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Legal regulation of green and sustainable bonds (SUKUK) A case study of the Saudi capital market authority

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Abstract

This paper deals with a very sensitive topic with several legal, economic, and other consequences, which is the legal regulation of green bonds (Sukuk) in Saudi Arabia. The paper analyzes the legal instructions for issuing green, social, and sustainable bonds. The guide issuing these bonds, which was prepared under the supervision of the Saudi Capital Market Authority to regulate the issuance of these bonds, consider as the legal basis for their issuance. However, the guide is not mandatory, as it is described as an advisory guide. Issuers are required to specify the areas of non-compliance if they fail to adhere to any of its provisions, without specifying a particular penalty for non-compliance. The flexibility adopted by the guide in issuing these bonds likely stems from their recent introduction and the desire to encourage companies to issue green, social, and sustainable bonds. This also supports the private sector in achieving Saudi Arabia's "Zero Carbon" Initiative, one of the initiatives of " Saudi Vision 2030", which aims to achieve net-zero carbon emissions by 2060. The paper recommends several measures, including a gradual transition to making the guide's provisions mandatory, as well as the issuance of regulations. The guide includes penalties for violating the provisions governing the issuance of green, social, and sustainable bonds.

Keywords: Green bonds (Sukuk), Sustainable development, Sustainable debt instruments, Green bond principles.

Introduction

The international community has never faced a challenge requiring the concerted efforts of all nations as much as climate change. All countries will be affected, regardless of their contribution to global warming and, consequently, climate change. Therefore, nations have strived to steer human activities toward becoming environmentally friendly and harmless. This international direction is mandatory under international obligations imposed by numerous international agreements, most notably the Paris Agreement, which aims to limit the rise in global temperatures.

However, the defining characteristic of countries' attempts to direct their activities toward environmentally friendly and harmless practices is the very high cost of these activities. Furthermore, the financial return on these environmentally friendly projects is not substantial compared to the expenses incurred, especially when comparing the return and cost of non-environmentally friendly projects. Therefore, countries have focused on two important approaches. The first approach is integrating private companies into the realm of environmentally friendly initiatives. Actuly the Environmental responsibility is no longer solely the responsibility of the state; companies and factories now bear a significant share of this responsibility, as they are the primary contributors to environmental pollution, global warming, and its associated harmful consequences. The second approach involves increasing the value derived from corporate social responsibility. By combining these two elements, companies can establish environmentally friendly projects funded by individuals and institutions concerned with the environment and climate. This achieves two objectives: first, the creation of environmentally friendly projects and the positive impact these projects have on the environment, which is a fundamental element of society. Consequently, the positive impact of social contribution from individuals and institutions who believe in their role in improving society and fulfilling their social responsibility is realized.

While the largest form of company is that of a joint-stock company, which is the only entity that can access public subscriptions to raise the necessary funds for project implementation, provided the public is convinced of the project's concept and impact, and given that environmentally friendly

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projects require substantial capital, companies resorting to individual subscriptions is the optimal solution for financing these projects. Therefore, countries have begun regulating subscriptions for environmentally friendly projects. The Saudi Capital Market Authority (CMA) has issued a guide for issuing green, social, and sustainable debt instruments, approved by the CMA Board of Directors under Resolution No. 1-32-2025, dated March 17, 2025. We can consider This guide as the regulatory framework for companies offering subscriptions targeting green and sustainable debt instruments. Consequently, joint-stock companies listed on the Saudi Stock Exchange must adhere to the guidelines outlined in the guide if they want to deal with green bonds. It is worth noting that the guide aims to ensure transparency in the relationship between the issuing company and the investor who wishes to invest in a special type of subscription that achieves sustainable development goals. Although the CMA issues several Acts and regulations, this guide specifically addresses the issuance of green shares and sustainable.

Methodology

This paper will employ a descriptive-analytical approach to describe the controls that must be followed for issuing green bonds, in accordance with the guidelines for issuing green, social, and sustainable debt instruments issued by the Saudi Capital Market Authority. It will also analyze these controls and demonstrate the extent to which they achieve the objectives the legislator aims to achieve by regulating green bond issuances.

Definition of green bonds (Sukuk)

Green Bonds are environmentally friendly bonds, an innovative type of bond that is usually tax-exempt. They encourage investment in projects focused on environmental conservation and pollution reduction. These bonds offer a fixed income and are easily liquidated financial instruments. The funds generated are allocated exclusively to projects that mitigate and adapt to climate change. The Saudi Capital Market Authority's Green Debt Instruments Issuance Guide defines Green Sukuk as: "Debt instruments whose proceeds are used to finance or refinance eligible green projects that achieve a positive environmental impact, whether these projects are new or partially or wholly existing "(Guide to Issuing Green, Social, Sustainable, and Sustainability-Linked Debt Instruments, 2025).

These bonds are called "green" because they are linked to environmentally friendly investments. They are debt instruments issued to raise funds specifically for climate-related or environmental projects. The funds from green bonds are specifically intended for projects with clear environmental benefits, such as those related to renewable energy and climate change reduction. This helps bridge the significant climate finance gap (Bhutta, et al., 2022) (Pakpahan, et al., 2024). One of the most important characteristics of green bonds is that the proceeds are specifically earmarked to support the financing of specific projects, distinguishing them from regular bonds. However, some argue that there is a lack of clarity regarding the definition of a green project enough to qualify for a green bond issuance, and how to effectively measure its environmental impact (Wisniewski, M., & Zielinski, J., 2019).

The term "green" is used to describe the bonds that are linked to environmentally friendly investments. Green bonds, like any other bond, present a fixed income and a promise to use this funding to finance or partially or fully refinance new or existing sustainable projects. The Green bonds may be issued by a financial institution, government, or even a company to raise funds for a specific period. The issuer must ensure that the funding is invested in green projects. It is considered profitable for both the issuer and the investor, in terms of contributing to a sustainable future, on the other hand, its defining itself as a responsible organization, institution, or individual (Bouaouina, S., & Almi, H. 2022).

The importance of green bonds

for Increasing the awareness of the consequences of climate change has led to inhansing in green bond issuance. Countries with higher adoption rates are leveraging these bonds to achieve sustainability goals, such as reducing carbon emissions and increasing renewable energy production (Alamgir, M., & Cheng, M.-C. 2023). This financial innovation is important given projections indicating a potential 4°C increase in average global temperatures by the end of the 21st century if carbon emissions continue unchecked, threatening the collapse of ecosystems (Bhutta, et. al, 2022).

This acceleration highlights the integration between financial tools and global climate policies, describing how market mechanisms can be used to achieve the motivational environmental objectives. This trend underscores the importance of continued political support and innovative financial mechanisms to accelerate the transformation to a low-carbon economy. Other analyses refer that companies issuing green bonds often describe improved environmental performance, as evidenced by better environmental ratings and lower emissions, demonstrating a strong commitment to environmental responsibility (Alamgir, M., & Cheng, M.-C. 2023) (Flammer, C. 2021). Furthermore, the stock market perhaps responds positively to announcements of green bond issuances, suggesting that investors value and appreciate these environmental commitments (Flammer, C. 2021). This investor interest, driven by growing awareness of environmental conservation and climate change, indicates that green bond issuance can remarkably impact a company's value and financial performance. (Alamgir, M., & Cheng, M.-C. 2023) (Tang, D. Y., & Zhang, Y. 2020)

This emphasizes the pivotal role of green bonds in mobilizing the capital for climate-friendly investments and bridging the gap between financial markets and environmental obligations (Alamgir, M., & Cheng, M.-C. 2023) (Wisniewski, M., & Zielinski, J., 2019). Furthermore, the consequences suggest that this positive impact is more implemented in countries with well-developed regulatory frameworks and strong institutional support, that's meant that effective governance structures enhance the environmental benefits derived from green bond investments (Bhutta, et al., 2022) (Alamgir, M., & Cheng, M.-C. 2023). This perception highlights the need for a supportive legal and regulatory environment to maximize the effectiveness of green finance initiatives, particularly in emerging markets, which has several frameworks may still be under development. The impact of green bonds on sustainable development has become particularly distinguished after Paris Agreement, as we can consider this agreement a significant turning point in their influence (Alamgir, M., & Cheng, M.-C. 2023).

Reasons for the emergence of green bonds

many authors believe that green bonds play a major role in attracting socially responsible investors who are integrating environmental, social, and governance factors into their investment decisions. This contributes to the multiplicity of the investor base for sustainable projects (Tang, D. Y., & Zhang, Y. 2020), as social responsibility is one of the most important factors for corporate performance. Regarding the calculation of social return, subscribing to green bonds is considered one of the most important tools for achieving a company's social contribution goals, since green bond subscriptions are directed towards projects that aim to achieve sustainable development goals with a positive impact on society.

Green Bonds also have the potential to further expand the financial market. Bonds should be attractive to regular investors if they offer reasonable returns comparable to the risk and are marketed effectively. Bonds that meet these criteria and provide environmentally sustainable financing can be particularly appealing to environmentally conscious investors because they offer a high degree of confidence that their funds will be used for a specific purpose. The funds which collected from issuing the bonds are directed towards investments in known assets and projects. Therefore, if the bonds are designed to provide funds for a specific infrastructure project, such as a renewable energy project, there is little chance that investors' funds will be diverted to other purposes rather than sustainable projects that are announced. This is also the case with sustainability-linked debt instruments, where the issuing company does not specify a particular project for which the proceeds will be invested. Instead, the issuer manages the proceeds by achieving sustainability-related performance indicators (Bouaouina, S & Almi, H. 2022).

Green bonds are known as a financing option targeting sustainable, development, and infrastructure projects. Investors in sustainable development and in the bond, market are drawn to projects that align with their values and principles. These bonds are designed to achieve the objectives of large-scale development projects while considering their environmental impact (Bouaouina, S & Almi, H.

2022).

Some argue that enhancing investor education is mandatory to build a strong awareness of sustainability specially among individual investors. This, in turn, would broaden the green bond market to include non-institutional groups (Lin, L., & Hong, Y. 2022). Ideally, this educational approach would encourage the preference for green and low-carbon investment instruments, directing financial resources towards sustainable development and social welfare as primary investment objectives (Lin, L., & Hong, Y. 2022; Kaewsaeng et al., 2022).

Legal instruments for regulating green bonds (Sukuk) issuance in the kingdom of Saudi Arabia

Saudi capital market issued a guide for issuing green, social, sustainable, and sustainable-linked debt instruments. This guide was adopted by the CMA Board under Resolution No. 1-32-2025, dated 17-3-2025.

This framework, for issuing green, social, sustainable, and sustainable-linked debt instruments aim to standardize the regulations governing the issuance of green debt instruments. This will simplify procedures and reduce the administrative burden on issuers, thereby enhancing market efficiency (Hakim, 2024). It is worth noting that the aforementioned issuance guide follows the International Capital Market Association (ICMA) principles related to green bonds, social bonds, sustainability bonds, and debt-linked bonds. The only difference is that the guide uses the term "debt instruments," while the International Capital Market Association (ICMA) principles use the term "bonds." The principles of green bonds are characterized as general guidelines rather than strict standards (Bhutta, et. al, 2022; Wahyuningtyas et al., 2026).

First of all, it’s important to note that the issuance guidelines differentiate between sustainable debt instruments and sustainability linking instruments. The difference between the two instruments is the nature of each instrument. Sustainable debt instruments (such as bonds) have their proceeds specifically and clearly earmarked for financing green (environmental) or social projects, or projects combining both. These bonds are specifically designed to finance initiatives aimed at improving environmental quality, ranging from renewable energy infrastructure to sustainable waste management systems (Pakpahan, E. F., et. al, 2024; Hamid., 2025). Before issuing these instruments, the type of project and the criteria that must be met to qualify for issuance must be precisely defined. In other words, the proceeds from these debt instruments have a known and predetermined use, such as bonds issued to finance a solar power plant.

Sustainability-linked debt instruments (SLLs/Sustainability-Linked Bonds), on the other hand, are entirely different from sustainable debt instruments. With sustainability-linked debt instruments, the use of the proceeds is not predetermined. The issuer can use the funds for any general purpose in the company, but the debt instrument itself is linked to the issuer's sustainability performance indicators. For example, the bond terms change (such as the interest rate or the possibility of early call) based on the company's ability to achieve certain performance indicators specified before issuance, such as reducing emissions by a certain percentage or increasing energy efficiency. If the company achieves the goals, the bond terms may improve, such as increasing the interest on the bond, but if the performance indicators are not achieved, the interest on the bonds will decrease.

The legal framework for issuing sustainable debt instruments

We previously noted that premium debt instruments refer to green, social, and sustainable debt instruments. The guide defines green debt instruments as "debt instruments whose proceeds are used to finance or refinance eligible green projects that achieve a positive environmental impact, whether for new projects or existing projects that are partially or wholly financed." A similar definition is used in the guide for social debt instruments, except that social debt instruments aim to finance or refinance social projects to achieve social benefit. Sustainable debt instruments, according to the guide, are those whose proceeds are used for projects that combine green and social projects.

In its definitions, the guide, in the context of outlining the principles of green bonds, social bonds, and sustainable bonds, refers to the principles issued by the International Capital Market Association (ICMA).

The ICMA (Green Bond Principles, 2021) defines Green Bonds as " any type of bond whose proceeds, or an equivalent amount, are used exclusively to finance or refinance, in whole or in part, new or existing tranches that are eligible for green financing, in accordance with the four key elements of a green bond (GBP)".

The Green Bond Principles (GBP) (Green Bond Principles, 2021) are voluntary, practical guidelines that recommend transparency, disclosure, and integrity to develop the green bond market by clarifying how green bonds should be issued. The GBP is intended for broad market adoption: it provides issuers with guidance on the key components of credible green bond issuance. It also assists investors by promoting the availability of information needed to assess the environmental impact of their green bond investments. Furthermore, it helps underwriters by encouraging the market to disclose information that facilitates transactions and maintains market integrity.

Some argue that clear and consistent guidelines for green bond issuance and oversight, along with strong disclosure requirements, can build investor confidence and promote cross-border investment in sustainable projects (Hakim, 2024) .

The four key elements for compliance with green bond principles are

1 .Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

It is worth noting that these four elements, considered by the International Capital Market Association (ICMA) to be the foundation for issuing green, social, or sustainable debt instruments, aim to enhance transparency, disclosure, and integrity in the green, social, and sustainable bond markets. This is also indicated in the ICMA's Green Bond Principles and its Green Debt Issuance Guide (Guide to Issuing Green, Social, Sustainable, and Sustainability-Linked Debt Instruments, 2025)

First: Using proceeds from issuance for green, social, and sustainable debt instruments

It is worth noting that this element of issuing sustainable debt instruments aligns with the first principle of the International Capital Market Association (ICMA) principles. The requirements for this element include the issuer's obligation to ensure the following:

a) The issuer must clearly describe how the proceeds will be used within the debt instrument issuance documents. The prospectus and issuance documents must specify the project to be financed using these proceeds.

b) The issuer must ensure that the projects financed by green debt instruments have clear environmental benefits and that their impact is assessed and determined – if possible – by the issuer. The issuer must include an environmental impact assessment in the issuance documents demonstrating the project's impact on environmental sustainability. Some argue (Tang, D. Y., & Zhang, Y. 2020) that external verification is crucial to assure investors that the financed projects genuinely contribute to environmental sustainability, thereby boosting market confidence and attracting further investment in green initiatives .

The same obligation to verify that funded projects achieve their intended benefits applies to both social and sustainable debt instruments. In the former case, it must be verified that the funded projects will deliver social benefits, while in the case of projects financed by sustainable debt instruments, it must be verified that they deliver both environmental and social benefits.

c) The issuer ensures the proper monitoring of the net proceeds from the offering. This may include depositing the net proceeds into a separate account with a bank licensed in the Kingdom. Researchers believe that green bonds are distinguished by the exclusive allocation of their proceeds to "green projects" that offer clear environmental benefits (Alamgir, M., & Cheng, M.-C. 2023). Therefore, this requirement is an application of the allocation of financial assets. Although the offering itself does not have a separate financial liability, while the issuer has a legal personality, the specific nature of projects financed by green, social, and sustainable debt instruments, and the desire to achieve the greatest possible transparency in managing the proceeds of these offerings, have led the offering rules to permit the allocation of these proceeds to the projects listed in the offering prospectus, while ensuring the separation of these funds from the issuer's other assets.

Second: green, social, and sustainable debt instruments framework

It should be noted that this element of issuing sustainable debt instruments aligns with the second and third principles of the International Capital Market Association (ICMA). This element involves project evaluation and selection, as well as the management of proceeds from the offering. The requirements for this element stipulate that the issuer must ensure the following:

a) The issuer prepares a Green, Social, and Sustainable Debt Instruments Framework document. This document is a fundamental document issued by the issuing entity that explains to investors how the proceeds from the offering will be used to finance environmental (green), social, or sustainable (a combination of both) projects, while ensuring transparency and accountability regarding the objectives, project selection mechanism, risk management, and use of proceeds (https://cma.gov.sa/) . Therefore, the framework document is considered one of the offering documents, and based on it, the issuer commits to environmental, social, or both environmental and social responsibility before the public. The framework must include the following information:

1. The categories of eligible projects to which the proceeds from the offering will be allocated and/or, if eligible projects have been identified, information regarding those projects to which the proceeds will be allocated; 1. Clearly identify the projects (e.g., renewable energy, energy efficiency, affordable housing, and healthcare) to which funds will be allocated.

2. Define and describe the environmental and/or social objectives and link them to the relevant Sustainable Development Goals (SDGs). It is not enough to simply state environmental or social objectives; these objectives must be linked to one of the 17 SDGs.

3. The mechanism by which the lender determines how projects fall within the categories of eligible green and/or social projects. The framework document should explain how projects that meet the defined criteria will be selected.

4.The relevant criteria applied to identify and manage the substantial and potential environmental and social risks associated with eligible projects. The lender must state how the potential environmental and social risks of the projects to be funded will be identified and managed.

5. The mechanism for managing the net proceeds of the offering and how the remaining unallocated net proceeds from the debt instrument issuance will be used. The framework document should explain how the funds raised will be allocated and managed, and how the unallocated funds will be handled. It is worth noting that the offering guide obliges the issuer, in the case of a public offering of green, social and sustainable debt instruments, to ensure that the debt instrument framework document is published for investors, and that the framework is published before or simultaneously with the publication of the prospectus, and that it is available to the public throughout the issuance period via the market website.

Third: external review of green, social, and sustainable debt instruments

It is worth noting that this element of issuing sustainable debt instruments aligns with one of the key recommendations of the International Capital Market Association (ICMA) Principles, namely, external review (Green Bond Principles, 2021). These principles, aimed at achieving transparency and integrity in the securities market in general, and the green and sustainable debt market in particular, recommend reliance on external review both before and after issuance. The external auditor's role in the pre-issuance phase is to ensure, prior to the offering, that the bonds, the green bond program, and/or the framework document comply with the four key elements of the Green Bond Principles (i.e., use of proceeds, project evaluation and selection, proceeds management, and reporting). after the issuance, its mandatory for the issuer to appoint an external auditor for completing the proceeds management process and verify the internal tracking and allocation of funds from green bond proceeds to eligible green projects.

The instructions of this item, as mentioned in the guidance of Issuance, stipulate that the issuer must appoint an external auditor registered with the International Capital Market Association. This auditor must have voluntarily obligation to the ICMA's guidelines for external auditors, be licensed to operate in Saudi Arabia, possess sufficient experience in green, social, and sustainable debt instruments, and include a statement of their independence and conflict of interest policy in their report.

The scope of the external auditor includes the entire debt instrument framework, eligible projects, and the compliance procedures of the issuer for any bonds covered by the Issuance Guidelines. for the case of a public offering, the external auditor must ensure that the issuer publishes the external auditor's report to investors within the specified timeframes and in the manner previously defined.

It should be noted that some have argued that the increasing demand for green bonds has led to a boom in the market for third-party verification and certification services, known as external auditing, which ensures the credibility and integrity of green financial instruments and mitigates the risks of environmental misrepresentation (Alamgir, M., & Cheng, M.-C. 2023). This external verification provides assurance to investors that the funded projects actually contribute to environmental sustainability, thus enhancing market confidence and attracting more investment in green initiatives (Tang, D. Y., & Zhang, Y. 2020)

Fourth: Post-issuance reports for green, social, and sustainable debt instruments

The component of issuing sustainable debt instruments agree with the fourth principle of the International Capital Market Association principles, which pertains to reporting. The requirements of this principle stipulate that the issuer must provide subscribers with reports at least once a year throughout the issuance period, until all proceeds are allocated. These reports must include information on how the proceeds will be used and the projects that is eligible to which the proceeds have been allocated. In the public offering state, the issuer must publish these reports on the Capital Market's website.

Conclusion

this research paper addressed the definition of green bonds and the reason for their designation as green. Also, it examines the similarities and differences between traditional bonds and green bonds. Moreover, the study refers to the importance of green bonds and the role that they play in financing environmentally friendly projects that aim to decrease the carbon emissions, thereby contributing to a reduction in global temperature and a positive impact on global warming. Green bonds connect two important elements; the first one is the continuity of economic growth resulting from sustained industrial activity, enabling companies to establish or upgrade factories using the funds generated by these financial offerings. The second element is the integration of achieving the best economic growth rates through industrial production, besides ensuring environmental protection and achieving the elements of sustainable development.also, the paper refers to the legal instruments for regulating the issuance of green bonds (Sukok) in Saudi Arabia. It explored the alignment between the rules outlined in the guide for regulating green bond issuance and the principles that issued by the International Capital Market Association (ICMA), which published a guide for green bonds. The study clarified that the four stages addressed in the the International Capital Market Association guide were considered in the guide issued by Saudi Capital Market Authority, especially regarding the use of proceeds, project evaluation and selection, proceeds management and reporting.

Recommendations

The research paper recommends to perform the following :

-A gradual transition towards making the regulatory provisions in the guide mandatory, transforming the guidelines from advisory to compulsory.

- Issuing a supplementary regulation to the guide that includes penalties for violating the provisions for issuing green, social, and sustainable bonds.

-Since green, social, and sustainable bonds are linked to projects with pre-defined environmental, social, or sustainability objectives, the guide must include mechanisms for legal accountability regarding the issuing company's failure to allocate the proceeds of the subscription to the targeted project.

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Conflict of interest

The author declares no conflict of interest.

References

-Alamgir, M., & Cheng, M.-C. (2023). Do Green Bonds Play a Role in Achieving Sustainability? Sustainability, 15(13), 10177. https://doi.org/10.3390/su151310177https://www.mdpi.com/2360826

-Bouaouina, S., Almi, H. (2022). The reality of issuing and trading green sukuk in financial markets Study the experiments of countries , Dafater Albohouth Alelmia, V.10, No.1.https://asjp.cerist.dz/en/article/192782

-Bhutta, U. S., Tariq, A., Farrukh, M., Raza, A., & Iqbal, M. K. (2022). Green bonds for sustainable development: Review of literature on development and impact of green bonds. *Technological Forecasting and Social Change*, *175*, 121378.https://doi.org/10.1016/j.techfore.2021.121378.https://www.sciencedirect.com/science/article/pii/S004016252100809X

-Flammer, C. (2021). Corporate green bonds. *Journal of financial economics*, *142*(2), 499-516.https://doi.org/10.1016/j.jfineco.2021.01.010 https://www.sciencedirect.com/science/article/pii/S0304405X21000337

-Green Bond Principles, 2021https://www.icmagroup.org/assets/documents/Sustainable-finance/Translations/Arabic-GBP-2021_06-260122.pdf

Guide to Issuing Green, Social, Sustainable, and Sustainability-Linked Debt Instruments, 2025https://cma.gov.sa/RulesRegulations/Regulations/Documents/Green_Social_Sustainability_Sustainability_Guidelines.ar.pdf

-Hakim, Akmal, Financing Green: Exploring Sukuk as a Tool for Sustainable Investment in Islamic Finance (June 11, 2024). Available at SSRN: https://ssrn.com/abstract=4860671 or http://dx.doi.org/10.2139/ssrn.4860671

-Lin, L., & Hong, Y. (2022). Developing a green bonds market: lessons from China. *European Business Organization Law Review*, *23*(1), 143-185.https://doi.org/10.1007/s40804-021-00231-1https://pmc.ncbi.nlm.nih.gov/articles/PMC8860139/pdf/40804_2021_Article_231.pdf

-Pakpahan, E. F., Heriyanti, H., Tanjaya, W., Pakpahan, E. S. F., Rizal, S., & Leonard, T. (2024). Legal Analysis of Investor Protection in Corporate Green Bond Issuance. *Indonesia Law Review*, *14*(2), 7.https://doi.org/https://doi.org/10.15742/ilrev.v14n2.7https://scholarhub.ui.ac.id/ilrev/vol14/iss2/7/

-Tang, D. Y., & Zhang, Y. (2020). Do shareholders benefit from green bonds? *Journal of Corporate Finance*, *61*, 101427.https://doi.org/10.1016/j.jcorpfin.2018.12.001https://www.sciencedirect.com/science/article/pii/S0929119918301664?via%3Dihub

-Wiśniewski, M., & Zieliński, J. (2019). Green bonds as an innovative sovereign financial instrument. *Ekonomia I Prawo. Economics and Law*, *18*(1), 83–96. https://doi.org/10.12775/EiP.2019.007https://apcz.umk.pl/EiP/article/view/EiP.2019.007/17137

Kaewsaeng-On, R., Al-Takhayneh, S. K., Jam, F. A., Chang, B. L., Pradana, M., & Mahmood, S. (2022). A three wave longitudinal study of school innovation climate and entrepreneurshipeachers' acceptance to technology: Moderating role of knowledge sharing and knowledge hiding. Frontiers in psychology, 13, 1028219.

Wahyuningtyas, R., Utomo, M. T., Etika, R., Angelika, D., Handayani, K. D., & Ayuningtyas, W. (2026). Multidisciplinary early care in a newborn with palatolabioschisis: Emphasizing feeding intervention and surgical planning. Perinatal Journal, 34(1), 1-7.

Hamid, M. (2025). How Entrepreneurial Learning Drives E-Intention via Creative Confidence, and the Boundary Condition of Digital Competence in Pakistan. Journal of Advanced Research in Social Sciences and Humanities, 42-54.