

## Exploring Green Finance Studies in Indonesia: A Systematic Literature Review (SLR) for Sustainable Development

**Widya Ningsih**

Faculty of Economics and Business, Sebelas Maret University, Indonesia  
(widyaningsih\_98@student.uns.ac.id)

**Wildan Izzulhaq**

Faculty of Economics and Business, Sebelas Maret University, Indonesia  
(wildanizz17@student.uns.ac.id)

**Doddy Setiawan**

Faculty of Economics and Business, Sebelas Maret University, Indonesia  
(doddy.setiawan@staff.uns.ac.id)

### ABSTRACT

This study aims to provide empirical evidence on the development of green finance research in Indonesia, driven by the relevance of this topic in supporting sustainability goals and government environmental policies. This topic is crucial given the increasing urgency of climate change and the need for sustainable development, which significantly impacts the environment, economy, and society globally, including in Indonesia. The study explores trends in green finance literature and the theories applied, offering a systematic review that has rarely been conducted before. The method used is a Systematic Literature Review (SLR), which systematically analyzes 23 articles from the Scopus and SINTA databases, accredited from Sinta 2 to Sinta 6 in the economics category. The articles are classified based on the publication journal, annual publication frequency, research methods, theoretical focus, and themes discussed. The results show that nationally accredited Sinta 2 journals have the highest number of publications, accounting for 29% of the total articles, with most articles published between 2021 and 2024, indicating a rapidly growing trend in recent years. Quantitative methods dominate the research approaches, while 48% of the articles lack a clear theoretical foundation, with Legitimacy theory and Stakeholder theory being the most frequently used. Five main themes were identified in this study: "The Role and Dynamics of Green Finance in Sustainable Finance," "Green Sukuk and Environmentally Friendly Financing," "The Role of Banking and Sharia Financing in Green Finance," "Corporate Governance and Green Banking Disclosure," and "The Effectiveness and Implications of Green Finance," with Corporate Governance and Green Banking Disclosure being the most dominant themes. These findings indicate that the successful implementation of green finance in Indonesia is highly dependent on strong policy support, sustainable financial innovation, and increased stakeholder engagement.

**Keywords:** Green Finance, Systematic Literature Review, Sustainability, Environmental Policy, Indonesia.

## INTRODUCTION

In recent decades, the issues of sustainability and climate change have become increasingly urgent themes worldwide. Climate change, driven by greenhouse gas emissions (Solomon et al., 2010). That can have significant negative impacts on the environment, economy, and society (Abbass et al., 2022; Adger et al., 2005; Feliciano et al., 2022). These impacts include global temperature increases, extreme weather events, rising sea levels, and ecosystem damage, all of which affect human well-being and biodiversity (Baste & Watson, 2022; Weiskopf et al., 2020). Therefore, efforts to combat climate change and support sustainable development are becoming increasingly important.

In response to the challenges of climate change and the need for sustainable development, the concept of green finance has emerged. This concept is important because climate change significantly impacts the financial and economic sectors (Martin, 2023). From a corporate perspective, there is a positive relationship between sustainability efforts and profitability, where companies that emphasize sustainability in their stakeholder reports tend to show higher returns on assets (Ulsnes & Steinshamn, 2020). Green finance encompasses all forms of financing designed to support environmentally friendly projects, reduce the impact of climate change, and promote long-term sustainability (Dikau & Volz, 2021). Green finance involves various financial instruments, including green bonds, green loans, and sustainable investments that consider environmental, social, and governance (ESG) factors (Gilchrist et al., 2021; Martin, 2023).

Green finance not only funds green projects but also serves as an innovative mechanism to redirect investment flows towards more sustainable directions (Agrawal et al., 2024; Falcone, 2019; K. H. Wang et al., 2022), thus becoming a key driver for the economic transition towards an inclusive and low-carbon model (Li et al., 2022). In addition to supporting climate change mitigation and natural resource conservation (Dai & Chen, 2023; Zhang et al., 2022). green finance also provides incentives for companies to improve ESG practices, strengthen global competitiveness, and accelerate the achievement of the Sustainable Development Goals (SDGs) (Ma et al., 2024; Udeagha & Muchapondwa, 2023; B. Wang et al., 2023). Consequently, green finance can balance economic growth with environmental preservation, transforming investment paradigms to support sustainable development and reduce climate change risks (Falcone, 2019; Udeagha & Muchapondwa, 2023).

Indonesia is a country with rich biodiversity and abundant natural resources (Persoon & Weerd, 2006; Saleh et al., 2020). Therefore, Indonesia urgently needs to implement green finance to support sustainable development and address the challenges of climate change. Taridala et al. (2023) argue that green finance is one of the ideal solutions for Indonesia to mitigate these challenges. Indonesia's commitment to addressing global climate change is demonstrated through its participation in the Paris Agreement, which was then integrated into national law through Law No. 16 of 2016 (KLHK, 2021) and reinforced by Presidential Regulation No. 111 of 2022 on SDGs, designed to encourage the financial sector to invest in projects that have a positive impact (Budiantoro, 2023). This step reflects Indonesia's serious efforts to protect the environment and promote sustainable finance.

The potential for green finance in Indonesia is fast, driven by increasing attention to sustainability. According to the Southeast Asia's Green Economy 2024 Report, Indonesia became the largest recipient of green investment in Southeast Asia in 2023, with investment flows reaching nearly USD 1.6 billion, or about 25% of the total investment in the region (SAGE, 2024). In addition, green financial instruments such as green sukuk have also shown significant growth. The Green Sukuk Allocation and Impact Report noted that the value of green sukuk increased from USD 1.25 billion since its first issuance in 2018 to USD 6.9 billion in 2022 (Ministry of Finance Republic of Indonesia, 2023). This reflects the high interest of both domestic and international investors. The government also supports the development of green finance through policies such as the Green

Taxonomy, which aims to accelerate sustainable financing to achieve Indonesia's net-zero emission targets (OJK, 2024).

Despite the significant potential of green finance in Indonesia, various barriers and challenges must be overcome to maximize its benefits. According to Kompas.com (2023), one of the barriers to green finance in Indonesia is the high cost of obtaining green industry certification, considering many industries lack such certification, making it difficult to access green financing from banks. Other major challenges include low public awareness of environmental issues and limited knowledge of sustainable financial products, with only 20.8% of the population having heard of and understood the concept of green finance (KIC, 2022). Therefore, collaborative efforts from various stakeholders are needed to address these barriers through increased green finance literacy, institutional capacity development, and supportive policy formulation.

In this context, in-depth research on green finance in Indonesia becomes crucial, so the purpose of this research is to provide empirical evidence on the development of green finance studies in Indonesia. This study uses a Systematic Literature Review (SLR) approach to collect and analyze relevant scientific literature. This research analyzes twenty-three green finance articles sourced from Scopus and Sinta 2 to Sinta 6, then classifies these articles based on annual publication frequency, research methods, theoretical focus, and themes used in green finance studies in Indonesia so that the results of this research are expected to provide an academic foundation to support theoretical and empirical research on new issues related to green finance in Indonesia.

This article is organized into five sections. The second section contains literature relevant to this study. The third section explains the Systematic Literature Review (SLR) method used, including inclusion and exclusion criteria, as well as the data collection and analysis process. The fourth section presents the results and discussion of the analysed articles, including a sample description containing the classification of articles based on publication journals, annual article publications, research methods, and theoretical focus, as well as a content analysis classifying themes related to green finance in Indonesia. Finally, the fifth section presents the conclusions of this article.

## LITERATURE REVIEW

### Green Finance in Indonesia

In general, the definition of green finance varies. According to Zhan et al. (2023), green finance encompasses the use of financial services to support and promote environmentally sustainable practices. Desalegn & Tangl (2022) define green finance as a strategy that allocates funds to projects promoting sustainable growth, such as providing loans to companies committed to environmental conservation. In a broader context, green finance refers to all forms of financing designed to support environmentally friendly projects, reduce the impact of climate change, and encourage long-term sustainability (Dikau & Volz, 2021). In practice, green finance is applied to the operational practices of banking through the concept of green banking. Green banking, as an integral part of green finance, offers products and services that support environmental initiatives, such as green loans and banking policies focused on sustainability (Chen et al., 2022; Desalegn & Tangl, 2022).

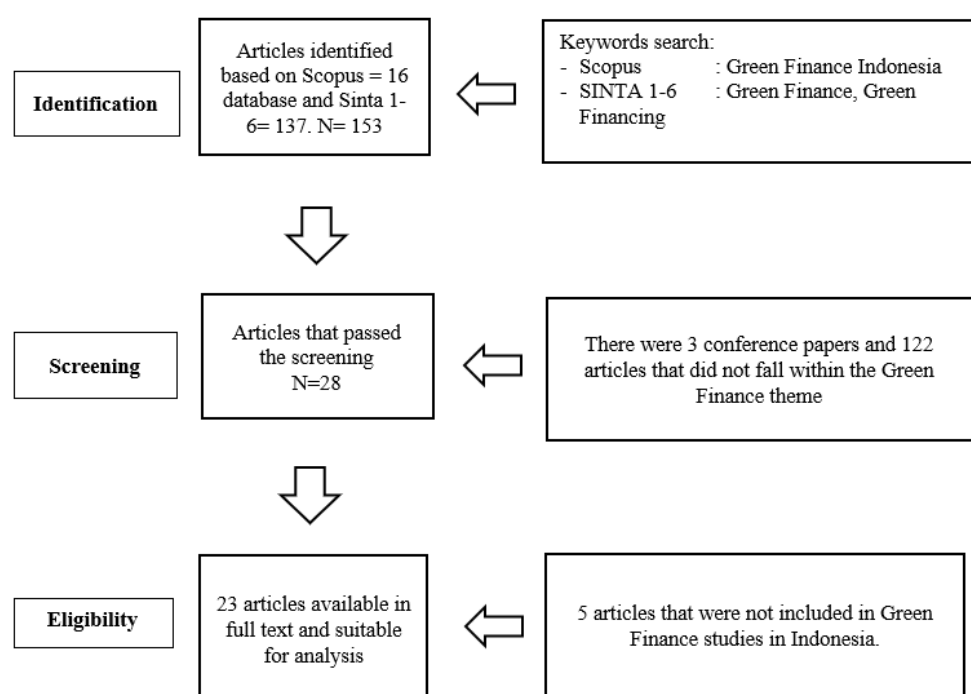
In Indonesia, the commitment to green finance has been evident since 2004 through the sustainable green economy program (Wiryomartono, 2015). The government's efforts to reduce carbon emissions and address global climate change are reflected in the Long-Term Development Plan (RPJP) 2005-2025, which emphasizes the sustainable use of natural resources and the development of a green economy (Wijaya, 2019). Green finance is seen as a key solution to these challenges (Taridala et al., 2023). Indonesia's participation in the Paris Agreement, integrated into Law No. 16 of 2016 (KLHK, 2021), underscores this commitment. Presidential Regulation No. 111 of 2022 on SDGs further strengthens the financial sector's push to invest in environmentally friendly

projects (Budiantoro, 2023). Additionally, the green taxonomy issued by the financial services authority reinforces this framework by ensuring that investments are directed toward practices that support sustainability and reduce carbon emissions (Pandu, 2022).

### METHOD, DATA, AND ANALYSIS

This study employs the Systematic Literature Review (SLR) method, a qualitative approach aimed at thoroughly analyzing a topic (Nursulistyo et al., 2022). This method is designed to uncover the development of research topics and identify differences in previous studies (Villas et al., 2008). The SLR in this study follows the method developed by Shu et al. (2022), which involves two main components. First, the identification and selection process of relevant articles using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria. Second, the data collection process, which includes identifying and presenting key issues related to green finance research in Indonesia.

In the first stage, articles were collected from journals indexed in Scopus and accredited journals in Indonesia (SINTA 1-6). The keywords used to search for articles in the Scopus database were "Green Finance Indonesia," while in the SINTA database, the keywords "Green Finance" and "Green Financing" were used, with a focus on journals in the 'economics' category. The selection of articles was then conducted using the PRISMA method through three main steps: (1) identification, (2) screening, and (3) eligibility. The identification process resulted in 137 articles from the SINTA 1-6 database and 16 open-access articles from the Scopus database. During the screening process, conference papers, articles not aligned with the Green Finance theme, and articles not focused on Green Finance studies in Indonesia were excluded. At the eligibility stage, 23 final articles in full-text format were obtained, consisting of 17 articles from the SINTA 2 to SINTA 6 databases and 6 articles from the Scopus database. The details of the article selection process using the PRISMA approach are shown in Figure 1 below:



**Figure 1. Research Protocol**

In the second stage, the researchers described the sample based on the classification of articles according to the publication journal, publication trends or frequency per year, research methods, and

theoretical focus (Fiandrino et al., 2022; Roberts et al., 2021). Next, the researchers applied a content analysis approach (Mayring, 2014) to examine the academic themes in Green Finance studies in Indonesia. The classification based on publication frequency per year and theoretical focus was conducted first (Fiandrino et al., 2022). Subsequently, the articles were classified according to research methods and themes (Ernawati & Aryani, 2019).

## RESULT AND DISCUSSION

### Articles Classification Based on Publication Journals

This study analyzes 23 articles on Green Finance in Indonesia from the Scopus and SINTA databases, consisting of 6 articles from the Scopus database and 17 journals in the Sinta database accredited from Sinta 2 to Sinta 6 in the economics category. This is illustrated in Table 1 below:

**Table 1. Articles Classification**

No	Journal Names	Accreditation	Author	Number of Articles	Percentage
1	Environment, Development and Sustainability	Q1	(Chien et al., 2024; Gunawan et al., 2022)	2	9%
2	Environmental Science and Policy	Q1	(Suroso et al., 2022)	1	4%
3	Ecological Indicators	Q1	(D'Orazio & Thole, 2022)	1	4%
4	Climate Policy	Q1	(Setyowati, 2023)	1	4%
5	Environment and Planning E: Nature and Space	Q1	(Yunita et al., 2023)	1	4%
6	International Journal of Sustainable Development and Planning	Q3	(Johan, 2022; Musyaffi et al., 2023)	2	9%
7	JIA (Jurnal Ilmiah Akuntansi)	Sinta 2	(Purnamawati, 2022)	1	4%
8	Jurnal Economia	Sinta 2	(Handajani et al., 2019)	1	4%
9	Jurnal Keuangan dan Perbankan	Sinta 2	(Wintoro, 2012; Yuniarti, 2013)	2	9%
10	JEJAK: Jurnal Ekonomi dan Kebijakan	Sinta 2	(Primambudi, 2023)	1	4%
11	Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah	Sinta 2	(Hariyani & Kusuma, 2020)	1	4%
12	JAB: Jurnal Akuntansi dan Bisnis	Sinta 2	(Firmansyah & Kartiko, 2024)	1	4%
13	Journal of Islamic Economics Lariba	Sinta 3	(Fad, 2021)	1	4%
14	Jurnal Ekonomi Syaiah Teori dan Terapan	Sinta 3	(Affandi & Rahmawati, 2023)	1	4%

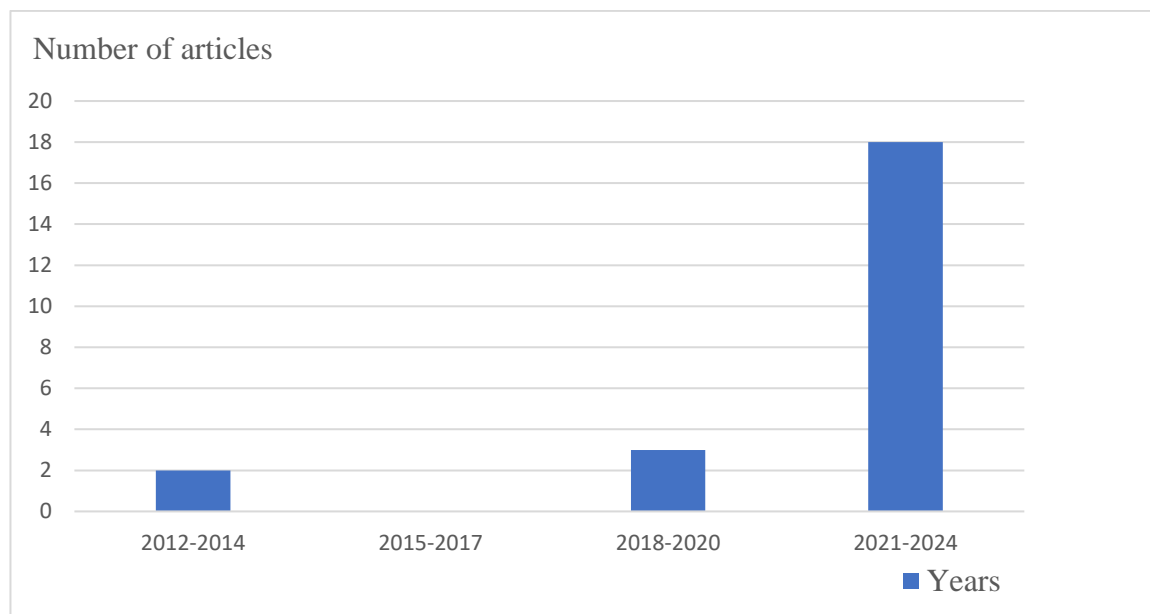
No	Journal Names	Accreditation	Author	Number of Articles	Percentage
15	Tazkia Islamic Finance and Business Review	Sinta 3	(Iryani et al., 2023)	1	4%
16	Jurnal Ekonomi	Sinta 4	(Fauzin et al., 2022)	1	4%
17	Indonesian Journal of Economics and Management	Sinta 4	(Widodo et al., 2023)	1	4%
18	Jurnal Akuntansi Bisnis dan Ekonomi	Sinta 5	(Hayati et al., 2020)	1	4%
19	Jurnal Mirai Management	Sinta 5	(Handayani, 2023)	1	4%
20	Jurnal Ilmiah Ekonomi Global Masa Kini	Sinta 6	(Petro et al., 2023)	1	4%
<b>Total Artikel</b>				<b>23</b>	<b>100%</b>

Table 1 shows that the articles analyzed in this study are classified based on the journal of publication and its accreditation level. Of the 23 articles, the publications can be divided into two main categories: Scopus-accredited journals and nationally accredited Sinta journals. Several articles were published in Scopus-accredited journals, with some at a very high accreditation level, specifically Q1. Journals such as *Environment, Development and Sustainability*, *Environmental Science and Policy*, *Ecological Indicators*, *Climate Policy*, and *Environment and Planning E: Nature and Space* are Scopus Q1 journals, accounting for 25% of the total articles, indicating a focus on publication in highly reputable international journals. Additionally, there are articles published in Scopus Q3 journals, such as the *International Journal of Sustainable Development and Planning*, which contribute 9% of the total articles.

On the other hand, most of the articles in this study were published in nationally accredited Sinta journals, particularly Sinta 2. Sinta 2 journals, such as *JIA (Jurnal Ilmiah Akuntansi)*, *Jurnal Economia*, *Jurnal Keuangan dan Perbankan*, *JAB (Jurnal Akuntansi dan Bisnis)*, *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah*, and *JEJAK (Jurnal Ekonomi dan Kebijakan)*, account for 29% of the total articles, making them the group of journals with the largest contribution in this study. Other articles are distributed across journals with lower accreditation, such as Sinta 3 to Sinta 6, each contributing 4% of the total articles. This distribution indicates that the majority of research is published in highly reputable journals, particularly Scopus and Sinta 2, with the remainder spread across Sinta 3 to Sinta 6. This reflects a balance between publications in international and national journals, as well as an effort to reach various scientific communities.

### Classification Based Publication Per Year

Research on green finance studies in Indonesia has shown significant development in recent years. Green finance, which refers to financial practices that support sustainable and environmentally friendly development, has become an increasingly relevant theme amid growing awareness of climate change and the need for environmental conservation. Publications on Green Finance in Indonesia began in 2012 and continued through 2024, with a sharp increase in the number of articles published during the 2021-2024 period. This trend is illustrated in Figure 1 below:



**Graph 1. Publication Per Year**

Figure 1 above shows the publication trend of research on green finance in Indonesia. The research first appeared during the 2012-2014 period with two articles, reflecting the initial stage of awareness about sustainable finance to support the Long-Term Development Plan (RPJP) 2005-2025, which emphasizes the importance of sustainable natural resource utilization and green economic development (Wijaya, 2019). In the 2015-2017 period, no articles were published. Then, there was an increase in the 2018-2020 period with three articles. Subsequently, in the 2021-2024 period, a significant surge occurred with 18 articles. This surge was driven by increased regulations and government policies, such as the renewable energy target of 23% by 2025 and green finance policies from the Financial Services Authority (OJK), including the issuance of the green taxonomy (Kemenkeu, 2022; Pandu, 2022). This phenomenon indicates growing interest and resource allocation for research in the field of green finance, which is expected to continue expanding.

#### **Articles Classification Based on Research Method**

Based on the research methods used, out of the total 23 articles on green finance in Indonesia, quantitative methods are the most dominant, employed in 11 articles, which is approximately 48% of the overall research. Qualitative methods follow with 10 articles, accounting for 43% of the total publications. Meanwhile, mixed methods and surveys were each used in only one article, representing 4% of the total. The dominance of quantitative and qualitative methods reflects the researchers' focus on measuring and understanding green finance phenomena from various perspectives, both through statistical data and in-depth analysis, as shown in Table 2 below:

**Table 2. Research Method**

No	Method	Number of Articles	Percentage
1	Quantitative	11	48%
2	Qualitative	10	43%
3	Mix Method	1	4%
4	Survey	1	4%
<b>Total</b>		<b>23</b>	<b>100%</b>

**Articles Classification Based on Theoretical Foundation**

Table 3 presents the distribution of articles based on the theoretical framework used in the research. Of the 23 articles on Green Finance in Indonesia that were analyzed, the majority of studies (48%) did not employ a specific theoretical framework. Among the studies that did use theory, Legitimacy Theory was the most frequently applied, used in 3 articles or 10% of the total, followed by Stakeholder Theory, which was used in 2 articles, comprising 7% of the total. The remaining theories, such as Innovation Resistance Theory, Transmission Mechanism Theory, Microeconomic Theory, Consumer Behavior Theory, and several others, were each used in only one article, representing 3% of the total publications. The diversity of theories used reflects the various approaches taken by researchers to understand different aspects of green finance, although most studies did not employ a specific theoretical framework.

**Table 3. Theoretical Foundation**

No	Theoretical Foundation	Number of articles	Percentage
1	Legitimacy Theory	3	10%
2	Innovation Resistance Theory	1	3%
3	Transmission Mechanism Theory	1	3%
4	Number Theory of Statistical	1	3%
5	Microeconomic Theory	1	3%
6	Index Number Theory	1	3%
7	Theory of Public Finance	1	3%
8	Stakeholder Theory	2	7%
9	Signalling Theory	1	3%
10	Analytic Network Process (ANP) Theory	1	3%
11	Consumer Behavior Theory	1	3%
12	Institutional Theory	1	3%
13	No Theory	14	48%
<b>Total</b>		<b>29</b>	<b>100%</b>



It is significant to note that 15 articles (38%) did not utilize a specific theoretical foundation, possibly because these studies were more focused on empirical or descriptive aspects rather than theoretical ones. On the other hand, Legitimacy Theory and Stakeholder Theory were the most frequently used, with Stakeholder Theory being one of the most influential theories in sustainability management research (Freeman & Dmytriyev, 2020). Meanwhile, Legitimacy Theory was employed in green finance research to explain how companies convince stakeholders that they contribute positively to sustainability and act in accordance with social values and norms (Chen et al., 2022; Fernando, 2014).

### Content Analysis

In this section, we present the results of the content analysis (Mayring, 2014). The 23 journal articles were categorized according to the research themes of the articles used in this study. Five categories encompass the academic themes of green finance research in Indonesia: the Role and Dynamics of Green Finance in Sustainable Finance, Green Sukuk and Environmentally Friendly Financing, the Role of Banking and Sharia Financing in Green Finance, Corporate Governance and Green Banking Disclosure, as well as the Effectiveness and Implications of Green Finance, as shown in Table 4 below:

**Table 4. Academic Themes**

NO	Academic themes	Number of articles	Percentage
1	Dynamics and Role of Green Finance in Sustainable Finance	5	22%
2	Green Sukuk and Eco-Friendly Financing Solutions	3	13%
3	Role of Banking and Sharia Financing in Green Finance	5	22%
4	Corporate Governance and Green Banking Disclosure	7	30%
5	Effectiveness and Implications of Green Finance	3	13%
<b>Total</b>		<b>23</b>	<b>100%</b>

Based on these findings, most research on green finance in Indonesia is classified under "Corporate Governance and Green Banking Disclosure," with 7 articles or 30% of the total articles analyzed, indicating a high focus on corporate governance and transparency in green banking. The themes "Dynamics and Role of Green Finance in Sustainable Finance" and "Role of Banking and Sharia Financing in Green Finance" each have 5 articles or 22% of the total articles analyzed, with the first theme exploring the role and adaptation of Green Finance in sustainable finance, while the second assesses the contribution of banking and the Sharia financing system to green financing. Lastly, the themes "Green Sukuk and Environmentally Friendly Financing" and "Effectiveness and Implications of Green Finance" each encompass three articles or 13%. The Green Sukuk theme focuses on Islamic financial instruments for environmentally friendly projects, while the Effectiveness and Implications theme evaluates the impact and effectiveness of Green Finance.

### **Dynamics and Role of Green Finance in Sustainable Finance**

This theme emphasizes the crucial role of green finance in achieving economic and environmental sustainability. Research by Chien et al. (2024) demonstrates that green finance can significantly enhance environmental preservation, especially when combined with technological advancements. Green finance also contributes to inclusive economic growth, particularly during crises such as the COVID-19 pandemic, by supporting a more equitable distribution of resources (Purnamawati, 2022). It also plays a role in meeting national climate targets, including in the context of international financing in Indonesia's energy sector (Suroso et al., 2022).

However, green finance faces challenges such as regulatory uncertainty and the impact of urbanization, which can threaten environmental sustainability (Yunita et al., 2023). Therefore, the feasibility and impact of green finance instruments, such as green bonds, need to be evaluated to ensure that sustainable development goals are achieved. This is because the development of green bond markets and SDGs often focus more on economic benefits and less on the tangible social or environmental impacts (Yunita et al., 2023). In this context, green banking plays a crucial role by supporting environmentally friendly financing, assessing risks, and strengthening fiscal and monetary policies that promote energy efficiency and pollution reduction (Yuniarti, 2013). Overall, green finance is not only about protecting the environment but also about creating a fairer and more sustainable economy. However, the success of green finance depends on supportive policy frameworks and effective integration with technological advancements.

### **Green Sukuk and Eco-Friendly Financing Solutions**

This theme explores the use of Green Sukuk as an Islamic financial instrument for financing projects that support sustainability, such as green infrastructure and renewable energy. The increasing interest in Green Sukuk in Indonesia since 2019 highlights the significant potential of this instrument, which can be further enhanced through improved financial literacy and effective marketing strategies (Affandi & Rahmawati, 2023). Essentially, Green Sukuk holds substantial potential for financing biofuel development initiatives in Indonesia, provided there is a commitment to business, greenhouse gas mitigation, and debt repayment (Primambudi, 2023).

In this context, Green Sukuk can boost participation from non-financial corporations and states and has been shown to provide sustainable benefits for renewable energy, supported by macroeconomic stability, although it requires a longer repayment period compared to conventional bonds (Primambudi, 2023). Meanwhile, research by Hariyani & Kusuma (2020) indicates that Green Sukuk also has potential as an Islamic financial instrument for financing municipal waste management projects, though challenges such as potential burdens and losses must be addressed. Overall, Green Sukuk plays a strategic role in supporting sustainable development, but its success depends on financial literacy, appropriate marketing strategies, and meticulous risk management.

### **Role of Banking and Sharia Financing in Green Finance**

This theme examines how Islamic financial institutions can support green finance by leveraging Sharia principles that promote sustainability. According to research by Fad (2021) & Johan (2022), Islamic financing and green financing can complement and integrate with each other to support Sustainable Development Goals, as the principles of fiqh al-bi'ah enable Islamic finance to contribute to environmental preservation and economic growth through carbon emission policies and financing for eco-friendly projects. Efficient Islamic financing has also been shown to enhance sustainability performance and green banking, assisting companies in planning future strategies with an environmental focus (Iryani et al., 2023)

Meanwhile, the strategy of intensifying cash waqf in Islamic banking, as detailed by Fauzin et al. (2022), shows significant potential to support green finance in Indonesia, as green finance is an effective tool for reducing the negative environmental impacts of economic development (Hayati et al., 2020). Therefore, the government needs to strengthen the role of Islamic banks as waqf managers, encourage collaboration with waqf institutions for product innovation, and develop regulations related to waqf obligations in Islamic banks (Fauzin et al., 2022). Overall, Islamic financing and green financing can collaborate to promote environmental preservation and sustainable development, advancing green finance in Indonesia through the principles of *fiqh al-bi'ah* and innovative strategies such as cash waqf intensification.

### **Corporate Governance and Green Banking Disclosure**

This theme focuses on how corporate governance practices and disclosure obligations in the banking sector support or impact the implementation and transparency of green finance. Effective corporate governance plays a crucial role in ensuring that financial institutions not only adhere to sustainability procedures but also maintain consistency in defining and reporting 'green' projects among financial institutions, as inconsistencies and tokenism in practices can arise from these challenges (Setyowati, 2023). Moreover, environmental disclosure in sustainability reports remains insufficient, with economic aspects being more dominant (Gunawan et al., 2022). Therefore, the implementation of green banking practices requires more standardized reporting guidelines to achieve consistency and transparency (Handajani et al., 2019).

Firmansyah & Kartiko (2024) reveal that green banking regulations can mitigate the negative impact of board size and independent commissioners on green banking disclosure. Effective green banking disclosure can also mediate the relationship between good governance and positive financial performance (Widodo et al., 2023). Research by Petro et al. (2023) emphasizes the importance of the Board of Commissioners in green banking disclosure, while Musyaffi et al. (2023) highlight the need for optimizing banking technology features to address barriers to green banking adoption. Overall, strong governance, appropriate regulations, and clear reporting standards are crucial for supporting transparency and the implementation of green finance in the banking sector.

### **Effectiveness and Implications of Green Finance**

This theme addresses the effectiveness of green finance and its impact on corporate performance and the achievement of sustainability goals. Wintoro (2012) highlights that the objective of Green Finance is to enhance shareholder wealth while protecting natural resources and social welfare, rather than solely focusing on economic profit. In this context, Handayani (2023) emphasizes the need for good regulation and investment in green technologies to support sustainable economic growth in Indonesia following COVID-19, in line with the National Long-Term Development Plan (RPJPN). Globally, the Climate-Related Financial Policy Index (CRFPI) measures how seriously countries are implementing environmentally friendly financial policies, indicating that developing countries such as Indonesia are actively engaged despite differences in their approaches (D'Orazio & Thole, 2022). Overall, the effectiveness of Green Finance relies on a combination of regulation, corporate commitment, and alignment with global sustainability goals to support sustainable development.

## CONCLUSION

This study presents a comprehensive systematic literature review (SLR) on the evolution of green finance in Indonesia, with a focus on theoretical perspectives. Of the 23 articles related to green finance research in Indonesia, 8 articles are from the Scopus database and 15 articles are from journals accredited by Sinta 2 to Sinta 6 in the economics category. The results indicate that national journals accredited by Sinta 2 have the highest number of publications, accounting for 29% of the total articles analyzed. Publications significantly increased during the period 2021-2024, influenced by government regulations and policies, such as the 23% renewable energy target for 2025 and the green finance policy from the Financial Services Authority (OJK), including the issuance of green taxonomy (Kemenkeu, 2022; Pandu, 2022). Quantitative methods are predominant in this research, with the main themes being Corporate Governance and Green Banking Disclosure. 48% of the articles lack a theoretical foundation, although Legitimacy Theory and Stakeholder Theory are the most frequently used theoretical frameworks.

The findings of this study indicate that the success of green finance in Indonesia heavily relies on strong policy support and increased stakeholder engagement. The study has limitations in the scope of the search database, covering only Scopus and SINTA, which restricts the breadth of the review. Theoretically, this study provides a basis for future researchers to explore various theoretical approaches to green finance. Practically, it offers valuable insights for companies, regulators, and policymakers in Indonesia and emphasizes the need for enhanced public literacy on green finance to encourage broader participation and industry growth. Future research is recommended to expand the scope of databases, including sources such as Springer, Emerald, DOAJ, Thomson Reuters, and Google Scholar, to gain a more comprehensive understanding of the development of green finance in Indonesia and to enhance the validity and reliability of the research findings.

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