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Funding Urgency to Establish Energy Transition Mechanism Country Platform Through Green Bond Financial Instruments in Indonesia

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Abstract

As a step towards pursuing the Net Zero Emission (NZE) target of 2060 or faster, Indonesia at the Bali G20 Summit launched the Energy Transition Mechanism (ETM) Country Platform. The formation of this ETM is one of the efforts to accelerate the energy transition from fossil energy to energy that is more environmentally friendly, namely by using New and Renewable Energy (EBT). One of the issues that have surfaced is related to the EBT funding scheme which requires a sizable fee. Currently, the Indonesian Capital Market has a new financial instrument called a green bond. The purpose of this study is to analyze the Green Bond financial instrument when viewed from a legal perspective as a source of financing for Renewable Energy in Indonesia. This research is normative research equipped with empirical data. This research is also a type of exploratory research. The approach used is the statutory approach and the conceptual approach. The results of the study show that Green Bonds are still regulated through the Financial Services Authority Regulation (POJK) Number 60 of 2017. However, to become a source of EBT financing, Green Bonds should be mentioned in the EBT Bill to provide legal certainty to investors who want to invest in EBT development in Indonesia.

Keywords
energy transitions; energy transition mechanism; green bond; funding

I. Introduction

The increasing use of fossil energy harms the environment in the form of particulate and gas emissions. The consequence of using this energy is none other than causing global climate change. Starting from the Paris Agreement in 2015 stated that to overcome climate change that is happening on earth, the countries participating in the Paris Agreement agreed to restrain the rate of increase in global warming below 2°C and continue efforts to reduce temperature rise to 1.5°C (Ghaniyyu, 2021). To achieve this, scientists at the *Intergovernmental Panel on Climate Change* (IPCC) state that the world must reduce emissions by 45% by 2030 and reach net zero by 2060 (Kennial, 2022). As a step towards pursuing the Net Zero Emission (NZE) target of 2060 or faster and the target of reducing carbon emissions in the Enhanced Nationally Determined Contribution (E-NDC) of 32% in 2030, the Government of Indonesia as the G20 Presidency for 2022 has launched three priority issues which discussed at the summit. Of the three priority issues that reached an agreement in the 'Leaders Declaration' or the Bali G20 Summit, one of the priority

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discussions was the discussion on sustainable energy transition. This is what later became the cause of the launch of the Energy Transition Mechanism (ETM) Country Platform.

The Energy Transition Mechanism (ETM) is a program to increase the development of energy infrastructure and accelerate the energy transition towards net zero emissions/NZE (Net Zero Emissions) with the principles of being just and affordable in 2060 or accelerated. This ETM consists of two schemes. First, the Emission Reduction Facility (CRF) scheme is used for the early retirement of coal-fired power plants (PLTU) in Indonesia. While the second, namely the Clean Energy Facility (CEF) scheme, is aimed at developing or investing in the construction of green energy facilities. Despite modest progress in some countries, the post-colonial state has been unable to establish rights-based political and economic systems of governance that would facilitate consolidation of state-building and promote economic development (Monga, 2019). Particularly, whether inflation is necessary or harmful form economic growth constitutes the basis of the matter in question (Eden in Wollie, 2018). The formation of this ETM is one of the efforts to accelerate the energy transition from fossil energy to energy that is more environmentally friendly, namely by using New and Renewable Energy (EBT).

However, the problem that often occurs when switching energy to New and Renewable Energy is related to funding or financing. Building EBT in Indonesia, of course, requires a large amount of money. One of the reasons is that the components of EBT technology are expensive because they have to import from abroad. Unlike the case with fossil energy such as oil and coal which tend to be much cheaper and Indonesia has natural resources. This is what causes fossil energy to be more desirable than EBT, and therefore, the investment costs required for EBT development in Indonesia are very high (Adzikri, 2017).

The strength and comprehensive legal basis that guarantees legal certainty regarding EBT development in Indonesia are urgently needed. For this reason, the People's Representative Council of the Republic of Indonesia (DPR-RI) is drafting a Law on New and Renewable Energy (RUU EBT) which has been stipulated in the 2022 National Legislation Program. In addition, the EBT Bill is expected to become a juridical basis for the laws and regulations under it related to the technical implementation of EBT which so far is still based on several regulations that are spread sectorally. In the EBT Bill, it is also stated in one of the draft Articles, that both Central and Regional Governments should facilitate research and development of New and Renewable Energy, one of which is in the form of funding. However, EBT development cannot only rely on the government sector only but also must involve the private sector.

The Indonesian Capital Market has now experienced development with the introduction of a new financial instrument, namely the *Green Bond*. In essence, the *Green Bond* is a bond that focuses on financing that is only allocated to finance sustainable development activities, projects, or business activities that are environmentally sound as well as environmentally friendly development and climate change mitigation (Endarto, 2022). In addition, *Green Bond* is part of the *green financing sub-system* currently being developed in the Indonesian Capital Market. *Green Financing* has two elements, namely environmentally friendly investment and sustainable development, which in this case are both in line with the New and Renewable Energy program which is currently being planned to be built in Indonesia (Hadi, 2022).

Seeing the development of the *Green Bond issue* and its relation to New and Renewable Energy, from a legal perspective it is necessary to study how Green Bonds are viewed from the perspective of Indonesian law as a source of financing for New Renewable Energy.

II. Research Method

This research is normative research equipped with empirical data. This research is also a type of exploratory research, which means that this research is intended to explore a new phenomenon that may not or has rarely been used as an object of previous research, in which green bonds are a new study in the field of Indonesian Capital Market law.

The approach used in this research is a statute approach, namely the basis of laws and regulations related to green bonds, a conceptual approach regarding the doctrine of theories relevant to this research topic such as the concept of investment and private law. The legal materials used are primary legal materials in the form of laws and regulations, international agreements related to the global environment (especially agreements that have been ratified by Indonesia), as well as secondary legal materials in the form of textbooks and legal journals containing doctrines related to research issues.

III. Discussion

Renewable Energy is a major issue in the development plan for sustainable development in Indonesia. This can be seen from the results of the agreement at the G20 Summit which was held in Bali on 15-16 November 2022. The G20 Summit resulted in 52 points of agreement. Of the 52 points formulated in the G20 Bali Leaders Declaration, there are 2 points of agreement related to the climate crisis and energy transitions that are part of sustainable development. Specific energy substances are contained in points 11 and 12, namely the agreement to accelerate and ensure an energy transition that is a sustainable, fair, affordable, and inclusive investment. One way is through the energy shift from fossil energy to New and Renewable Energy. In the plan, the Government of Indonesia will carry out early retirement in 33 PLTUs with a total capacity of 16.8 GW. The government will also use new, renewable energy and low-emission technologies, such as replacing diesel power plants with gas, then using biomass cofiring technology in steam power plants (PLTU), developing Carbon Capture Storage (CCS) / Carbon Capture Utilization and Storage technology. (CCUS) to achieve a balance between gas production targets and emission reductions, as well as the construction of massive EBT generators of up to 700 GW.

However, there are often obstacles in the transition from fossil energy to New and Renewable Energy. One of the problems is related to funding or financing. Building EBT in Indonesia requires a sizable cost when compared to fossil energy. Therefore, the investment costs required for EBT development in Indonesia are very high. Secretary General of the Ministry of Energy and Mineral Resources (ESDM) of the Republic of Indonesia, Rida Mulyana said that to develop EBT, Indonesia would need huge funds of more than USD 1 trillion by 2060. For this, the involvement of the private sector is necessary. Because if this is supported by funding that comes from government funds (APBN or APBD), then this is very unlikely and it is feared that it could disrupt the country's financial balance.

Looking back at the results of the Bali G-20 Summit, there is also one thing related to environmental sustainability, namely a point related to sustainable finance or sustainable finance. Implementation related to sustainable finance in Indonesia existed before the G-20 Summit. One system of financial institutions is the capital market. In the Capital Market, there is a financial instrument that is closely related to sustainable development which is called the Green Bond. This instrument can be one of the funds carried out by the private sector regarding the energy transition to New and Renewable Energy. Every development in various countries refers to the concept of Sustainable Development Goals (SDGs). SDGs is a world program that is long term. This program was formed by the United Nations (UN) to optimize all potentials and resources owned by each country. The Government of Indonesia has committed to the success of the SDGs by enacting Presidential Regulation Number 59 of 2017 concerning the Implementation of Achieving the Sustainable Development Goals (Irhamsyah, 2019).

One of the systems of financial institutions in Indonesia is the capital market which is regulated in Law Number 8 of 1995 concerning Capital Markets. One of the things that are traded on the Capital Market is Bonds (bond) (Muharam, 2018). Derived from the Act as well as from various policies The government and taking into account the guidelines prepared by international institutions and the 2015-2019 Sustainable Finance Roadmap prepared by the OJK, specifically issued the Financial Services Authority Regulation Number 60/POJK.04/2017 concerning Issuance and Requirements for Debt Securities Environmentally Friendly / Green Bond ("POJK Green Bond").

From a juridical point of view, POJK Green Bond was formed based on two laws. In addition to Law Number 8 of 1995 concerning Capital Markets, there is also Law Number 21 of 2011 concerning the Financial Services Authority. Concretely it can be interpreted that the capital market aims to support the implementation of national development in the framework of increasing equitable distribution of growth and national economic stability towards improving people's welfare, including the Green Bond. Meanwhile, the Financial Services Authority is a state institution that has the functions, duties, and authority to regulate and supervise activities in the financial services sector in an integrated, independent, and accountable manner.

From the explanation above, it can be said that OJK is the parent of the implementation of financial services in Indonesia, including the Capital Market (although the Capital Market Law was born earlier than the OJK Law). Therefore, Green Bonds which are part of the financial system in the Capital Market is regulated in POJK. A green bond is one of the instruments in the capital market which is known from an investment perspective as a form of investment indirectly (indirect investment) because the capital owner or investor only has several shares or is a debt holder in a company without participating or having direct power in managing the management of the company (Ilmar, 2006).

The Financial Services Authority has carried out banking developments in Indonesia, one of which is strengthening the banking sector. Banks are encouraged to aggressively fund green projects or sustainable development activities, with the issuance of Financial Services Authority Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. POJK 51 of 2017 is the background for the birth of the Green Bond, which is further regulated in POJK 60 of 2017.

Green Bond itself is an instrument to seek financing only for environmentally sound projects. Green Bonds can be used to finance sustainable development activities such as efficient energy use, pollution prevention, and so on. Green Bonds can also be used for development financing environment-friendly and climate change mitigation. In essence, Green Bonds are only allocated as financing for projects or business activities that care about environmental sustainability.

Green Bonds are also part of the Green Financing sub-system. Green Financing is a financial product and service that involves environmental factors in making credit decisions to encourage the creation of environmentally friendly technologies for industrial and business projects (Susilowati, 2022). The definition of Green Financing is a green finance concept to create financial service products that will encourage environmentally friendly investments and sustainable development. Aiming to fully support the financial services industry for sustainable development resulting from the harmony between economic, social, and environmental interests under sustainable development (Naiborhu, 2022), and the Green Bond is one example of Green Financing.

The government has appointed PT. Multi Infrastructure Facilities (Persero) or PT. SMI as the Energy Transition Mechanism (ETM) Country Platform Manager to develop the financing and investment framework for the ETM program. As a non-bank sector PT. SMI is the first company in Indonesia that issued Phase I Sustainable Green Bonds in 2018 with a total value of Rp. 2 trillion. In 2022, SMI plans to issue green bonds again to increase funding for projects related to Sustainable Development Goals (SDGs). One of SMM's strengths is that it is a company listed as the first entity in Southeast Asia that has been accredited by the Green Climate Fund (GCF) and has realized 31 SDG's-based projects for business entities with a total commitment of Rp. 9.8 trillion. In addition, PT. SMI is also entrusted by the Ministry of Finance to manage the SDG Indonesia One (SIO) platform as a forum for combining public and private funds through a blended finance scheme for SDG's projects, which to date have raised US$ 3.27 billion from 33 strategic partners (Finansial, 2022). So, the solution related to this funding is to invest using Green Bonds.

Article 4 of the POJK Green Bond, states that Environmentally Friendly Business Activities (KUBL) that can be financed from the issuance of green bonds include business activities and/or other activities related to renewable energy, namely energy sources produced from sustainable energy sources. if managed properly. Examples are wind, geothermal, sunlight, water flows and waterfalls, bioenergy, and the movement and temperature differences of the sea layers.

Look at the draft of the New Renewable Energy Bill, none of the Articles of the EBT Bill explicitly mention Green Bonds or Green Bonds as one of the financings for the development or transition of energy to New and Renewable Energy. Of course, if Green Bonds are included in the EBT Bill, the development of Green Bonds in Indonesia will accelerate because this development will lead to legal certainty, which will later become a solid legal framework.

To achieve this, Indonesia must go through several steps. The very first step is related to the arrangement of rules and regulations to support the concept of green financing where one of the sub-systems is the Green Bond itself. If laws and regulations are inadequate, then the implementation of green financing such as easy access to finance, accelerating green investment, incentive support, and so on will not work. In addition, our Constitution has expressly regulated in Article 1 paragraph (3) of the 1945 Constitution which states that Indonesia is a country based on law. Therefore, in the process of becoming a nation, Indonesia is obliged to uphold the law and government and uphold the principle of legality.

By including the Green Bond concept in the draft New Renewable Energy Bill, it will further provide legal certainty to investors who wish to invest using Green Bond facilities, especially in investment in New and Renewable Energy in Indonesia. Moreover, if it is associated with laws and regulations as stated in Article 7 of Law Number 12 of 2011 concerning the Formation of Legislation, it is clear hierarchically that laws are much stronger and have a higher position compared to institutional regulations such as regulations. Financial Services Authority (POJK). In addition, if Green Bonds are included in the EBT Draft Bill, it can become a juridical basis for the regulations stipulated in the regulations law related to incentives, rates, and ease of access to EBT funding, whether regulated through Government Regulations, Minister of Finance Regulations or Regulations Financial Services Authority (POJK).

Institutionally, the Financial Services Authority is an institution that is independent and free from interference from other parties, which has the functions, duties, and authority to regulate, supervise, examine and investigate related to financial services. One of the implementations is to make regulations in the financial services sector. It is different when viewed from the point of view of the concept of laws and regulations associated with investment theory regarding a solid legal framework, OJK Regulations alone are not sufficient to accommodate the development of Green Bonds in Indonesia. Even more so when it is associated with EBT financing in Indonesia. The development of New and Renewable Energy requires cooperation in several sectors. Not only in the financial sector, but multi-sectoral, including the licensing, land, research and technology, Energy and Mineral Resources (ESDM) sectors, and others. If Green Bonds are only mentioned in the POJK, then green bonds only refer to the financial sector.

Green Bond is not limited to funding a project only if it is related to New and Renewable Energy. More than that, the need for New and Renewable Energy is a must in the current order of life. The environment, besides being promulgated in Law Number 32 of 2009, is also something that is stipulated in the Constitution. The constitutional amendments to the 1945 Constitution of the Republic of Indonesia have included environmental elements as part of human rights as regulated in Article 28H and an environmentally sound national economy as regulated in Article 33 paragraph (4). In addition, the provisions of Article 33 paragraph (5) state that provisions related to (one of them) Article 33 paragraph (4) regarding the national economy which is organized based on economic democracy with one of the principles being sustainable and environmentally sound are regulated in the Law. Green Bond is part of the national economic system, What's more, concerning a sustainable and environmentally sound national economic system, it should not only be regulated in the OJK Regulations alone but also mentioned in-laws, one of which is through the Bill on New and Renewable Energy.

The thing that also needs to be considered is the mention of Green Bonds in the EBT Bill, not only mentioning Green Bonds as a source of financing in the development of New and Renewable Energy but also mentioning general coordination or technicality related to Green Bond financing for EBT. The reason why it is delegated to Government Regulations and not only regulated in institutional regulations. This explains that EBT development is multi-sectoral. So, the technical provisions for EBT financing through Green Bonds should also be regulated through law. After that, then the details or elaboration of the technical regulations for EBT financing through green bonds which in general have been mentioned in the EBT Law can be regulated through a new OJK Regulation or using the existing green bond POJK.

IV. Conclusion

Green Bond when viewed from the perspective of Indonesian law as a source of financing for New and Renewable Energy leads to sustainable development that is environmentally friendly as stipulated in Presidential Regulation Number 59 of 2017 concerning the Implementation of Achievement of Sustainable Development Goals/SDGs. Therefore, OJK as an institution that has regulatory authority in the financial services sector issues Financial Services Authority Regulation Number. 60/POJK.04/2017 concerning Issuance and Requirements for Green Bonds. In line with the energy transition plan in Indonesia towards New and Renewable Energy (EBT) which requires large funding, the Green Bond can be a solution to the problem the funding. However, to guarantee legal certainty, reassure investors, and remember that EBT development is multi-sectoral, Green Bonds should not only be regulated in the Financial Services Authority Regulations but also mentioned as a source of funding for the transition to EBT in the EBT Bill and also explained in general regarding Green Bond technicalities as financing in the framework of EBT. This will later be carried out in general technical elaboration which is regulated both in Government Regulations, Minister of Finance Regulations, or Financial Services Authority Regulations. With the mention and regulation of Green Bonds as a source of funding for the transition to EBT to the statutory hierarchical level, Green Bonds as a source of EBT funding has a strong legal basis to provide legal certainty to investors in investing in this environmentally sound project.

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