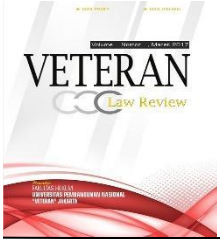

Veteran Law Review
Volume : 8 Issue: 1
P-ISSN : 2655-1594 E-ISSN: 2655-1608

Harnessing Digital Transformation to Accelerate Sustainable Investment Through Environmental, Social, and Governance Integration (ESG)

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ARTICLE INFO	ABSTRACT
Keywords: *Digital Transformation; Sustainable Investment; ESG Principles, Industry* ***How to cite:*** Kusuma, Ajeng., Et., Al. (2025). Harnessing Digital Transformation to Accelerate Sustainable Investment Through Environmental, Social, and Governance Integration (ESG). *Veteran Law Review*. 8(1). 28-44. Received:2025-02-24 Revised:2025-08-14 Accepted:2025-08-16	*In recent years, digital transformation has emerged as a pivotal catalyst for innovation and efficiency across various sectors, including sustainability. This study investigates the integration of digital technology with Environmental, Social, and Governance (ESG) principles to enhance the sustainable industrial sector in Indonesia. Despite the presence of supportive policies, challenges such as the effective implementation of digital technology and the preparedness of human resources remain significant barriers to achieving this objective. Employing a normative approach, this research analyzes the legal framework governing sustainable investment in Indonesia and assesses the potential of digital technology in accelerating ESG adoption within the industrial sector. Furthermore, it proposes strategic recommendations to cultivate an ecosystem that facilitates digital transformation, emphasizing regulatory measures that reinforce the synergy between technology, sustainability, and investment. The findings of this study are expected to provide valuable insights for policymakers, industry stakeholders, and investors in advancing sustainable investment through digital innovation in Indonesia.*

1. Introduction

In recent years, digital transformation has become a major catalyst in driving innovation and efficiency in various industrial sectors, including the sustainability sector. Digitalization not only provides technical solutions but also opens up great opportunities to increase investment value, especially in the context of implementing Environmental, Social, and Governance (hereinafter referred to as ESG) principles (Tan, Ambouw & Kustiwi, 2024). Companies that adopt digital technology tend to be more transparent and efficient, thus attracting the interest of investors who increasingly prioritize sustainability as one of the main criteria in making investment decisions. In this context, Indonesia as a developing country has great potential to utilize digital transformation in strengthening the sustainable industrial sector. However, implementing digital transformation in supporting sustainable investment still faces various challenges in Indonesia. Although investment policies and regulations have regulated sustainability aspects, such as Law Number 25 of 2007 concerning Investment, its implementation in the field still requires adjustments to the development of digital technology (Natagaul & Iswan, 2024). In addition, the integration of ESG principles in investment policies is often hampered by limited digital infrastructure and low human resource readiness. This requires special attention from the government and business actors to create an ecosystem conducive to digital transformation in this sector.

ESG is a non-financial indicator that covers environmental, social, and corporate governance aspects. The Indonesia Stock Exchange (IDX) together with PT Kliring Penjaminan Efek Indonesia (KPEI), with the support of the Financial Services Authority (hereinafter referred to as OJK), has launched an ESG platform as part of efforts to support the achievement of the Sustainable Development Goals (SDGs) (Chandra, Sacipto & Muktiono, 2022). This step aims to encourage the growth of a sustainable capital market that is in line with financial practices outlined in the Sustainable Finance Map Phase II for the period 2021. Public awareness of social and environmental issues has encouraged companies to not only focus on achieving profits but also consider the impact of their operations on the environment and society. Since 2019, OJK has required issuers to submit sustainability reports to the public. ESG disclosure in sustainability reports reflects the implementation of responsible environmental, social, and governance principles (Septiana & Puspawati, 2022). The implementation of ESG can have a positive impact on companies, especially in improving their positive image in the eyes of the public and investors. Sustainable investment focuses on projects that are committed to preserving the environment, such as reducing pollution, conserving natural resources, using alternative energy, and cleaning and managing air, water, and waste.

The emergence of online store platforms such as Tokopedia, Shopee, Blibli, and other platforms has made it easier for consumers to distribute their products while obtaining the goods or services they want. This innovation has had a significant impact on the business world, especially large retail entrepreneurs who face new challenges (Saputri, Berliana & Nasrida, 2023). They tend to be slower to adapt to the changes brought about by this digital platform-based business. As a result, they have to face fierce competition from new business actors who are quicker to utilize digital technology to reach the market more widely and efficiently. The advancement of digital platforms has also driven the growth of other business sectors, such as goods delivery or logistics services. With the existence of online store platforms, people can now open virtual stores without having to face various complicated bureaucratic regulations. Simply by utilizing digital technology and registering on an e-commerce platform, they can immediately start a business. This convenience not only encourages the growth of platform-based businesses but also creates a new ecosystem that facilitates digital transformation in various business sectors (Hadiono & Santi, 2020).

This digital transformation itself is driven by several factors, such as ease of consumer access, improved user experience, and efficiency of services offered by digital technology. This change has caused the business competition landscape to shift from a traditional model to a digital model (Sifa et.al, 2024). Digital transformation is actually an inevitability that will occur over time, regardless of whether or not there is a pandemic. However, the COVID-19 pandemic has accelerated this process, encouraging many organizations and businesses to immediately adapt to digital technology that previously may have only been planned or in the early stages of implementation (Hendriyaldi, Erida & Yanti, 2022). Sustainable investment standards are based on ESG principles that consider environmental, social, and corporate governance aspects. From an investor's perspective, the existence of ESG is a primary concern in investment decision-making. Socially responsible companies require an allocation of financial resources to support the sustainability of their operations. Before investing, investors will assess the feasibility of a company by considering environmental, social, and governance factors. They are increasingly aware that sustainable business practices have a significant impact on the company's long-term performance.

Companies that adopt responsible and sustainable business practices tend to be considered more likely to provide long-term added value to shareholders (Sari et.al, 2023). Thus, ESG becomes a strategic foundation for investors to optimize their portfolios by considering the social and environmental impacts of the investments made. On the other hand, investment globalization has pushed Indonesia to adapt to international standards related to sustainability and digital transformation. Global investors tend to be more selective in choosing projects that have a strong commitment to ESG principles (Amalia & Kusuma, 2023). Therefore, Indonesia needs to ensure that investment policies not only encourage economic growth but also support the implementation of environmentally friendly digital technologies. The role of investment law is crucial in creating a framework that supports digital innovation and ensures that incoming investments are in line with national sustainability goals (Shakil, 2021).

Digital transformation also provides opportunities for companies to increase transparency and accountability, two important elements in attracting sustainable investment. Technologies such as blockchain, big data, and the Internet of Things (IoT) can be used to monitor and report ESG performance in real time, thereby increasing investor confidence. However, there needs to be a clear and strong legal umbrella to regulate the implementation of these technologies in the context of sustainability, including data protection and information integrity. Thus, this study will discuss how digital transformation can accelerate sustainable investment in Indonesia by integrating technology and ESG principles. Focusing on the legal aspects of investment is important to ensure that this transformation runs in a corridor that is in accordance with applicable regulations, and is able to drive sustainable industry growth in the long term.

2. Method

This normative legal research writing uses a statutory approach, where the legal materials analyzed include primary legal materials, secondary legal materials, and tertiary legal materials. Data collection techniques are carried out through literature studies related to the legal materials, as well as linking the results of the analysis with relevant factual conditions. The literature study in this study aims to explore the development of theories and findings related to digital transformation in ESG (Wasyith, 2019). In addition, this study uses a conceptual approach by identifying key concepts such as blockchain technology, artificial intelligence, big data analysis, and other current technologies in the context of ESG. This study has also reviewed various theories that support the application of digital innovation in ESG management.

3. Analysis & Results

3.1. The Impact of Digital Transformation on Investment Legal Policies in Indonesia for Sustainable Industry Development.

Digital transformation has become a crucial element in supporting investment in various sectors, including the sustainability industry. In Indonesia, digital transformation is changing the investment landscape by creating new opportunities that allow companies to improve operational efficiency and transparency (Lestari et.al, 2024). This has prompted the government to adjust investment law policies to be more responsive to these changes. One of the main challenges in investment law is ensuring that the existing regulatory framework can accommodate the development of digital technology and support sustainable practices in the industrial sector. Law Number 25 of 2007 concerning Investment is the basis for the government's efforts to attract investment, including in the sustainability sector. However, the development of digital technology requires a new interpretation and implementation of this regulation. The government needs to ensure that investment law does not only focus on economic aspects but also includes environmental and social aspects. This means that investments driven by digital technology must be in line with ESG principles to encourage sustainable industrial growth (Fadillah & Rahmawati, 2024).

Digital transformation has a significant impact on the transparency and accountability aspects of investment. Technologies such as blockchain, for example, can be used to record company transactions and activities transparently, thereby minimizing the risk of corruption and misappropriation. This provides more confidence to investors, both domestic and international. Therefore, investment legal policies must create mechanisms that encourage companies to utilize digital technology to support good governance and transparency. In addition, the integration of digital technology into investment policies is also related to data protection. With increasing digitalization, the risk of data leakage is higher. Regulations such as the recently passed Personal Data Protection Law (UU PDP) play an important role in protecting corporate and consumer data. Investment law needs to ensure that companies operating in Indonesia comply with these data protection standards, especially if they use digital technology in their operations. In supporting sustainable investment, digital transformation also requires policies that encourage innovation in environmentally friendly technologies. Investments in this sector involve projects that utilize technology to reduce carbon emissions, manage waste, and increase energy efficiency.

The government needs to update investment policies to provide incentives for companies that adopt this technology. These incentives can be in the form of tax breaks, ease of licensing, or access to funding. The role of the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX) is also very important in ensuring that investment law policies are in line with developments in digital transformation (Tobing & Setiawati, 2022). OJK has required companies to report their ESG performance, and this must be strengthened with policies that support the use of digital technology to increase accountability for such reporting. Companies that utilize digital technology for ESG reporting will be more competitive in the investment market. The Financial Services Authority (OJK) has issued POJK No. 12/POJK.03/2021 concerning Commercial Banks (POJK Commercial Bank), which strengthens the existence of digital banks in response to technological advances in the digital era. The shift from the traditional bank model to the bank of the future encourages the digitalization of banking, including through the establishment of new digital banks or the transformation of conventional banks into digital banks.

Therefore, Indonesian Legal Entity Banks (BHI) that claim to be digital banks must comply with the provisions stipulated in the POJK Commercial Banks regarding digital bank requirements. In addition, BHIs are also required to comply with various other regulations relating to the business model and operations of digital banks. The bank must not only use the label "digital bank" as a marketing strategy or just a business gimmick without meeting applicable standards and provisions (Abubakar & Handayani, 2022). Sustainable investment has become an increasingly important topic in the global capital market, including in Indonesia. ESG principles have begun to be integrated into investment regulations and practices, although their implementation still faces various challenges. One of the main challenges is the disclosure of ESG information by issuer companies. Although the OJK has encouraged the implementation of ESG principles, the disclosure of such information is still often voluntary and not in-depth. This condition makes it difficult for investors who want to invest by considering ESG aspects because the available information is not yet sufficient to evaluate the environmental and social impacts of their investments (Durlista & Wahyudi, 2023).

To increase the effectiveness of ESG implementation, stricter regulations are needed that require companies to disclose ESG information comprehensively with consistent standards. In addition, OJK and the Indonesia Stock Exchange (IDX) need to develop mechanisms that ensure that ESG information submitted by issuer companies is accurate, relevant, and verifiable (Saripah, Diantimala & Arfan, 2024). Another challenge faced is the low awareness of investors regarding the importance of sustainable investment. Many investors are still oriented towards short-term financial gains without considering the long-term impact on the environment and society. This shows the need for more intensive education for investors about the importance of responsible and sustainable investment. The implementation of ESG principles in the Indonesian capital market also faces various practical challenges. These challenges include limited resources, lack of understanding at the operational level, and the absence of consistently applied international standards. This condition indicates that the effectiveness of capital market law in encouraging sustainable investment still needs to be improved, both in terms of regulation and its implementation in the field.

Therefore, strengthening regulations, especially those related to information technology governance and risk management, is crucial to ensure that digital bank operations remain prudent. Strengthening these regulations is a joint commitment between the government, OJK, and Bank Indonesia in creating accommodating regulations. In addition, the development of digital technology infrastructure is also a priority to support the optimization of the role of financial technology, including digital banks, in strengthening its position as one of the main pillars of the national financial and digital economy ecosystem. Investment legal policies must also consider aspects of digital infrastructure. Many companies in Indonesia, especially in remote areas, still face limited access to digital technology. The government needs to ensure that investment policies include equitable development of digital infrastructure.

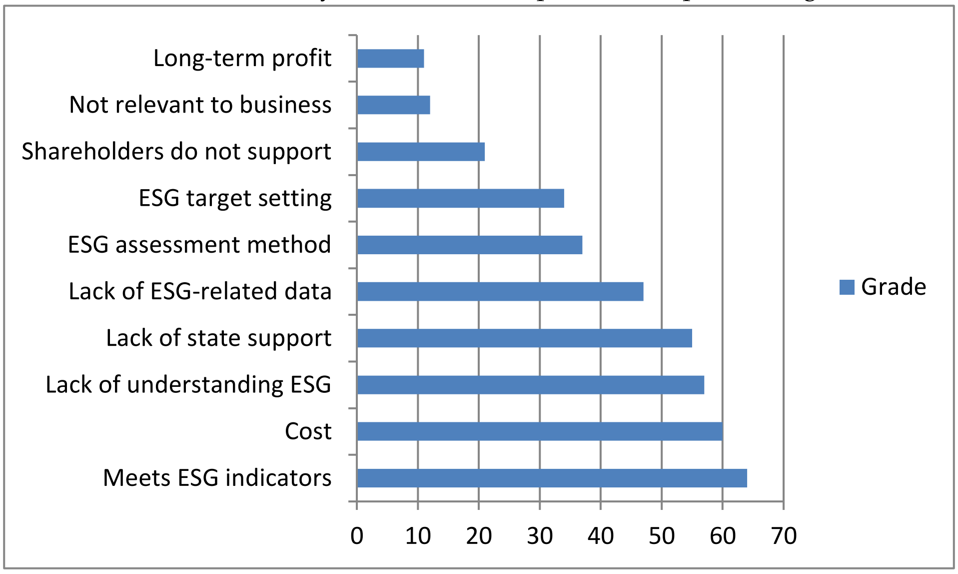
This will enable more companies to take advantage of digital transformation in their operations and attract more investors.

The implementation of investment law policies that support digital transformation also requires collaboration between the public and private sectors. The government cannot work alone in creating a conducive investment environment (Sutisna, Umam & Morisson, 2024). There needs to be synergy with the private sector to develop policies that encourage the adoption of digital technology. This collaboration is also important to ensure that the policies are realistic and can be implemented well in the field. Furthermore, investment law must ensure that foreign companies investing in Indonesia comply with applicable sustainability standards. This can be done by requiring foreign companies to implement digital technology in their operations and comply with ESG principles. This policy will ensure that investment entering Indonesia not only brings economic benefits but also supports environmental and social sustainability. Overall, digital transformation has great potential to increase the value of investment in the sustainability industry sector in Indonesia. However, this requires an investment law policy that is adaptive and responsive to technological developments.

The government needs to ensure that existing regulations are able to encourage innovation, transparency, and sustainability so that Indonesia can compete in the global market and attract more sustainable investment. To support investment in the sustainability industry in the era of digital transformation, several adjustments to Law Number 25 of 2007 concerning Investment and its supporting regulations are needed. One important adjustment is the integration of ESG principles into investment policies. This can be realized by requiring companies to prepare and publish annual ESG-based sustainability reports. In addition, the government also needs to set ESG certification standards that must be met by companies operating in the sustainability sector. This step aims to ensure that investments are not only oriented towards economic profit but also contribute to environmental preservation and social welfare (Nabilah & Ahmadi, 2024). Incentives for companies investing in the sustainability sector also need to be clearly regulated in the law. The government can provide tax breaks for companies that comply with ESG standards or use environmentally friendly technology.

In addition, ease of licensing can be an additional incentive to encourage companies to develop green technology-based projects. With this incentive, it is hoped that more companies will be interested in investing in the sustainability sector, which will ultimately support Indonesia's sustainable development goals. Another aspect that needs to be considered is the regulation of the use of digital technology in investment. The law needs to include provisions on a digital transparency system that requires companies to use technology such as blockchain to record investment transactions. This aims to ensure transparency and accountability in investment activities. In addition, data security must also be a priority, given the increasing risk of data leaks along with digitalization. Therefore, investment regulations must be aligned with the Personal Data Protection Law (UU PDP) to protect company and consumer data (Fezliani, 2024). In an effort to encourage sustainable investment, it is also important to establish sanctions for companies that violate sustainability principles. The law must include a progressive fine mechanism for companies that are proven to violate environmental regulations, as well as the revocation of business licenses if the violation has a serious impact on the environment or society.

Table 1. Obstacles Faced by Indonesian Companies in Implementing ESG, 2023



Source: Katadata Media Network, https://databoks.katadata.co.id/ekonomi-makro/statistik/66a0b63950061/ini-kendala-perusahaan-indonesia-dalam-menerapkan-esg

With strict sanctions, companies will be more motivated to comply with sustainability standards, thereby creating a responsible and sustainable business environment. Alignment with international standards is also important in the context of investment globalization. Investment legal policies in Indonesia must adopt internationally applicable principles, such as the OECD Guidelines for Multinational Enterprises and the UN Principles for Responsible Investment (PRI). This alignment will increase Indonesia's competitiveness in the global market and attract foreign investors who are oriented towards sustainability. In addition, this adjustment also ensures that investment entering Indonesia is in line with global best practices. Support for digital infrastructure must also be part of the investment policy. The government needs to ensure that investment in digital infrastructure, such as the development of renewable energy-based data centers and the provision of smart grid technology, receives special attention. This infrastructure will support companies in adopting digital technology to improve the efficiency and transparency of their operations while supporting sustainability goals. Corporate Social Responsibility (CSR) obligations regulated by law must also be directed at projects that support sustainability.

Companies need to be required to implement CSR programs that focus on environmental preservation and social development in the communities where they operate. The implementation of corporate social responsibility (CSR) has begun to develop in Indonesia, and in 2007, its regulation was included in Article 74 of Law No. 40 of 2007 concerning Limited Liability Companies (UUPT). The article states that companies that carry out business activities in the field of and/or related to natural resources are required to implement social and environmental responsibilities (*Undang-Undang No. 40 Tahun 2007 tentang Perseroan Terbatas (UUPT)*, n.d.). Basically, the implementation of CSR is aimed at companies that utilize natural resources in their business activities, where they are required to be responsible for the environment used. This responsibility reflects the company's concern for environmental sustainability and the welfare of the surrounding community, as well as supporting the sustainability of life in the future (Rohadi, Bhakti, & Sumriyah, 2023). This will ensure companies not only contribute to the economy but also support sustainable social and environmental development.

The role of local governments also needs to be strengthened in supervising sustainable investment. Regulations must provide greater authority to local governments to oversee the implementation of ESG principles in their regions. This is important to ensure that investment policies are applied consistently throughout Indonesia, especially in areas prone to environmental exploitation. With strict supervision, local governments can ensure that investments truly provide long-term benefits to local communities and the environment. Overall, Law Number 25 of 2007 and its supporting regulations must include the integration of ESG principles, the provision of incentives, the strengthening of digital transparency, data protection, enforcement of sanctions, and alignment with international standards. With adaptive regulations and responsive to developments in digital technology, Indonesia can create a conducive, transparent, and sustainable investment ecosystem, thereby attracting more investors are committed to sustainability.

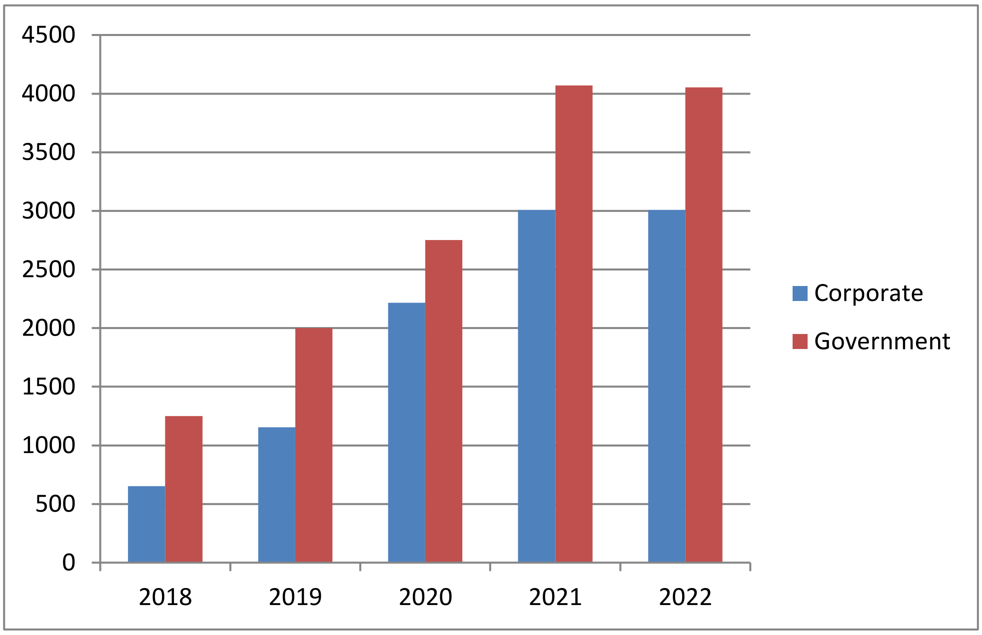
3.2 Enhancing Sustainable Investment Competitiveness in Indonesia Through Digital Technology and ESG Integration.

The integration of digital technology and ESG principles in the investment world is the main key to increasing the competitiveness of sustainable investment in Indonesia. ESG is not only a benchmark in assessing company performance, but also a framework that helps investors evaluate the impact of investments on the environment, society, and corporate governance. The application of ESG in sustainable investment aims to ensure that companies not only focus on profitability but also prioritize environmental sustainability and community welfare. In the context of Indonesia, the government and the OJK have taken important steps by issuing various policies to support the implementation of ESG (Ningwati, Septiyanti & Desriani, 2022). One of them is the obligation for issuers on the Indonesia Stock Exchange (IDX) to prepare sustainability reports since 2019. This report aims to increase the transparency and accountability of companies for the sustainability practices they carry out. Digital technologies, such as blockchain and big data, play an important role in helping companies collect and report ESG data accurately and in real-time, thereby increasing investor confidence (Syaifudin, 2024).

In addition, OJK has also issued POJK No. 12/POJK.03/2021 concerning Commercial Banks, which support digital transformation in the banking sector. This transformation aims to strengthen governance and risk management of information technology in digital bank operations. This regulation shows the government's commitment to creating an accommodating and sustainable digital financial ecosystem, which ultimately supports sustainable investment growth. The implementation of ESG is also an investment risk mitigation strategy. Companies that comply with ESG principles tend to have more stable long-term performance because they are able to better manage environmental and social risks. This creates trust among investors, especially global investors who are increasingly selective in choosing sustainability-oriented projects. With the support of digital technology, companies can improve operational efficiency and ensure that their sustainability practices are transparent and measurable. The implementation of sustainable investment in Indonesia is increasingly showing great potential, one of which is through a product known as a green bond. Green bonds are investment instruments designed to fund projects that support environmental goals, such as reducing carbon emissions, nature conservation, and sustainable management of natural resources.

The introduction of this green bond product began with the issuance of the 2015-2019 Sustainable Finance Roadmap by the OJK, which became the main foundation for encouraging the development of a sustainable financial market in Indonesia. Furthermore, more detailed regulations regarding green bonds are contained in the OJK Regulation (POJK) on Green Bonds, which further clarifies the mechanisms and procedures for issuing and supervising green bonds in the Indonesian capital market. Based on data released by the Climate Bond Initiative, Indonesia has successfully issued a significant amount of green bonds. As of April 2019, green bond issuance in Indonesia, both by the government and the corporate sector, was recorded to have reached a total of around 2.7 billion US dollars. This figure contributed 39% of the total green bond issuance carried out by all ASEAN member countries, indicating Indonesia's position as one of the main players in the green bond market in Southeast Asia (Fitri, 2024). This figure illustrates the large potential of the green bond market in Indonesia which is in line with the need to fund sustainable projects that can help the country achieve the carbon emission reduction targets set in the Paris Agreement.

Table 2. Green Bond Issuance Value in Indonesia, 2018 - 2022



Source: Katadata Media Network, https://databoks.katadata.co.id/ekonomi-makro/statistik/b57b815b2c60950/green-bond-indonesia-tumbuh-pesat-pemerintah-jadi-aktor-dominan

To date, Indonesia is ranked 6th in the category of developing markets that are most active in issuing green bonds. The total volume of green bonds issued by Indonesia has reached around 1.86 billion US dollars. There are a number of green bonds issued in the domestic market, including two green sukuk issued by the Indonesian government, and four green bonds issued by corporations. In November 2019, Indonesia launched a retail green sukuk, which is one of the innovations in green bond instruments that can be accessed by retail investors (Anggraini, 2018). The issuance of retail green sukuk received a positive response from the market, especially from millennials who are increasingly concerned with sustainability and climate change issues. For example, the issuance of Indonesia's first green bond in 2018 experienced an oversubscription of 2.5 times the set offering value, indicating that this investment instrument is in high demand by the market. In addition, the issuance of retail green sukuk in 2019 succeeded in attracting investors with a total fund of IDR 1.4 trillion, the majority of which came from millennials who are increasingly aware of the importance of investing in products that support sustainability (Wijaya, Rahayu & Budiman, 2024).

However, despite the enormous potential, there are a number of challenges that must be faced in developing the green bond market in Indonesia. One of the biggest challenges is the assessment and ranking of sustainability risks from companies issuing green bonds. Most Indonesian companies do not yet have a good track record in terms of managing social, environmental, and sustainability risks, which can affect their assessment by international rating agencies. This could lead to low ratings and assessments of the sustainability risk profile of Indonesian corporations, which in turn will reduce the attractiveness of Indonesian green bonds in the international market, especially among foreign investors who tend to be more selective. To overcome these challenges, the role of external parties who can provide second opinions and sustainability rating agencies that can assess and certify projects funded through green bonds is very important. In addition, credit rating agencies and green certification agencies also have a very important role to play in ensuring that green bonds issued are in accordance with international sustainability standards, such as those stated in the Paris Agreement and the United Nations Sustainable Development Goals (UN SDGs). Without a transparent and objective assessment of funded projects, foreign investors may hesitate to invest.

However, there are also great opportunities that can be utilized to support the development of the green bond market in Indonesia. One of them is by utilizing the Environmental Funding Instrument regulated in Article 20 paragraph (1) of Government Regulation No. 46 of 2017 concerning Environmental Economic Instruments. This instrument includes various funds such as Environmental Recovery Guarantee Funds, Pollution Mitigation Funds, and Environmental Recovery Funds, as well as Conservation Trust/Assistance Funds. These funds can be used to finance projects that focus on sustainability and environmental management and can provide additional financial support for green bond issuers in Indonesia, especially for companies that have difficulty attracting foreign investors. Environmental finance is part of a market-based approach that prioritizes the "polluter pays principle," which seeks to allocate the costs of pollution or environmental damage to those who cause the damage. This is also in line with efforts to fund projects that are not only financially profitable but also provide sustainable social and environmental benefits to the wider community (.

Thus, the development of the green bond market in Indonesia has enormous potential but requires various efforts to overcome challenges related to sustainability assessment and to create a conducive environment for sustainable investment. Collaboration is needed between the government, corporations, financial institutions, and the community to ensure that green bonds can be an effective instrument in financing projects that support sustainability goals in Indonesia. The role of regulation is very important in supporting this process. Policies that support digital transformation must be accompanied by incentives for companies that adopt environmentally friendly technologies and sustainable practices. These incentives can be in the form of tax breaks, ease of licensing, or access to funding. In addition, the government also needs to ensure that these regulations include data protection and information security, given the increasing risk of data leakage along with digitalization. In addition to the regulatory aspect, it is also important to encourage collaboration between the government, the private sector, and the community in creating a sustainable investment ecosystem.

The government can work with technology companies to provide a platform that facilitates transparent and accurate ESG reporting. This collaboration will help increase accountability and ensure that investments entering Indonesia are in accordance with sustainability principles. With the integration of digital technology and ESG, companies in Indonesia can improve their reputation in the eyes of investors. Transparency in ESG reporting, supported by digital technology, will provide accurate information on company performance. This will not only increase investment attractiveness but also encourage companies to run their businesses responsibly and sustainably. Overall, the integration of digital technology and ESG principles is a strategic step to increase the competitiveness of sustainable investment in Indonesia. With strong regulatory support, digital infrastructure development, and collaboration between stakeholders, Indonesia can create a conducive and sustainable investment environment. This will ensure that economic growth goes hand in hand with environmental preservation and community welfare.

4. Conclusion

The integration of digital technology and ESG principles plays a crucial role in enhancing Indonesia's sustainable investment competitiveness. ESG implementation prioritizes long-term environmental and social sustainability, as seen in OJK policies requiring sustainability reports and digital technology adoption for transparency. The issuance of POJK No. 12/POJK.03/2021 reflects the government's commitment to a sustainable financial ecosystem. Technologies like blockchain, big data, and ESG reporting platforms enhance efficiency and transparency in sustainability management. However, challenges such as limited digital infrastructure and human resource readiness persist. Strong regulations and incentives are essential to attract investment and drive sustainable practices, positioning Indonesia as a key sustainable investment hub in Southeast Asia.

To enhance ESG implementation in sustainable investment, Indonesia must strengthen digital infrastructure, particularly in underserved areas, to facilitate broader adoption of digital technology. Regulatory policies should be improved with incentives like tax reductions, streamlined licensing, and easier funding access to encourage sustainable investments. Public-private collaboration is crucial in developing a transparent ESG reporting platform. Additionally, education and training in sustainability and digital technology should be enhanced to build skilled professionals. Expanding ESG adoption across all economic sectors will boost competitiveness in the global market. These efforts will maximize sustainable investment potential, optimize digital technology's economic contribution, and support Indonesia's SDG achievements.

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