategic Issues **Vol. I, No. 30/10/2020**

THE MANDATORY POLICY OF BIODIESEL AS "THE ANCHOR" OF INDONESIAN ECONOMY

By
Research Team PASPI

RESUME

The policy of mandatory B30 was implemented in early 2020, and it is estimated that the biodiesel needs for the policy will reach 9.6 million kiloliters. But in this year, the world also faced Covid-19 pandemic. This pandemic had an impact on reducing the absorption of domestic biodiesel, due to a decrease in transportation activities because of policies to restrict social and economic activities. Even though it has decreased, the total biodiesel production in the B30 has accumulated to reach 5.73 million kiloliters or about 60 percent of the target.

On the other hand, the pandemic also give an impact on a decrease in the fossil fuel's price and increase CPO's price.. With this price trends, the B30 mandatory policy is considered by certain parties to be less efficient because the difference between the price of the fossil diesel price and the Market Index Price of biodiesel is too large and it closes the opportunity for producers to enjoy greater profits from exporting palm oil, so this policy is considered to be losses in business (financial).

Even though, the biodiesel (B30) mandatory policy is designed as an instrument of economic policy that aims to produce greater economic and social benefits with a larger scale/coverage of the population that enjoys these benefits in the long term, not a financial policy that profitable only for industry actor. This facts can be seen based on data published by Secretariat General National Energy Council (2019) that achievement of B20 policy on several economic indicators such as saving foreign exchange, increasing added value and labor absorption, and environmental impact of reducing carbon emissions.

Implementing the policy of mandatory B30 will generate greater economic benefits and emission reductions. Even in its realization, which has only been implemented for a few months, this policy has been able to reduce the amount of Indonesia's oil and gas balance deficit net trade and save total trade balance during a pandemic and the threat of a global economic recession. The benefits of B30 can also be seen from a broader (macro) point of view, there is in addition to saving foreign exchange, reducing emissions and creating a large multiplier effect for the economy, this policy can create), stabilizing CPO prices and FFB prices, opportunities to become price-makers at the global market level, solutions to trade barriers and policies that discriminate against palm oil, the achievement of the SDGs, and in order to achieve national energy security and independence.

INTRODUCTION

Indonesia is a country that is rich and has a large potential of renewable energy sources, such as vegetable oil, solar, wind, or geothermal power. The wealth of the sources must be utilized as an effort to fulfill national energy needs and reduce dependence on fossil fuels.

The country's dependence on fossils energy is already enormous. According to Pertamina's (2015) projection data, fossil diesel consumption in 2020 will increase to 42 million kiloliters and 55 percent of it will be met from imports. The very high imports of fossil diesel and other fossil fuels can spend the foreign exchange and become the main trigger for Indonesia's trade balance deficit.

Indonesia is also one of the countries that committed to reducing greenhouse gas (GHG) emissions. In the document of Nationally Determined Contribution (NDC), Indonesia's GHG emission reduction target reaches 29 percent to 41 percent by 2030 with the support of international cooperation. This commitment can be achieved through reducing the use of fossil energy, which is a main source of carbon emissions and total GHG emissions (IEA, 2016).

The use of palm biodiesel is one solution to handle high dependence fossil energy as well as reducing GHG emissions. Biodiesel development in Indonesia is driven by the Mandatory Biodiesel Policy through Minister of Energy and Resources Regulation No. 32 of 2008 concerning the Provision, Utilization, and Trading Procedure of Biofuels as Other Fuels. With the mandatory B30 policy implemented in 2020, Indonesia has succeeded in being a country with the largest mixture of palm oil and fossil diesel fuel in the world. This Indonesia's achievement is confirmed by Statista (2020) which states that Indonesia is the world's largest biodiesel producer in 2019. Meanwhile, Malaysia, which is also the second largest a palm oil-producer, after Indonesia, has only just started implementing the B20 program after delays due to Covid-19.

The implementation of the mandatory biodiesel policy in Indonesia is considered quite successful in reducing dependence on diesel imports and reducing emissions, but there are persons still those who say that the costs of this policy are greater than the benefits, or this policy will only benefit one party and harm the other parties. Even though the mandatory policy, especially the mandatory B30, is the anchor of the national economy, especially during the Covid pandemic and the threat of a global recession. Therefore, this paper will discuss the benefits of the mandatory biodiesel policy for Indonesian economy.

THE DEVELOPMENT OF INDONESIA'S BIODIESEL INDUSTRY

Biodiesel development in Indonesia is supported by mandatory policy instruments. Through Minister of Energy and Resources Regulation No. 12/2015, the mandatory biodiesel policy is accelerated from B-10 in 2014, to B-15 in 2015 and increased to B-20 in 2016. The B30 mandatory policy in these regulation that targeted to be implemented in 2020, can also be realized. Currently, the Ministry of Energy and Mineral Resources is conducting a B40 technical test which is planned to be implemented in 2021.

The success of this mandatory biodiesel policy program cannot be separated from the support of the CPO Supporting Fund (CSF) which is managed by the Indonesia Oil Palm Plantations Fund Management Agency (Badan Pengelola Dana Perkebunan Kelapa Sawit/BPDPKS). The financial support comes from the export levy, which is charged for every ton of exports of palm oil and its derivatives. One of the uses of CSF is used to subsidize the difference between the palm biodiesel and fossil diesel price, so it can make the biodiesel price more competitive. This is aimed to increasing domestic absorption as well as being an incentive for the growing domestic biodiesel industry, as indicated by the increasing production and export of biodiesel (Figure 1).

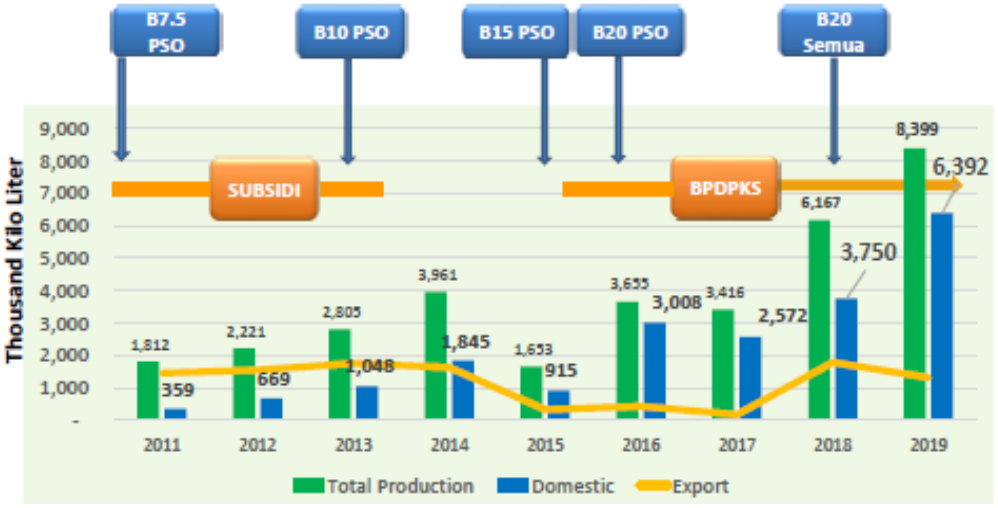

Figure 1. Development of Indonesian Biodiesel Production, Domestic Absorption and Exports (Source: APROBI, 2020[a])

With the B30 mandatory policy that began to be implemented in early 2020, it is estimated that the biodiesel needs for the program will reach 9.6 million kiloliters. But in this year, the global conditions are not the same as the previous year due to the Covid-19 pandemic. The Covid-19 pandemic also had an impact on decreasing domestic absorption and exports (Figure 2).

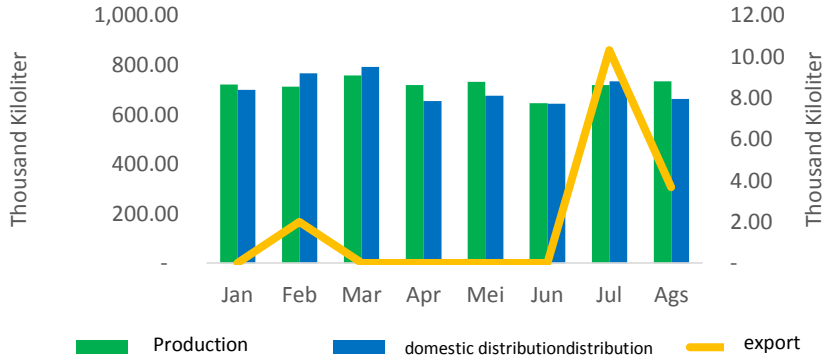

Figure 2. Development of Biodiesel Production, Domestic Absorption and Exports of Indonesia for the January-August 2020 Period (Source: APROBI, 2020[b])

Based on APROBI data (2020[b]), the distribution or domestic absorption of B30 decreased by an average of 0.25 percent during the January-August 2020 period. The biggest decreasing in domestic absorption occurred in the March-April period by 17 percent and the May-June period by 4.68 percent. During this period, in accumulation, the total biodiesel production in mandatory B30 reached 5.73 million kiloliters and the total distribution shows that domestic absorption reached 5.62 million kiloliters.

MANDATORY BIODIESEL POLICY (B30): ECONOMIC POLICY NOT FINANCIAL POLICY

The development of palm oil biodiesel in Indonesia as an alternative renewable energy source is considered as a policy that could be a solution for handling the dependence on the use of fossil diesel and achieving emission reduction targets. Based on the data of the Directorate General of Renewable and Conservation Energy (Dirjen Energi Baru, Terbarukan dan Konservasi Energi/ Dirjen EBTKE) on Secretariat General National Energy Council's report

(2019), the B20 program implemented in 2018 and 2019 was able to save foreign exchange on diesel imports by USD 1.89 billion and USD 3.54 billion. Meanwhile, the B20 program was also able to reduce GHG emissions by 5.61 million tons of C02eq and 9.91 million tons of C02eq. Not only these two indicators, but the B20 program is also considered can create a multiplier effect in the form of added-value in the downstream palm oil industry (CPO to biodiesel) with a value of Rp. 5.78 trillion and Rp. 9.68 trillion. This program is also able to increase labor absorption both on-farm and off-farm, it is about more than 481 thousand people in 2018 and increased by almost doubled to more than 834 thousand people in 2019.

Secretariat General National Energy Council (2019) also predicted four indicators that show the economic impact of implementing B30. It is estimated that the 9.6 million kiloliters of biodiesel that are required in the B30 program can save foreign exchange from imported diesel by USD 5.13 billion and reduce GHG emissions by 14.25 million tonnes of C02eq. The multiplier effect created from the B30 program is also estimated to be greater, where the added value increases to Rp 14.02 trillion and the number of labor absorbed increased to 2.1 million people, which is divided into 1.2 million people in on-farm sector and 9 thousand people in off-farm sector.

In its realization, the total domestic biodiesel distribution in the B30 program that was 5.62 million kiloliters during the January-August 2020 period can save foreign exchange around USD 2.24 billion, so that Indonesia's net exports of the oil and gas sector in that period only has deficit of USD 4.19 billion. If Indonesia does not implement the B30 program amid this pandemic period, Indonesia's oil and gas balance deficit has the potential to be even greater and reach about USD 6.43 billion (PASPI, 2020). This shows that the mandatory B30 policy succeeded in saving Indonesia's trade balance during a pandemic and the threat of a global economic recession.

Even though the mandatory B30 policy has made a significant contribution of economic benefit, some people or parties question whether this policy should be continued, because the cost of this policy is considered to be greater than the benefits, especially when the price of fossil diesel has decreased, and on the contrary when CPO's global price has increasing, like this condition.

EIA data (2020) shows that the price of fossil diesel is in the range of USD 1.12 per gallon to USD 1.85 per gallon. It even touched the lowest price throughout 2020, which was only USD 0.88 per gallon in March 2020, although the price trend continued to increase over the last three months and the price was about USD 1.23 per gallon in August 2020. Meanwhile, CPO's CIF (MPOB, 2020) prices showed an postive trend, which has increased from USD 527 per ton to USD 698 per ton during May-September 2020.

With this price trend, the B30 mandatory policy is considered less efficient by some peole or parties because the difference between the price of fossil diesel and the Market Index Price of Biodiesel is too large and is detrimental to business or loss financially. In addition, the business/financial losses are getting bigger, because the B30 policy is considered to hinder palm oil producers from exporting to the global market.

In fact, the mandatory policy of biodiesel (B30) is designed as an instrument of economic policy aimed at generating benefits for all Indonesians, not a financial policy that only aims to give benefit for certain parties. The economic benefits as a result of this biodiesel mandatory policy are not only a healthy trade balance due to a deficit of import solar, but also create a large multiplier effect (added-value, labor, income, and output), which is enjoyed not only by the industries but the general public community both at the regional and national levels. This large multiplier effect will lead to an increase in Indonesia's economic growth (GDP).

Other economic benefits of the biodiesel mandatory policy, they are: ***First****, CPO and FFB Price Stabilization*. The B30 program will increase the absorption of around 10 million tons of palm oil by the domestic biodiesel industry, so the supply and stock of palm oil in the global market is relatively well maintained (not oversupply). The

implication is that the international price of palm oil is relatively stable and tends to increas during the pandemic. The higher international price of CPO (CIF) will be transmitted to the FFB price received by smallholders, which also has increased. This is confirmed by FFB price's data in Riau which increased by 27 percent during the August-October 2020 period. This positive price trends of course profitable for producers, both plantation companies, and smallholders.

***Second**, Pricemaker*. Indonesia, which is the largest producer and exporter of palm oil in the global, but until now the global price of palm oil has been more determined by the demand market (the largest port). With the biodiesel mandatory policy, Indonesia has the opportunity to realize its dream to become a global price-maker of palm oil and its derivatives products. This is because through the biodiesel program, Indonesia can regulate the volume of stocks in the global market so that it's global prices can also be regulated and determined by Indonesia.

Third, Solutions of Global Market Dynamics and Trade Barriers. In the last decade, the national palm oil industry has often faced market dynamics such as unfair trade with the aim of inhibiting the palm oil trade in the global market. One of them is the European Union with the RED II ILUC policy and the palm oil phase-out plan which is considered as a high-risk ILUC feedstock (PASPI, 2019). The threat from the European Union, which is one of Indonesia's third-largest palm oil export destination countries (GAPKI, 2020), has negative implications of declining of palm oil products export performance, which can lead to a larger deficit of trade balance from the non-oil and gas sector. To handle this, Indonesia must choose other strategies to accommodate palm oil stocks that should be exported to the European Union, such as diversifying export destination markets or developing domestic downstream industries. The B30 program is the right strategy to mitigate the risk of impact of the implementation of EU policies, because the program can absorb the volume of palm oil in the domestic market with a relatively large capacity (PASPI, 2019).

***Fourth**, the achievement of Sustainable Development Goals (SDGs).* The biodiesel mandatory policy is a government effort to developing sustainable energy sources as an alternative to using fossil energy, while also placing palm oil biodiesel as a solution in order to realize SDG-7 (Affordable and Clean Energy), and SDG-13 (Climate Action). Not only these two goals SDGs, the development of the biodiesel industry which creates a large multiplier effect on the nation's economy also indirectly has the potential to realize the eight goals contained in SDGs such as SDG-1 (No Poverty); SDG-2 (Zero Hunger), SDG-3 (Good Health and Wellbeing); SDG-4 (Quality Education); SDG-8 (Decent Work and Economic Growth); SDG-9 (Industry, Innovation, Infrastructure); SDG-10 (Reducing Inequality); and SDG-12 (Responsible Consumption and Production). By linking the palm oil industry as a solution in order to achieve the SDGs goals, it's expected that it will be able to open the global consumer's eyes of positive benefits of the palm oil industry so that it can increase the its acceptance o in the global market.

***Fifth**, National Energy Security and Independence*. The use of biodiesel which utilizes palm oil as a local resource to substitute the use of fossil diesel as well as reducing dependence on imports of fossil diesel is an effort in order to realize national energy security and independence. This phrase is not just the government's jargon, but there are bigger implications. This means that by using palm biodiesel as its energy source, Indonesia is no longer dependent on imported diesel and the "party" behind the import business, so that the sensitivity of Indonesia's macroeconomic variables to global shock due to instability of fossil fuel prices can can be reduced. In addition, Indonesia can also be more independent and free from parties who take advantage of it's weak bargaining position as a larger net importer of fossil diesel importer.

The arguments presented above are expected to giving insights regarding the contribution of biodiesel mandatory policies, which are economic policies that can provide greater economic and social benefits with a larger scale/coverage of the population that

enjoying these benefits in the long term (long term goals). So that the cost of implementing the biodiesel mandatory policy is felt to be always lower than the benefits both in terms of economic, social, and environmental aspects resulting from the implementation of the policy.

CONCLUSION

The mandatory B30 policy was implemented in early 2020. However, this year, the world also faced Covid-19 pandemic. This pandemic had an impact on reducing the absorption of domestic biodiesel, due to a decrease in transportation activities because of policies to restrict social and economic activities. On the other hand, the pandemic also give an impact on a decrease in the fossil fuel's price and increase CPO's price.. With this price trends, the B30 mandatory policy is considered by certain parties to be less efficient because the difference between the price of the fossil diesel price and the Market Index Price of biodiesel is too large and it closes the opportunity for producers to enjoy greater profits from exporting palm oil, so this policy is considered to be losses in business (financial).

In fact, the biodiesel (B30) mandatory policy is designed as an instrument of economic policy that aims to produce greater economic and social benefits with a larger scale/coverage of the population that enjoys these benefits in the long term, not a financial policy that profitable only for industry actor. The B30 program can reduce the oil and gas net trade deficit, creating a large multiplier effect (added value, labor, income, and output) which will have implications for increasing Indonesia's economic growth (GDP), stabilizing CPO prices and FFB prices, opportunities to become price-makers at the global market level, solutions to trade barriers and policies that discriminate against palm oil, the achievement of the SDGs, and in order to achieve national energy security and independence.

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