Green Financing : One Effort Achieving Sustainable Development

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ABSTRACT

The scope of the economy is to increase revenue and minimize costs, social, namely the welfare of employees, fair trade/business, and participation in charity programs. Green financing encourages the formation of a green industry; stimulates the development of technological innovations through the creation of clean, energy-efficient, and radiation-free environmental technologies; and creates new business growth in the financial industry through the establishment of financial instruments, such as green loans, green bonds, green investments, green funds, and various other financial business opportunities. The purpose of this study is to determine (1) the concept of green financing and sustainable development (2) the dimensions of green financing and (3) the efforts that must be made so that green financing is implemented optimally. The method used is descriptive qualitative. The results of the research are (1) there are 3 (three) concepts of green finance: greening the banking system, greening the bond market, greening institutional investors (2) the dimensions of green financing are achieving industrial, social, and economic excellence; (3) efforts that must be made so that the application of green financing in sustainable development can be further enhanced namely increasing government participation, support and regulation.

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1. Introduction

In today's era, companies are required to have an awareness of environmental management. The company's internal awareness and responsibility can be used to reduce the ecological pressure and it will improve the system and work that is environmentally friendly (greening) Sustainable development is a popular term today and has become an important central *issue and its relevance is critical for the sustainability and economic viability of organizations*. (Muafi & Uyun, 2021) . In the modern business environment, sustainable development is largely achieved through the application of green economy concepts, both at the global and national level as well as at the enterprise level. (Puspitasari, 2017) . Sustainable development must have a balance from three points of view (*Triple Bottom Line*), which includes Profit (Economic), Human (Social) and Planet (Safe Environment).

Figure 1. *Triple Bottom Line* Concept
Source: (Alisjahbana, 2018)

A sustainable business or "green" business is a business that does not cause any negative impact on the local or global environment, society, or economy, in the form of practices that benefit employees, society, and the planet. Companies that carry out operational activities with a *green concept* or use *green management* can reduce costs and increase revenue (Alisjahbana, 2018). By applying the concept of *green management*, companies can implement better environmental practices, namely better access to certain markets; product differentiation; controlled pollution with a technology; able to manage risk and build relationships with external stakeholders; material, energy, and service costs; capital costs; and labor costs. (Puspitasari, 2017) .

Based on a study conducted by a team from Pricewaterhouse Coopers Consultants (PWC) (2013) regarding the implementation of *green financing* in China, it is known that for the banking sector, *green financing is* defined as a product and financial services that take into account environmental factors in making credit decisions, stimulate the birth of a responsible investment environment and encourage the creation of environmentally friendly technologies for industrial and business projects. According to Höhne, et al (2012), *green financing* is a broad term that can refer to financial investments that flow into sustainable development projects and initiatives, environmental products, and policies that promote sustainable economic development.

Green finance encourages the formation of *industrial green*; stimulates the development of technological innovations through the creation of clean, energy-efficient, and radiation-free environmental technologies; as well as *creating new business* growth in the *financial industry through* establishment of financial *instruments*, *such* as green loans, green *contracts*, *green investments*, *and* green investments green funds and *various other financial* business opportunities. Various instruments products and the concept of *green financing continue to be* introduced, but only a small part of the world's banks that make bank loans and investments to investors can be *categorized* as " *green* ". *Brazil was one of the countries that implemented green banking* sustainability in 2008, only 11% of the country's bank loans were based on considerations of renewable energy (*new energy*) and *low-carbon agriculture* in 2013. China has introduced a g*reen credit policy since* 2007. At the end of 2015, CBRC's green credit statistics for the top 21 Chinese banks (accounting for around 80% of total banking assets) showed that the majorities have adopted E&S risk management practices, and Green Credit now makes up approximately 10% of these banks' portfolios. Building on this experience of greening the banking system, the PBOC is leading efforts to green the whole financial system in China beyond banking (World Bank Group, 2012). Meanwhile in Indonesia itself, the Financial Services Authority (OJK) issued a financial sustainability *roadmap* in 2014, covering the banking sector, capital market, and non-banking financial institutions (insurance, leasing, pension funds) to contribute to addressing climate change and supporting the low-carbon economy competition. Bank Indonesia as the person in charge of banking since 2012 has issued various regulations related to the establishment of an environmentally friendly sustainable economy such as PBI No.14/15/PBI.2012; PBI No.14/26/PBI.2012; PBI No.14/22/PBI.2012 and introduced the new *lending model in* 2013.

Some of the main indicators that will be used in tracing *green finance include* bank commitments*;* priority volume and distribution of financial flows; risk factors related to the influence of financial assets on the environment and society as well as the achievement of positive and negative environmental and social influences.

The problems that will be investigated are :

1. What's the concept of *green financing* and sustainable development?
2. What are the dimensions of green *financing* in sustainable development?
3. What efforts should be made so that the application of *green financing* in sustainable development can be further improved?

The purpose of this research is investigating:

1. The concept of *green financing* and sustainable development.
2. Dimensions of *green financing* in sustainable development.
3. Efforts must be made to increase the application of *green financing* in sustainable development.

The urgency of this research for:

1. Banking is input in making decisions to get the expected results.
2. Government, to be taken into consideration/input in making policies.
3. Investors are considered to make sustainable investments that prioritize the environment, electoral governance, portfolio management, and social issues.

2. Literature Review

Green Financing Theory

Volz, et al (2015:2), *green financing* is all forms of investment or loans that consider environmental aspects to improve environmental sustainability. A business that deserves to be financed with a *green financing scheme* is a business carried out by the debtor in the context of environmental conservation efforts, where the debtor is obliged to undertake environmental management efforts based on applicable law. *Green financing in Indonesia* is defined as the overall support of the financial services industry for sustainable growth resulting from the alignment of economic, social, and environmental interests. The World Bank has also developed guidelines for policy tools that can be used to green the financial services sector.

Figure 2. Greening Policy for the Financial Services Sector
Source: katakata.id, 2022

Banks and customers are the main drivers of the transition to *green*. In formulating a business strategy, banks as business actors must: consider public interest and participation in *green finance*. The community is already interested in *green finance*, but not completely. In general, they already have initiatives in the use of environmentally friendly products. The public has also considered the reputation of a bank in the environmental sector. To increase public awareness, education, and communication regarding the implementation of *green finance principles* and their benefits must continue to be carried out.

Sustainable Development

Sustainable development is the ability of a system to maintain its level of production created by nature in the long term (Huckle & Wals, 2015). Sustainability does not mean then requires special resource savings, but only ensures sufficient resources for future generations, thus making their standard of living at least as good as the current generation.

Figure 3. Sustainable development
Source: (Ragheb et al., 2016)

The concept of sustainable development includes 3 (three) scopes, namely economic, social and environmental. The economic scope is to increase *revenue* and minimize *costs*, social, namely employee welfare, fair trade/business, participation in charity programs, and the environment must be able to suppress the exploitation of natural resources, as well as *manage* waste management, not causing damage/environmentally friendly.

Starting in 2016, the Sustainable Development Goals (SDGs) 2015–2030 have officially replaced the Millennium Development Goals (MDGs) 2000–2015 / *competitive advantage*. The SDGs contain a set of agreed-upon transformative goals that apply to all nations without exception. There are 17 (seventeen) sustainable development goals, namely : (1) Without poverty, eradicate all forms of poverty all over the place. (2) Zero hunger, ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture. (3) Healthy and prosperous life, promoting healthy living and supporting well-being for all ages. (4) Quality education, ensuring adequate and inclusive quality education and promoting lifelong learning opportunities for all. (5) *Gender* equality, achieving *gender* equality, and empowering women. (6) Clean water and proper sanitation, ensuring access to water and sanitation for all. (7) Clean and affordable energy, ensuring access to affordable, reliable, sustainable, and modern energy. (8) Decent work and economic growth, sustainable and inclusive economic growth, and decent work for all. (9) Industry, innovation, and infrastructure build a strong infrastructure, promote sustainable industrialization, and encourage innovation. (10) Reducing inequality, reducing disparities within and between countries. (11) Cities and sustainable communication, making cities inclusive, safe, strong, and sustainable. (12) Responsible consumption and production, ensuring sustainable consumption and production patterns. (13) Addressing climate change, taking important steps to fight climate change and its impacts. (14) Marine ecosystems, protection and sustainable use of oceans, seas, and marine resources. (15) Terrestrial ecosystems, sustainably manage forests, fight land conversion to deserts, and stop biodiversity loss (16) Peace, justice, and strong institutions, promote just, peaceful, and inclusive societies. (17) Partnerships to achieve goals, and revive global partnerships for sustainable development . http://www.un.org/sustainabledevelopment

3. Method, Data, and Analysis

The method used is descriptive qualitative. Descriptive method (describe), namely the method used to find the elements, characteristics, and properties of a phenomenon. This method begins with collecting data, analyzing data, and interpreting it. Descriptive research is research that seeks to describe a symptom, event, or event that is happening now. Qualitative methods are called new methods because of their recent popularity. Also called the post-positivistic method because it is based on the philosophy of postpositivism. Also called the artistic method because the research process is more artistic in nature. Also called the *interpretive research method*. The qualitative method is used to examine the natural objective conditions (as opposed to the experimental method). The results of qualitative research are more meaningful than generalizations. In other words, qualitative research does not emphasize generalization but emphasizes more on meaning. Generalization in qualitative research is called *transferability*. Qualitative methods are used to obtain in-depth and meaningful data, namely actual data and definite data. (Afrizal, 2017)

The data used in this research is secondary data. The data source comes from the event study (*Event Study*). An e*vent study* is a study that studies the market reaction to an event whose information is informed as an announcement. (Afrizal, 2017). The location of this research is done through access to the official website of Bank Indonesia. (Bank Indonesia, 2021). The data analysis technique used has 3 (three) stages, namely data reduction, data presentation, and conclusion/verification. (1) data reduction is summarizing, choosing the main things, focusing on important things that are following the research topic, looking for themes and patterns, in the end providing a clearer picture and making it easier to carry out further data collection. (2) data presentation is presenting data in the form of tables, graphs, flowcharts, pictograms, and the like. Through the presentation of these data, the data can be organized, and arranged in a relationship pattern, so that it will be easy to understand. In addition, this can be done in the form of short descriptions, charts, relationships between categories, flowcharts, and the like, but what is often used to present data in qualitative research is narrative text. Through the presentation of these data, the data is organized and structured so that it will be easier to understand. (3) concluding verification is something that can answer the formulation of the problem that was formulated from the start and must also be in the form of new findings that have never existed before. Findings can be in the form of a description or description of an object that was previously unclear so that after research it becomes clear. (Sugiyono, 2018).

4. Result and Discussion

1. The concept of *green financing* and sustainable development.

There are 3 (three) concepts of *green finance* namely :

1) Greening the banking system. *Green banking* or the concept of green banking requires cooperation with the bank and includes environmental factors in the loan portfolio. This will greatly affect the comparison of pricing with environmental outcomes. This will then have the potential to increase the debt costs of companies that emit high pollution. On the other hand, environmentally conscious companies will facilitate access to low-cost funding. Both will help each other in implementing environmentally friendly practices in various sectors.
2) Greening the bond market. This matter is a debt instrument used in financing environmentally friendly projects. A green bond market will benefit green projects as well as investors. Another benefit is that it can provide an additional source of green financing.
3) Greening institutional investors. The existence of sustainable investments that prioritize the environment, electoral governance, portfolio management, and social will include several activities and strategies including:
    a. Investation sustainable themed impact investment or community negative screening or *exclusionary* norm-based screening
    b. Positive screening or *best in class*
    c. Involvement of shareholders and company
    d. Integration of social environmental factors and governance

Before implementing *green financing*, several things must be considered, which will later help realize a sustainable and environmentally friendly project, namely:

1) Good *disclosure* will serve to increase *green financing*. Sustainability reports must be reported continuously, once a year.
2) Evaluation is needed to determine the price of assets contained in financial instruments that are closely related to natural capital such as forests or rivers through predictive analytics.

3) Capacity and policy development, for example by adhering to the ASEAN green market standards and also the ASEAN capital market forum, all of which are also adjusted to the country level. (finata.id)

The challenges in implementing *green financing* are:

1) Banks are generally not willing to lend for sustainable infrastructure projects in the long term.
2) The benefits of economic activities or externalities including air and water pollution are not internalized in pricing.
3) Many environmentally and socially responsible investors do not know which companies to invest in due to a lack of information.
4) Investors do not have data or tools to analyze investments in environmentally friendly projects.

2. Dimensions of *green financing* in sustainable development

Green financing consists of the following dimensions:

1. Achieve industrial, social, and economic excellence to reduce the threat of global warming and prevent other environmental and social problems;
2. Have a goal of shifting the target towards a competitive low-carbon economy;
3. Strategically promote environmentally friendly investment in various business/economic sectors; and
4. Support Indonesia's development principles namely the 4Ps (*pro-growth, pro-jobs, pro-poor*, and *pro-environment*). (OJK, 2021)
5. The following is a *green financing roadmap for* sustainable development:

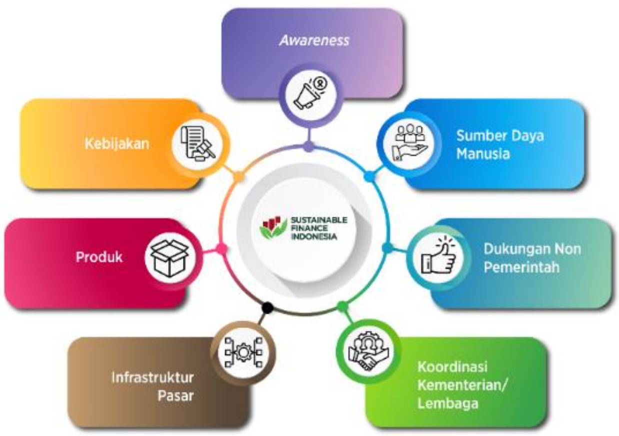

Figure 4. *Roadmap of green financing*
Source: OJK, 2021

3. Efforts must be made so that the application of *green financing* in sustainable development can be further improved.

The efforts that must be made so that the application of *green financing* in sustainable development can be further improved, namely :

1. Increase government participation, support, and regulation. In this case, the Financial Services Authority (OJK) is increasingly encouraging the practice of sustainable finance, as stated in the Roadmap for Sustainable Finance Phase 1 (2015-2019) and Phase 2 (2021-2025), OJK Regulation no. 51 of 2017 concerning the Implementation of Sustainable Finance, and Indonesia's Green Taxonomy (THI).

   THI is structured to facilitate in assessing the economic activities of debtors related to climate change mitigation. THI includes the classification of 919 economic sub-sectors, out of a total of 2,733 sub-sectors, using the *traffic light system*. There are three classifications such as traffic light colors, namely red, yellow, and green. Red is a sector that is not environmentally friendly and needs to be encouraged to be more environmentally friendly. Yellow is a sector that is transitioning towards the principles of *Environment, Social, and Governance* (ESG). While green is an ideal condition, which has a positive impact on the environment. The use of THI is expected to help banks in financing environmentally friendly businesses.
2. Increase the participation and support of banks. To encourage green funding *best practices, banks* can conduct *global benchmarking* which is used to develop a *roadmap Environment, Social and Governance* (ESG). One of the implementations is the formulation of ESG commitment in the entire bank business, including business strategy, governance, risk management, and work culture. Banks should have targets to reduce the operational impact on the environment, for example by using technology that cuts paper and reduces the need to come to the office. Banks must have digital initiatives such as *digital banking* applications, *branchless banking*, and digital systems for credit applications to reduce emissions, so that customers can enjoy banking services without having to travel, also without paper waste for documents that are currently digitized. In addition, banks must also actively encourage public awareness of climate change by conducting training and education to customers (debtors) so that their business is more environmentally friendly. The most important initiative in banking commitment to sustainability is the mobilization of customer funds for green investments, both in the form of credit products, *sustainability bonds*, green stocks, and green Sukuk.
3. Make a policy of giving *rewards* and penalties to the government to banks. For banks that are aggressively and successfully implementing *green financing*, the government must be able to

provide *rewards* /incentives, because the rules that have been implemented currently tend to be recommendations without any incentives or penalties. Incentives can increase bank commitment to implementing *green banking* but are not treated like a company's *Corporate Social Responsibility* (CSR) project. Several types of incentives can be in the form of ease of regulation in conducting business and appreciation to banks that implement *green finance*, it can also be in the form of providing interest rate facilities. Appreciation in the form of incentives can improve the reputation and credibility of banks that apply *green finance* principles.

5. Conclusion and Suggestion

Green financing can properly implemented if there is active participation from the government, and also for others with up-to-date policies and promoting elements of sustainable development.

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