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What Green Finance Does Indonesia after COVID 19?

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Abstrak
The part of Indonesia's commitment to realizing the United Nations (UN) Sustainable Development Goals, various steps and strategies need to be considered. One aspect that plays an important role in realizing this vision is green financing. The goal of this study is to learn more about how green finance has affected Indonesia since COVID-19. This research methodology combines qualitative inquiry with the technical documentation of data collecting. This study comes to the conclusion that a country's regulatory framework can be strengthened or investment in clean and green technologies increased to boost green financing. The country is dedicated to creating a balanced and sustainable Indonesia, under the National Long-Term Development Plan (RPJPN), by enhancing the economic utilisation of the environment and natural resources in a sustainable way. The nation is also committed to improving environmental and natural resource management in order to raise peoples' standards of living.

Keywords: covid-19, green finance, national long-term development plan

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1. Introduction
Economic activity at various levels locally, nationally, globally slowed drastically and even stopped. Logistical disruptions occurred in various countries, supply chain networks were torn apart, production and consumption activities stagnated, energy demand plummeted, and as a result employment opportunities were dashed and unemployment rates increased, as well as poverty increased.
The challenges faced are not only related to the impact generated by the pandemic. The world, including Indonesia at the same time faces the threat of climate change and declining environmental quality and carrying capacity. These threats, if not addressed, can be an obstacle to achieving equitable and sustainable development in the long term, and can increase the risks and costs involved in facing crises similar to the COVID-19 pandemic, even greater, in the future. Therefore, policy authorities need to consider optimal utilization of resources and fiscal capacity to deal with crises and multidimensional challenges in formulating economic recovery strategies.
According Handayani et.all (2018) growth of financial performance of the company will be a consideration that has a big effect on investment decisions by investors. As part of Indonesia's commitment to realizing the United Nations (UN) Sustainable Development Goals, various steps and strategies need to be considered. One aspect that plays an important role in realizing this vision is green financing. As stated by the

United Nations Environment Program (UNEP), the goal of green finance is to increase financial flows (from banking, microcredit, insurance, and investment) from the public, private and non-profit sectors to be used for sustainable development priorities.

A further objective of green finance is to work with different countries and financial sectors, to direct capital allocation for sustainable development, which will impact future production and consumption patterns. Banking, with its broad stakeholders, can play a role as an agent of change in the transition to a green economy. A total of 110 foreign banks that are members of the Net-Zero Banking Alliance have targeted achieving net zero carbon emissions by 2050. The World Bank has also developed guidelines on policy tools that can be used to "green" the financial services sector.

In research conducted by Dewi (2021), several banks have declared as green banks, but so far, the issues of implementing green banking are very diverse. Also, the absence of technical guidelines for banks to implement green banking will make it difficult to evaluate compliance and increase capacity in its implementation. However, OJK's support and regulatory tools do not necessarily smooth the transition to green finance without the commitment of financial service providers and users. Banks and customers are key drivers of the green transition. In developing business strategies, banks as businesspeople certainly consider public interest and participation in green finance.

The formulation of the problem in this study is how to implement Green Finance Post Covid-19 in Indonesia. The purpose of this study is to determine the implementation of Green Finance Post Covid-19 in Indonesia. The expected benefit is that this research can be used as one of the study materials on green finance.

2. Literature Review

Green Finance

Green Finance is defined as the overall support of the financial services industry for sustainable growth resulting from the alignment of economic, social, and environmental interests. Green Finance consists of dimensions:

1. *Achieve industrial, social, and economic excellence in order to reduce the threat of global warming and prevent environmental and other social problems.*
2. *Aim to shift targets towards a competitive low-carbon economy.*
3. *Strategically promote environmentally friendly investment in various business/economic sectors.*
4. *Support Indonesia's development principles as stated in the RPJM, namely the 4Ps (pro-growth, pro-jobs, pro-poor, and pro-environment).*

The main roles of green finance for sustainable growth are:

1. *Greening the Banking System*
   The concept of green banking needs to involve working with banks and incorporating environmental factors into the loan portfolio. This will affect the comparison of environmental outcomes with pricing, potentially increasing debt costs for high-polluting companies. Then environmentally conscious companies will ease access to low funding. Both will help establish green practices across the sector.
2. *Greening the Bond Market*
   Green bonds or green bonds are debt instruments used for environmentally friendly project financing. The green bond market is beneficial for green projects and investors, including providing additional sources of green financing for bank loans and equity

financing. In Asia, green bonds are issued by ADB for energy efficiency, sustainable transport, and green cities.

3. *Greening Institutional Investors*
   Sustainable investment prioritizes environmental, social and governance factors in portfolio selection and management.

3. Method, Data, and Analysis

Overall, this type of research is qualitative research, which is research that does not carry out systematic calculations, statistics and so on, but uses scientific emphasis or research that produces findings that cannot be achieved using statistical procedures or by other means of qualification (Moeloeng, 2018). The approach in this study is a qualitative approach where the approach itself is a problem related to the way people review and how someone approaches the problem according to their discipline.

The data sources that the authors used in this study include scooter data. Secondary data is data obtained from graphic documents such as notes and photos where this data is data that will support primary data (Arikunto, 20140).

The data collection technique carried out is documentation. Documentation is looking for data about things or variables in the form of photos, notes, transcripts, books, newspapers, magazines, agendas about opinions, theories, propositions and so on, which are related to research problems (Susiadi, 2015).

Data analysis is carried out qualitatively. After the data is collected, the next step is for the author to analyze the data so that conclusions can be drawn. In analyzing data, the author uses an inductive thinking method, which is based on general facts and concrete events. The analysis method used is to use a qualitative descriptive approach.

4. Result and Discussion

In Indonesia, the Financial Services Authority (OJK) is increasingly encouraging sustainable finance practices, as stated in the Sustainable Finance Roadmap Phase 1 (2015-2019) and Phase 2 (2021-2025), OJK Regulation no. 51 of 2017 concerning the Application of Sustainable Finance, and the Indonesian Green Taxonomy (THI). THI is prepared to facilitate financial service institutions (FSIs) in assessing debtors' economic activities related to climate change mitigation. THI includes the classification of 919 economic subsectors, out of a total of 2,733 subsectors, using the traffic light system. There are three classifications such as the color of traffic lights, 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 Environment, Social and Governance (ESG) principles. While green is an ideal condition, which has a positive impact on the environment. The use of THI is expected to help banks finance environmentally friendly businesses.

Figure 1. Traffic Light Classification in Green Taxonomy

Source: Indonesia Taxonomy (2021)

Figure 2. Classification in Green Taxonomy

Kategori/*Category*	Penjelasan/*Explanation*
Hijau *(do no significant harm, apply minimum safeguard, provide positive Impact to the environment and align with the environmental objective of the taxonomy).* ***Green*** *(do no significant harm apply minimum safeguard, provide positive Impact to the Environment and align with the environmental objective of the taxonomy).*	Kegiatan usaha yang melindungi, memperbaiki, dan meningkatkan kualitas atas perlindungan dan pengelolaan lingkungan hidup, serta mitigasi dan adaptasi perubahan iklim serta mematuhi standar tata kelola yang ditetapkan pemerintah dan menerapkan praktik terbaik di tingkat nasional ataupun tingkat internasional. *Business activities that protect, restore, and improve the quality of environmental protection and management, as well as climate change mitigation and adaptation, and comply with the governance standards by government, and apply best practices at both the national and international level.*
Kuning *(do no significant harm).* ***Yellow*** *(do no significant harm).*	Kegiatan usaha yang memenuhi beberapa kriteria/ambang batas hijau. Penentuan manfaat kegiatan usaha ini terhadap perlindungan dan pengelolaan lingkungan masih harus ditetapkan melalui pengukuran serta dukungan praktik terbaik lainnya. *Determination of business benefits for environmental protection and management must still be conducted through measurement and support of other best practices.*
Merah *(Harmful activities).* ***Red*** *(Harmful activities).*	Kegiatan usaha tidak memenuhi kriteria/ambang batas kuning dan/atau hijau. *The business activities do not meet the yellow and/or green criteria/ threshold.*

Source: Green Taxonomy 2021

The Katadata Insight Center (KIC) survey shows that the general public already has initiatives in the use of environmentally friendly products. The poll held from March 28 - April 4, 2022 among 3105 respondents throughout Indonesia showed that the public seeks information, chooses, and has an understanding of the environmental impact of the products used. A total of 33.9 respondents admitted to considering the reputation of a bank in the environmental sector. This figure is quite encouraging, although more people still pay attention to service quality (71.6%), financial performance (66.9%), products (62.7%) and social responsibility (57.6%). In fact, the majority of respondents stated that green finance principles are important for them in choosing a bank, with an average score of 8 out of 10 related to the level of importance of green finance principles.

Awareness of environmental issues in the financial sector was also shown by respondents who invested in the stock market. As many as 66.1% of respondents own shares in companies that prioritize ESG practices. The reason for choosing green investment is allegedly because they feel safer with a good company reputation (75.3%) and help protect the environment (61.8%).

Figure 3. Investment Practices in Companies that Apply ESG.

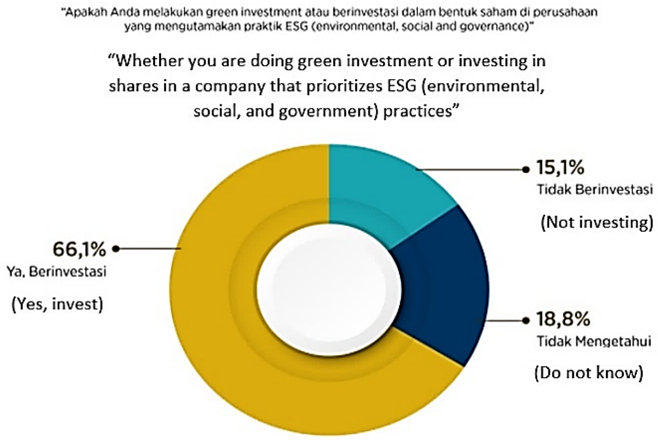
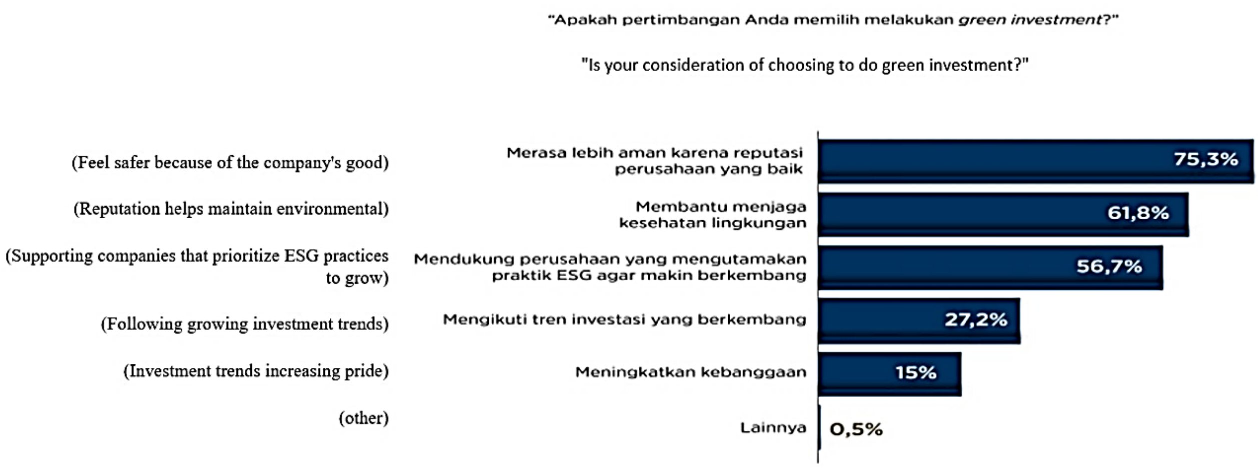


Figure 4. Reasons A Green Investment



However, 42.3% of respondents do not know whether the bank they use has applied green finance principles. This is reflected in respondents' perceptions of the challenges in improving green finance in Indonesia. As many as 75.3% of respondents consider public awareness of the use of sustainable products is still low. Furthermore, 50.5% of respondents feel that people consider more considering the price and financial benefits of the financial products used. To increase public awareness, education, and communication about the implementation of green finance principles and their benefits must continue to be carried out. The opportunity to improve green finance practices is still very open. This is evidenced by the large willingness of respondents (38%) to switch to other banks if the bank they currently use is proven not to apply green finance principles.

Financial institutions can be a catalyst in driving development towards a more sustainable direction while solving climate problems through the allocation of funding to green and environmentally friendly sectors. The involvement of financial institutions is part of an important solution to drive the transformation of industry business practices through sustainability due diligence and ESG risk management. Currently, various international financial institutions have begun to show their direction of change and ambition through the declaration of net zero emission targets (NZE) by 2050. However, the challenge is how to ensure that the financing activities of financial institutions are really in line with the commitments that have been stated. Without intervention from the banking and investment sectors so that business practices can be more responsible, climate change that causes global warming will continue to create ecosystem imbalances that will eventually have an impact on economic supply chains and even threaten financial system stability. As a signatory to the Paris Agreement, Indonesia has an obligation to achieve the common goals, namely: holding the rate of global temperature rise below 2 degrees Celsius even below 1.5 degrees Celsius compared to preindustrialization levels and reducing emissions by 29% (own efforts) and 41% (international support) from BAU 2030.

To achieve the targets outlined in the Nationally Determined Contribution (NDC), massive financing is needed to support climate change mitigation and adaptation efforts. This is in line with article 2.1 of the Paris Agreement which states "to create consistent financial flows to achieve development that is low in greenhouse gas emissions and resilient to climate change". CPI in FFA (2020) states that at the ASEAN level, Indonesia is the country that needs the largest green finance, estimated at around 247 billion USD in 2030 to achieve the NDC target of 29%. However, of this target, only USD 13.2 billion was channeled by private financing between 2015-2018, indicating that Indonesia must immediately mobilize funding to achieve its NDC.

Based on these considerations, Indonesia needs to develop a coherent policy so that support and resources can be optimally mobilized, including from the banking sector. In line with the existing momentum, the world is currently experiencing an era of transition from the conventional financial system to a more sustainable direction. This is also influenced by increasing investor demand and awareness to combine short-term profit orientation with environmental and social interests. However, transition commitments have not been fully followed by ambitions to immediately exit financing into industries that fuel climate change. At the global level, total green investment assets grew by 15 percent in two years or reached US$ 35.3 trillion in 2020 (GSIA, 2020). On the other hand, the "Banking on Climate Chaos 2021" report reveals that the 60 largest banks worldwide have channeled more than US$ 3.8 trillion into the fossil fuel industry since the Paris Agreement was signed in 2015. The increase in sustainable financing without being followed by efforts to phase out raises contradictions and questions about the credibility of financial institutions' commitment to support climate change action.

Indifference to climate risk and failure to adapt will increase financial institutions' exposure to credit risk. According to the IMF, climate-related risks can be classified into two categories: (1) physical risks arising from extreme weather events and the catastrophic impacts of climate change and (2) transition risks due to changes in climate policy, technology and market sentiment during the adjustment process to a low-carbon economy. The transition process can lead to the risk of stranded assets where assets will be devalued and neglected, resulting in financial losses to financial institutions and even threatening financial system stability (IESR, 2021). Therefore, portfolio management that prioritizes climate goals is considered to be able to increase the resilience and competitiveness of financial institutions in the long term.

In Indonesia, the implementation of sustainable finance is still in its early stages. Based on OJK data, total lending and financing in the green sector reached Rp809.75 trillion rupiah during the period 2015 to 2019. In 2019, OJK has published a Reference Book for Credit/Financing of Palm Oil Plantations and Industry as a banking guide on sustainable palm oil plantation practices. In addition, OJK has also published the Sustainable Finance Roadmap for the 2021-2025 Period which focuses on the agenda of preparing taxonomies as green classification standards and developing innovative sustainable project financing schemes. Although sustainable finance practices and policies have evolved in recent years, there is still a considerable gap.

The concept of sustainable finance in Indonesia still faces many challenges and obstacles in mainstreaming. Among them are business as usual mindset and behavior, limited human resource capacity in the field of ESG management and the absence of green classification standards that cause differences in perceptions of sustainable activities. In addition, cross-sectoral policy disharmony is an obstacle in building a sustainable financial ecosystem in Indonesia. However, at the same time, sustainable finance initiatives are a new investment opportunity for financial institutions to support ESG-minded financing.

Since 2014, Responsibank Indonesia, a civil society coalition that focuses on encouraging banks to be more responsible, conducted a study of state-owned banks, national private banks, and foreign banks in the BUKU III and BUKU IV categories operating in Indonesia to assess bank credit and investment policies from ESG aspects. As part of the global network of Fair Finance Guide International (FFGI), ResponsiBank adopts FFGI methodology which has been applied in several countries such as the Netherlands, Belgium, Brazil, Denmark, India, Japan, Germany, Norway, France, Sweden, and Thailand.

In 2020, ResponsiBank conducted a study of 11 banks operating in Indonesia, namely HSBC, DBS, BNI, BCA, BRI, Maybank, BJB, Bank Mandiri, CIMB Niaga, Bank Danamon, and Bank Permata based on Annual Reports, Sustainability Reports, Corporate Governance Reports, sectoral policy documents, and other public documents. There were 18 themes assessed which were divided into cross-cutting, sectoral, and operational theme categories. On the cross-cutting and sectoral themes, studies were conducted on internal policies and banking credit and investment policies in financed companies. Cross-cutting themes include climate change, corruption, gender equality, human rights, workers' rights, biodiversity, and taxation. Sectoral themes include armaments, food, forestry, manufacturing industry, mining, oil and gas, power generation. Meanwhile, the operational theme focuses on the bank's internal policies consisting of consumer protection, financial inclusion, remuneration, as well as transparency and accountability. This review is limited to written policies published by banks, but not to the level of implementing financing practices.

Judging from the report on the distribution of green financing to four commercial banks, namely BNI, BRI, Bank Mandiri and BCA, there are MSMEs that have participated in obtaining green financing. In this case, the bank participates in carrying out one of Nawacita's missions, namely a productive, independent and competitive economic structure through green financing in order to realize an increase in business scale for all business sectors, including MSMEs, in order to be able to upgrade or Scalling Up MSMEs.

The phenomenon of four major commercial banks in Indonesia (BRI, BNI, Bank Mandiri and BCA) shows that there is a sincerity in the distribution of green financing in sustainable business activities as an effort to participate in maintaining economic, social and environmental balance through medium, micro, medium enterprises including cooperatives in Indonesia.

Increasing world attention on environmental issues, increasingly requires banks to immediately transform the behavior of their activities, through the concept of green financing which basically encourages that every economic activity must be able to reduce negative impacts on the climate and environment. Bank Indonesia's attention is very serious as evidenced by the issuance of Bank Indonesia Regulation No. 14/15/PBI/2012 concerning Asset Quality Assessment of Commercial Banks with the aim that national banks consider environmental feasibility factors in conducting business feasibility assessments.

Green finance can be scaled up through a country's regulatory framework or by increasing investment in clean and green technologies. In Indonesia's National Long-Term Development Plan (RPJPN), it is stated that the nation is committed to realizing a balanced and sustainable Indonesia by increasing the economic use of natural resources and the environment in a sustainable manner. The nation is also committed to improving the management of natural resources and the environment to support the quality of life.

In its report entitled "The OECD Clean Energy Finance and Investment Policy Review of Indonesia", the Organization for Economic Cooperation and Development (OECD) stated that Indonesia can lead the world in clean energy development by reforming the mobilization of investment in renewable energy and energy efficiency. The sectors mentioned above are very important in accelerating Indonesia's transition to the implementation of green energy, while supporting the nation's recovery from the COVID-19 pandemic.

As a commitment to realize the 2060 Carbon Neutral target, Perusahaan Listrik Negara (PLN) will invest 500 billion US dollars to support green energy and start decarbonization. To achieve this, PLN is preparing to get opportunities in green financing. Since last year, PLN has received a US$500 million green loan through the World Bank's Multilateral Investment Insurance Agency (MIGA), becoming the first green loan received by a state-owned enterprise. The funds are directed to the development of renewable energy and environmentally friendly energy infrastructure.

To further open green financing opportunities, PLN provides several options on different instruments. First, green bonds. These bonds are exclusively applied to fund projects with clear environmental benefits. Second, social obligations, which will be used for strategic projects that have a direct impact on society. Sustainability bonds are a third option, which can be applied exclusively to fund a combination of green and social projects.

The 2021 United Nations Climate Change Conference (COP26) further opens up opportunities for Indonesia to become a major destination for global green investment. The OECD report also states that support for renewable energy investments (including some tax incentives) has increased in recent years and is a sign that the soon-to-be-enacted Presidential Regulation on renewable energy will facilitate market growth.

With the Indonesian government's renewable energy projects and developments in sectors such as downstream industries, green finance is the right solution that is expected to support Indonesia's progress towards a more sustainable future.

The development of this practice is expected to apply sustainable finance principles through the creation of financial products and services that can contribute to financial system stability through environmentally friendly lending policies. Thus, the objectives of sustainable finance regulated by the Financial Services Authority can be applied by banks through the development of financial products and services that apply the principle of sustainability. A critical factor that needs to be considered is the need to increase the ability of bank employees to adopt green banking practices through education and training activities on the environment. Some banks have declared as green banks but so far, the issues of green banking implementation are very diverse. Also, the absence of technical guidelines for banks to implement green banking will make it difficult to evaluate compliance and increase capacity in its implementation.

5. Conclusion and Suggestion

The conclusion of the study is that green finance can be improved through a country's regulatory framework or by increasing investment in clean and green technologies. In Indonesia's National Long-Term Development Plan (RPJPN), it is stated that the nation is committed to realizing a balanced and sustainable Indonesia by increasing the economic use of natural resources and the environment in a sustainable manner. The nation is also committed to improving the management of natural resources and the environment to support the quality of life.

The author has suggested that OJK should encourage FSIs to contribute to emission reduction targets by ensuring the business sector has a comprehensive analysis of how the target will be achieved, including requiring the business sector to have climate change control experts in its human resource structure.

Reference

Arikunto, Suharsimi. (2014). Prosedur Penelitian: Suatu Pendekatan Praktik, Cet. 15 (Jakarta: Rineka Cipta.

Candra. (2019). Policy Brief Policy Brief. Pancanaka, 1(04), 14. https://kebijakankesehatanindonesia.net/images/2019/policy_brief_penguatan_kbk_dalam_meningkatkan_mutu_rujukan_non_spesialistik.pdfOJK. (2021). Road Map Keuangan Berkelanjutan Tahap II (2021-2025)-The Future of Finance

Debrah, Caleb, Chan, Albert Ping Chuen, & Darko, Amos. (2022). Green finance gap in green buildings A scoping review and future. Volume 207, Part A, January 2022, 108443

Dewi, L. S. (2020). Peranan Perbankan Dalam Mendukung Green Economy Melalui Program Green Financing. Strategi Pengembangan Kinerja Koperasi Dan UMKM, 161–168.

Handayani, H., Muharam, H., Mawardi, W., & Robiyanto, R. (2018). Determinants of the Stock Price Volatility in the Indonesian Manufacturing Sector. *INTERNATIONAL RESEARCH JOURNAL OF BUSINESS STUDIES*, *11*(3), 179-193.

Hasanah, Nurul, & Hariyono, Slamet. (2022). Analisis Implementasi Green Financing Dan Kinerja Keuangan Terhadap Profitabilitas Perbankan Umum Di Indonesia. Jurnal Ekobis: Ekonomi, Bisnis & Manajemen Vol 12, Nomor 1 (2022)

Istiowati, Sri Indah. (2018). Analisis Strategi Pembiayaan dalam Upaya Optimalisasi Konsep Green Finance. Universitas Islam Negeri (UIN) Ibrahim Malik Malang

Katadata.co.id. (2022). Peluang, Tantangan, dan Inisiatif Green Finance di Indonesia (katadata.co.id). https://katadata.co.id/green-finance-di-indonesia?cv=1

Kementerian Investasi BKPM. (2022). Pembiayaan Hijau Selamatkan Masa Depan Indonesia. https://www2.bkpm.go.id/id/publikasi/detail/berita/pembiayaan-hijau-selamatkan-masa-depan-indonesia?cv=1

Khan, Muhammad Asif, Riaz, Hammad, & Saeed, Masood Ahmed Abubakar. (2022). Does green finance really deliver what is expected an empirical perspective. Volume 22, Issue 3, May 2022, Pages 586-593

Lexy J, Moleong. (2018). Metodologi Penelitian Kualitatif, Cetakan ketiga. Bandung: PT Remaja Rosdakarya.

OGIINDONESIA.com. (2022). Akselerasi PLTS Atap sebagai Strategi Green Economic Recovery Pasca-COVID19. http://www.ogindonesia.com/2020/05/akselerasi-plts-atap-sebagai-strategi.html?cv=1

Sugiyono. (2018). Metode Penelitian Kuantitatif. Bandung: Alfabeta.

Susilowati, Heni. (2022). Peran Green Finance Dalam Sustainable Development. https://stiestekom.ac.id/berita/peran-green-finance-dalam-sustainable-development/2022-01-19?cv=1

Wang, Yao, & Zhia, Qiang. (2016). The role of green finance in environmental protection Two aspects of market mechanism and policies. CUE2016-Applied Energy Symposium and Forum 2016: Low carbon cities & urban energy systemsEnergy Procedia 104 (2016) 311 – 316

Wijaya, Uttary Selvira Hendrawan, &Leon, Farah Margaretha. (2022). Pengaruh Green Finance, Volatility, Risk dan Regulation Terhadap Investment decisions Pasca Covid-19 di Indonesia. Jurnal Ecoment Global: Kajian Bisnis dan Manajemen, Volume 7 Nomor2 Edisi Agustus 2022

Wintoro, Joko. (2012). Eksploratori Tujuan Manajemen Keuangan Bisnis Hijau. Jurnal Keuangan dan Perbankan, Vol.16, No.1 Januari 2012, hlm. 27–36

Yuliawati, T., Rani, A. M., & Assyofa, A. R. (2017). Efektivitas Implementasi Green Financing Sebagai Alternatif Pembiayaan Berkelanjutan Bagi UMKM Sektor Industri Pengolahan Alas Kaki Di Kota Bandung. Jurnal Manajemen Dan Bisnis (Performa), XIV(2), 152–162.

Yuniarti, Sari. (2013). Peran Perbankan Dalam Implementasi Bisnis Hijau dan Pembangunan Berkelanjutan. Jurnal Keuangan dan Perbankan, Vol.17, No.3 September 2013, hlm. 463–472

Yusuf, A. M. (2014). Metode Penelitian: Kuantitatif, Kualitatif & Penelitian Gabungan. Jakarta: Prenadamedia Group.