

Green Investments: Development of an Understanding of Future Prospects

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Abstract

In this study, there is a detailed discussion about the factors of green investments and their impact on developing different sustainable prospects to improve the economic growth of different countries. Besides that, the importance of green investment in developing the prospects of different countries has been evaluated throughout the study. However, there are many negative factors that are affecting green investments and creating difficult situations in the process of developing prospects. Green investment helps to improve the productivity of different businesses worldwide and helps to improve the business position in the global market. In this study, also the implications of sustainable business models and sustainable strategies through green investments have been discussed in a detailed manner to understand the impact of green investment clearly. The different negative aspects of green investments have caused many crucial situations in developing effective sustainable prospects that help improve the economic condition of different countries worldwide. However, through the secondary qualitative data collection method, all the information of the study has been collected from authentic and reliable sources in this study. Besides that, through the thematic analysis process, all gathered data has been evaluated in a descriptive manner to understand the concept of the phenomenon and conduct better outcomes of the study.

INTRODUCTION & BACKGROUND

Green investments are traditional investments such as exchanging stocks, market shares, trades, mutual funds and many others which aim to improve the business environment and help to provide sustainable strategies to improve the economic growth of the country. Besides that, the green investment provides beneficial facilities for different businesses which helps to develop the businesses at a higher level than before and also helps to improve the understanding of the prospects of these businesses [1]. It also provides different financial instruments and relatable services to improve the development of effective business models and strategies according to the country's trade, economy, environment and society to improve the business in the international market.

Apart from that, implementation of the green investments

in the business of different countries impactfully improves business growth and also helps to provide more effective and efficient business models which positively increase the business position in the global market. Green investment focuses on ensuring the natural assets of businesses which impactfully helps to deliver full economic potential on a sustainable basis to improve the business position in the global market and develops efficient future prospects of these businesses worldwide. Besides that, green investment policies are developing new opportunities for businesses and improving their prospects in the future by giving them effective and easy access to the global market. In 2022, green investment policies have invested around 119 billion U.S. dollars in new technologies to improve the business model of different countries [2]. Hence, in this study, all the necessary elements associated with green investments and their impact on future prospects have been discussed in a detailed manner.

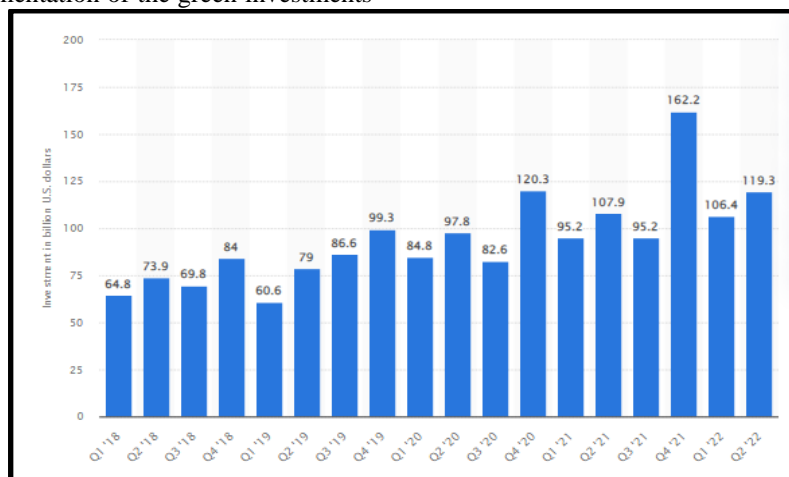


Figure 1: Green investments in new technology worldwide 2018-2022 [2]

AIM OF THE STUDY

This study aims to focus on the different aspects of green investment policies and their efficient and effective business prospects and implications for the future.

- To understand the concept of green investments and its impact on the businesses
- To find out the overall aspects of green investments and their impact on developing prospects
- To evaluate the factors that are affecting the green investment policies
- To explore the evaluation of green investments and their future prospects in sustainable development

RELEVANCE OF THE STUDY

In this digital era, the whole world is emerging with new technologies which help to develop business models with more efficiency which impactfully helps to improve the business position in the global market. Climate change is one of the most important factors that affect global businesses negatively and even in this digital era with effective technologies it is sometimes very difficult to manage climate change which causes much harm to global businesses. However, the development of green finance and green investments and their implementations in global businesses has reduced the negative effects of climate change on global businesses and has provided many sustainable business models which help to develop effective future prospects for businesses in the global market. Thus, this study is relevant to green investment policies and their impact on global businesses as it helps to improve the future prospects of businesses at an international level.

MATERIALS & METHODS

Research design

Research design is an appropriate framework that provides effective methods and techniques for the researchers to conduct the study in a systematic way. Many research designs are provided to the researchers among them the *exploratory* design helps define the research problem in a detailed manner that has not previously been studied in depth [3]. In this study, an exploratory research design has been followed to conduct the research problem in a descriptive way to understand the research issue in an appropriate way.

4.2 Research type

Research type suggests the different forms of the research methods in which the research study will be conducted, observed and analysed. There are different forms of research types among them the *qualitative* type helps to seek a depth understanding of the phenomenon of the study within their natural setting [4]. However, the qualitative type has been followed through this study which helps to evaluate the phenomenon of the study in a deep and detailed manner within its natural settings to improve the understanding of the study.

Research philosophy

The research philosophy of a study helps to understand the ontological assumptions by encompassing multiple realities for the phenomenon of the study. The *interpretivism* method helps to understand the social aspects of the phenomenon of the study and composite multiple perspectives according to the research study [5]. In this study, the interpretivism method has been followed throughout the study to conduct proper outcomes of the study by observing the phenomenon closely and carefully.

Inclusion and exclusion criteria

The *inclusion* and *exclusion criteria* help to filter the collected data about the phenomenon of the study to conduct a proper research study [6]. Through the inclusion method, all the information has been collected in this study from authentic and reliable articles, newspapers, journals and many others which are published after 2018. Besides that, through the exclusion method information from conference papers, doctoral articles and advertisements have been excluded from the study. Apart from that, through implementing the exclusion criteria in the study it has excluded information that is in different languages rather than English.

Data collection and analysis

The data collection and data analysis methods provide different effective tools to collect information about the phenomenon of the research study and through the analysis; it helps to conduct proper outcomes of the study [7]. However, the *secondary qualitative* data collection method has been implemented throughout the study to gather information about the phenomenon from authentic sources. Besides that, in this study, *thematic analysis* has been adopted to analyse the collected information in different themes and evaluate the understanding of the research study in a descriptive way to improve the results of the study. However, all ethical considerations have been followed throughout the study which has guided the researchers to conduct the stuffy in a proper direction.

RESULTS

Concepts of green investment

Green investment refers to the traditional investment vehicles that include stocks, exchange-traded funds and mutual funds that are involved in operations which aim to improve environmental factors. Green investments are funds or businesses that seek different ways to reduce harmful environmental impacts and use resources more sustainably [8]. In the present scenario, every business organisation is trying to reduce environmental impacts and investing in different funds that help them to reduce pollution and other negative environmental impacts. Environment-friendly investment is able to provide profits and different environmental benefits to the organisation that supports the sustainable development of the company. Nowadays

investors support green investment practices by buying different green mutual funds, green exchange-traded funds, green index funds and green bonds or by holding stocks in environment-friendly organisations [9].

Profit is not only the primary goal of green investment but also improving sustainable development in an organisation is the main concern in a green investment plan. However, there is evidence that eco-friendly investment has the ability to beat the profits of more traditional investments. The green investment consists of multiple investment activities through which the companies or different projects commit to conserve the existing natural resources and take part in sustainable development [10]. Green investment policies are important for business organisations to build great brand

value among consumers and that gives them a push towards their organisational goals and objectives. Hence, green investment is the future as it has the ability to enhance organisational profits by reducing negative environmental impacts. There are multiple evidence that shows investment in low carbon growth in key economic sectors is increasing gradually in recent times. Around 10.2 trillion U.S. dollars are invested worldwide annually by different business organisations at the present time and it is expected to get more growth by 2030. East Asia and the Pacific regions have the potential to invest half of the total investment among the 21 markets in the next decade [11]. Hence, it can be stated that green investment plays a significant role in the wider context of future prospects.

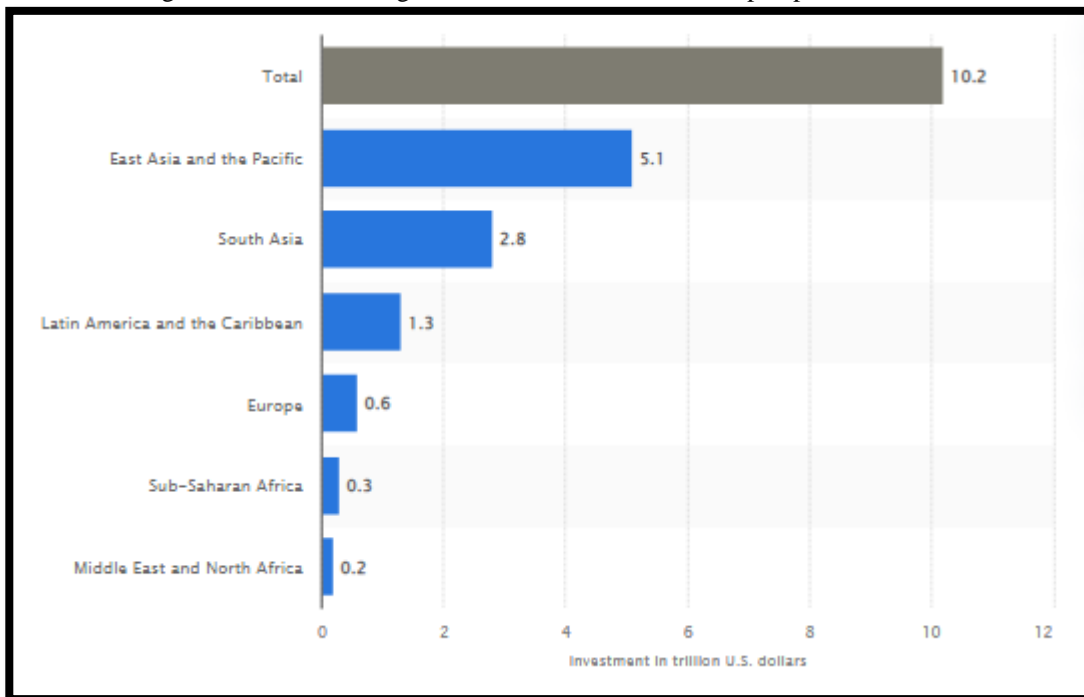


Figure 2: Green investment opportunities in emerging market
(Source: [11])

Forms of green investment and its importance in contemporary days

Green investment is gradually increasing worldwide and it has the ability to give positive feedback to its investors. In green investment strategies, business organisations seek to improve sustainable development along with the financial profit for the organisation [12]. In order to do that, business organisations find different forms of investment that support sustainable development and help conserve existing natural resources. Different financial advisors considered green investment risky as its primary focus is not only generating profit. However, multiple pieces of evidence show that green investment provides strong profits to its investors. Consequently, green investment is gradually increasing in contemporary days and it adds different forms which support the basic objectives of the investment. There are different types of green investment that include green equities, green bonds and green funds.

Green equities refer to equity investment policies that seek to promote environmental sustainability more generally. It is also considered as the equity investment that seeks to gain profit from the capital market by recognising the urgency of biological diversity protection, mitigating climate change and reducing the other environmental negative impacts. Different companies and high net worth professionals are investing in environment-friendly sustainable companies to gain profits along with contributing to environmental betterment [13]. In green equity investment, investors seek to invest in companies which have better sustainable development strategies, environment-friendly technologies and environment-friendly goals. Through green equity investment, investors can earn more profits and also can contribute to the environment. This green equity investment can help the investor companies to gain popularity and increase brand value among customers.

Green bonds are not only traditional financial bonds but

also green bonds are designated to encourage sustainability and climate in a wider context. Green bonds financial projects aim to get energy efficiency and conserve existing environmental energy resources [14]. It is also designed to prevent pollution, promote sustainable agriculture, fishery, and forestry and protect the aquatic elements from business-related negative impacts. A green bond is a form of investment that comes with different tax incentives including tax exemption and tax credits. These tax-related incentives make green fund investments more attractive to investors. Tax advantages provide monetary advantages to investor companies and individuals to tackle different social issues, and climate change and to promote renewable energy sources [15]. Tax incentives and monetary benefits make these investment policies more attractive and as a consequence, it increases green bond investment in contemporary days.

Green funds are an important investment vehicle in which investors will invest their funds in organisations that are socially and environmentally conscious. It is a focused investment element that is supportive of businesses, alternative energy resources, sustainable waste and water management, sustainable living and green transport [16]. The green investment fund is the investment fund whose portfolio is widely based on the "Environmental, social and governance" (ESG). Based on different evidence and the performance of green funds it is not clear that green funds can provide a better return than other traditional investment plans. Environmental contributions attract investors to invest funds in this investment plan to build their image and take part in the sustainable development programme.

Factors affecting green investment

Green investment is the future and it has the ability to improve the sustainable development programme of any organisation. The green investment has wider objectives in improving environmental health and promoting the usage of renewable energy sources. There are different forms of green investment and different negative factors that can affect green investment in wider aspects. Long payback periods, technological risk, and revenue risks are the major factors that affect green investment negatively, on the other hand, increasing the price of fossil fuel, and tax incentives on different green investment plans attract investors and that affects the investment plan in a positive way.

The long payback period is a significant factor that affects green investment negatively. Green investment policies' front cost is high and it requires more time to get high returns from the capital market [18]. This is the main factor behind the green investment not getting popularity among the high net worth investors and companies. They fear taking risks and try to invest their money in other traditional funds which give them stable and high returns in a short time period. **Technological risk** is a significant factor that affects green investment in a wider context. New environmentally friendly sustainable technologies are not popular enough among the people and it is not been developed enough in recent times. New sustainable environment-friendly technologies need

more development to bring attention among investors. This technological risk among investors affects green investment negatively. Investors will not invest in green funds and other green investment plans until eco-friendly technologies become stable.

Revenue risk is also a major risk that affects green investment policies. The primary objectives of green equity, green funds and other green investments are not profit-making. Consequently, investor fears to invest their money in these funds for revenue-related issue [19]. On the other hand, the **high price of fossil fuel and petroleum** affects green investment in a positive way. Due to the increasing price of conventional energy sources, business organisations are trying to switch to renewable energy sources and it encourages investors to invest in sustainable business organisations. Investment in green funds and investment policies encourage investors to increase their popularity and reliability among the people.

Tax incentives are the major factor that attracts investors toward different green investment funds and increases the investment of investors around the world. Due to environmental benefits, governments around the world provide tax incentives and other monetary benefits to green investors [20]. These tax benefits and incentives affect green investment in a positive way and increase green investment around the world.

Green investment and its implications for sustainable development

Green investment is an emerging investment concept that helps a country to develop sustainably and it is also important for business organisations to grow their businesses through sustainable development. Green investment plays a significant role in the business development and sustainable development of the country. Besides, green investment has multiple implications which impact green investment in a negative way [21]. From the investors' perspective, investing in green funds and equities are not profitable enough in comparison to other investment funds. In green investment strategies, investors are getting low revenue that discourages them to invest their money. This ultimately affects sustainable development and along with the business of different organisations. Lack of liquidity is also a major implication in the field of green investment.

Due to a lack of liquidity investors preferred to invest in other investment funds and that affects multiple organisations in their fund and fails in the sustainable development of the organisation. In the contemporary period, the lack of knowledge about green investment leads investors to not take risks in green funds [22]. A lack of clear understanding of green investment and green technologies also discourages investors towards sustainable companies and consequently, business organisations lose their interest in sustainable development and which can affect the sustainable development programme of the country.

Evaluation of green investment and its future prospects

Green investment is the concept of investment that seeks to achieve an effective financial return from the capital market by contribution to the wider environmental perspective. In green investment policies, investors focus on the environmental benefits over financial benefits to develop a sustainable business model in the competitive market [23]. Green investment is growing gradually in the contemporary period and it has major future prospects. In the future companies around the world can collect funds and investments by portraying their sustainable business model. The green investment will also motivate entrepreneurs and future business professionals to implement sustainability in their projects. Awareness about the environment is increasing and it leads them to attract sustainable products and services and which results in the business of the organisation.

Green investment is able to mitigate serious environmental issues and heal the environment from multiple negative impacts and these can give investors satisfaction and the investment will grow in future. ESG (Environment, social and governance) fund representatives use the environmental, social and governance components to assess the performance of countries towards sustainability which is the major future perspective of green investment [24]. ESG funds also include exchange-traded funds that indicate extraordinary sectoral weightage that is important for the development of a country that is also future prospective investing in green investment policies. Green funds are important to increase investment in renewable energy such as hydroelectric and nuclear power plants that help to improve the sustainable development in the country along with business development.

DISCUSSION

Green investment is the emerging concept of investment that incorporates environmental betterment and also helps in the sustainable development of the country. This investment concept seeks different ways to reduce multiple environmental implications and also focuses on the conservation of existing traditional energy sources through investing in renewable energy sources. Presently different companies and high net worth investors buy equities of different companies which are strong in their sustainable development programmes. Green funds are one kind of mutual fund that plays a crucial role in the sustainable development of the country along with the organisational betterment of different companies. Profit making is not only the primary objective of green investment but it also provides a good reputation in the market.

Evidence also supports that green investment is often more profitable than other traditional investment strategies. Green investment is gradually increasing worldwide as it provides positive feedback to its investors [25]. There are different types of green investments that can provide inventors with good returns in the capital market. Green equity, green bond and green funds are major types of green investment strategies that are popular among investors. Green equity is

an equity investment strategy that helps to promote environmental benefits and reduce environmental implications. This investment strategy is also important to improve sustainable development programmes and heal the environment from different environmental hazards. Green bonds are not only traditional financial bond but it is designed to encourage sustainability in the wider aspect. Green bonds attract investors as it promotes sustainable agriculture, forestry and fishery through investment.

The green investment bond gives an opportunity to its investors to contribute to the betterment of the environment. Besides these investment strategies, a green fund is also a green investment plan that is important for organisations to collect funds from high net worth investors and other companies. These green funds are used by organisations by creating sustainable strategies for the organisation. Green investment is the future as it contributes to sustainable development. There are different factors that have the ability to affect green investment in positive and negative ways. Long payback periods, technological risk, and revenue risks are the factors that affect green investment negatively while the high price of petroleum and the tax incentives effects green investment in a positive way.

Green investment is an investment concept in which investors get their profits after a long period and that discourages them to invest in such investment policies. Underdevelopment of green technologies is also a major factor which affects green investment negatively. Green technologies are not developed enough and that increases fear among investors to invest their money in green investment policies. Low revenue in green investment strategies also discourages investors towards green investment strategies [26]. On the other hand, the high price of petroleum and fossil fuels leads organisations to focus on renewable energy and it increases green investment among investors. Tax incentives for green investment also encourage investors towards green investment. Besides these, green investment also has different future prospects that include sustainable developments, and environmental, social and governance-related benefits that help to make a better environment along with global economic growth.

CONCLUSION

Green investment is an emerging concept of investment that incorporates the environmental betterment, and conservation of existing traditional energy sources. Every business organisation trying to invest reduces harmful environmental impacts and uses resources more sustainably. Green investment is gradually increasing worldwide and it has different forms that include green equity, green bond and green funds. These investment strategies are important to increase sustainability in an organisation and also help to heal the environment from different environmental implications. Different factors are there in green investment that has the ability to affect green investment in positive and negative ways. Long payback periods, technological risks, and low

revenue risks are the factors that can affect green investment in a negative way. The long payback period is a significant factor that discourages investors to invest in green investment policies as investors get a return after a long time of investment. Due to technological and revenue-related risks, investors fear investing their money in the green investment policies. Besides, the increasing price of petroleum and tax incentives for green investment attracts investors towards investment. Green investment also plays a significant role in sustainable development along with the business development which is the major future prospect of green investment.

REFERENCES

- [1] Sarkar, B., & Bhuniya, S. (2022). A sustainable flexible manufacturing–remanufacturing model with improved service and green investment under variable demand. *Expert Systems with Applications*, 202, 117154. <https://www.sciencedirect.com/science/article/abs/pii/S0957417422005462>
- [2] Jaganmohan, M., (2022). New investment in renewable energy technology worldwide from 1st quarter 2018 to 2nd quarter 2022. *Statista*. Retrieved on: 5th Januar, 2023. Retrieved from: <https://www.statista.com/statistics/1279058/global-new-investment-in-renewable-energy-technology/>
- [3] Al-Ababneh, M. M. (2020). Linking ontology, epistemology and research methodology. *Science & Philosophy*, 8(1), 75-91. <https://deliverypdf.ssrn.com/delivery.php?ID=031091004086064018102081079101097018021040001044049026109107120095111029031123120110101005043014122099042088121004096064095082052020066046041119081106115125119067031040084075121091064069069002085066121091087006099077112094085008006070127024098002103073&EXT=pdf&INDEX=TRUE>
- [4] Bleiker, J., Morgan-Trimmer, S., Knapp, K., & Hopkins, S. (2019). Navigating the maze: Qualitative research methodologies and their philosophical foundations. *Radiography*, 25, S4-S8. <https://www.sciencedirect.com/science/article/abs/pii/S1078817419300902>
- [5] Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43. https://gajrc.com/media/articles/GAJHSS_23_39-43_VMGJB OK.pdf
- [6] Belur, J., Tompson, L., Thornton, A., & Simon, M. (2021). Interrater reliability in systematic review methodology: exploring variation in coder decision-making. *Sociological methods & research*, 50(2), 837-865. <https://journals.sagepub.com/doi/full/10.1177/0049124118799372>
- [7] Ruggiano, N., & Perry, T. E. (2019). Conducting secondary analysis of qualitative data: Should we, can we, and how?. *Qualitative Social Work*, 18(1), 81-97. <https://journals.sagepub.com/doi/full/10.1177/1473325017700701>
- [8] Taghizadeh-Hesary, F., & Yoshino, N. (2020). Sustainable solutions for green financing and investment in renewable energy projects. *Energies*, 13(4), 788. doi:10.3390/en13040788
- [9] Deschryver, P., & De Mariz, F. (2020). What future of the green bond market? How can policymakers, companies, and investors unlock the potential of the green bond market?. *Journal of risk and Financial Management*, 13(3), 61. <https://www.mdpi.com/1911-8074/13/3/61/pdf>
- [10] Yin, W. (2019). Integrating Sustainable Development Goals into the Belt and Road Initiative: would it be a new model for green and sustainable investment?. *Sustainability*, 11(24), 6991. doi:10.3390/su11246991
- [11] Jaganmohan. M., 2021., *Green investment opportunities in emerging markets* across key sectors between 2020 and 2030, by region.*, Retrieved from: <https://www.statista.com/statistics/1245771/global-green-investment-by-region/>
- [12] Lee, J. W. (2020). Green finance and sustainable development goals: The case of China. *Lee, Jung Wan (2020). Green Finance and Sustainable Development Goals: The Case of China. Journal of Asian Finance Economics and Business*, 7(7), 577-586. <https://www.koreascience.or.kr/article/JAKO202020952022597.pdf>
- [13] Owen, R., Brennan, G., & Lyon, F. (2018). Enabling investment for the transition to a low carbon economy: Government policy to finance early stage green innovation. *Current opinion in environmental sustainability*, 31, 137-145. <https://eprints.mdx.ac.uk/32924/1/RO%20COES%20Enabling%20investment%20-march11-18.pdf>
- [14] Flammer, C. (2021). Corporate green bonds. *Journal of Financial Economics*, 142(2), 499-516. <https://doi.org/10.1016/j.jfineco.2021.01.010>
- [15] Guo, Y., Xia, X., Zhang, S., & Zhang, D. (2018). Environmental regulation, government R&D funding and green technology innovation: Evidence from China provincial data. *Sustainability*, 10(4), 940. doi:10.3390/su10040940
- [16] Banga, J. (2019). The green bond market: a potential source of climate finance for developing countries. *Journal of Sustainable Finance & Investment*, 9(1), 17-32. <https://doi.org/10.1080/20430795.2018.1498617>
- [17] Lyeonov, S., Pimonenko, T., Bilan, Y., Štreimikienė, D., & Mentel, G. (2019). Assessment of green investments' impact on sustainable development: Linking gross domestic product per capita, greenhouse gas emissions and renewable energy. *Energies*, 12(20), 3891.
- [18] Owen, R., Brennan, G., & Lyon, F. (2018). Enabling investment for the transition to a low carbon economy: Government policy to finance early stage green innovation. *Current opinion in environmental sustainability*, 31, 137-145. <https://eprints.mdx.ac.uk/32924/1/RO%20COES%20Enabling%20investment%20-march11-18.pdf>
- [19] Taghizadeh-Hesary, F., & Yoshino, N. (2020). Sustainable solutions for green financing and investment in renewable energy projects. *Energies*, 13(4), 788. <http://dx.doi.org/10.3390/en13040788>
- [20] Zhang, X., & Yousaf, H. A. U. (2020). Green supply chain coordination considering government intervention, green investment, and customer green preferences in the petroleum industry. *Journal of Cleaner Production*, 246, 118984. <https://doi.org/10.1016/j.jclepro.2019.118984>
- [21] Pyka, I., & Nocoń, A. (2021). Responsible lending policy of green investments in the energy sector in Poland. *Energies*, 14(21), 7298. <https://doi.org/10.3390/en14217298>
- [22] Chan, A. P. C., Darko, A., Olanipekun, A. O., & Ameyaw, E. E. (2018). Critical barriers to green building technologies adoption in developing countries: The case of Ghana. *Journal of cleaner production*, 172, 1067-1079. <https://doi.org/10.1016/j.jclepro.2017.10.235>
- [23] Dalby, P. A., Gillerhaugen, G. R., Hagspiel, V., Leth-Olsen, T., & Thijssen, J. J. (2018). Green investment under policy uncertainty and Bayesian learning. *Energy*, 161,

- 1262-1281.https://ntnuopen.ntnu.no/ntnu-xmloi/bitstream/handle/11250/2433826/15367_FULLTEXT.pdf?sequence=1
- [24] Gao, S., Meng, F., Gu, Z., Liu, Z., & Farrukh, M. (2021). Mapping and clustering analysis on environmental, social and governance field a bibliometric analysis using Scopus. *Sustainability*, 13(13), 7304.<https://doi.org/10.3390/su13137304>
- [25] Barabanov, S. S., Basnet, A., Walker, T. J., Yuan, W., & Wendt, S. (2021). Firm-and country-level determinants of green investments: An empirical analysis. *Managerial Finance*.https://www.uni.li/de/universitaet/institute/finance/fo rschung/firm_and_country_level_determinants_of_green_inve stments.pdf/@@download/file/Firm_and_country_level_deter minants_of_green_investments.pdf
- [26] Sun, H., Wan, Y., Zhang, L., & Zhou, Z. (2019). Evolutionary game of the green investment in a two-echelon supply chain under a government subsidy mechanism. *Journal of cleaner production*, 235, 1315-1326.<https://doi.org/10.1016/j.jclepro.2019.06.329>