

INVESTMENT RISK MANAGEMENT: CONTEMPORARY APPROACHES TO RESPONSIBLE INVESTING IN THE REAL ESTATE MARKET

Dominika P. BRODOWICZ

Warsaw School of Economics, Collegium of Business Administration, Department of Real Estate Market and Innovative City Department, Warszawa; dominika.brodowicz@sgh.waw.pl, ORCID: 0000-0002-2070-086X

Purpose: The research examines how Responsible Property Investment (RPI) functions as a risk mitigation tool for commercial real estate properties while emphasizing environmental, social and governance criteria. The research focuses on Polish property companies during times of market instability and rising regulatory requirements regarding ESG and sustainability.

Design/methodology/approach: The research followed three stages and included examining 100 major Polish real estate firms' investment strategies through desk research and conducting qualitative interviews with industry professionals and a CATI survey of 54 firms with majority operating in Poland for more than 15 years. The survey collected both numerical and descriptive information about investment choices and sustainability practices and ESG integration.

Findings: The research shows that more than half of the surveyed organizations recognize RPI as a risk management approach, but its implementation varies across different companies. The drivers for companies included factors like regulatory compliance and energy efficiency and formal certifications while social aspects of sustainability received less attention. The study revealed also that greenwashing practices such as selective market reporting and symbolic actions were common among property investors. The research data demonstrates that ESG principles have become mainstream but actual change remains blocked by poor implementation and insufficient social oversight.

Research limitations/implications: The research study focuses on companies investing in the Polish real estate market. Future studies could analyse how investor education along with policy development affects RPI adoption rates across different property sectors and cities worldwide.

Practical implications: The research demonstrates that better regulatory oversight together with improved investor education and standardized sustainability metrics are essential. Companies need to synchronize their internal plans with changing ESG standards to protect their reputation and maximize long-term asset worth.

Social implications: The increased adoption of RPI will lead to better urban sustainability and improved community well-being. The current investment practices demonstrate weak community involvement and insufficient social elements in their strategies which requires both policy changes and stakeholder participation.

Originality/value: The research provides a knowledge regarding RPI elements and their application as investment risk management tools in the real estate market. The research demonstrates RPI's strategic importance while adding to the discussion about sustainable development and most recent regarding ESG.

Keywords: responsible property investment (RPI), ESG, risk management, greenwashing, real estate sector.

Category of the paper: Research paper.

1. Introduction

Over the past decade, market risks have increased in complexity and social and environmental responsibility is now a significant concept within the real estate industry. Global markets, the real estate investors had to rethink traditional risk assessment frameworks in an economy of volatility, climate change risks, and changing stakeholder expectations, and therefore, social and environmental responsibility had to be incorporated as crucial components of investment strategies. Also environmental, social and governance criteria are no longer a niche approach that is integrated into investment decision-making, but a strategic necessity, which is motivated by regulatory changes, investor expectations, and societal needs for sustainable development. In essence responsible property investment (RPI) is the pursuit of financial performance while advancing environmental protection and social responsibility (Pivo, McNamara, 2005). RPI can enhance not only financial performance, reduces operational costs, mitigates environmental and regulatory risks, improves tenant satisfaction, increases asset value, and provides access to green financing and incentives while promoting long-term sustainability (Sayce, 2013; Newell, Marzuki, 2022).

The adoption of RPI in the real estate market is mainly manifested in the form of green buildings, which are certified in systems like the Building Research Establishment's Environmental Assessment Method (BREEAM) and the Leadership in Energy and Environmental Design (LEED) (Belniak, Głuszak, Zięba, 2013; Brodowicz, Pospieszny, Grzymała, 2015). Yet, it is important to stress that there are numerous concerns about greenwashing, as well as compliance with environmental, social and governance (ESG) principles or simply going beyond only green buildings (Areco, 2023; Siemińska, 2023). This article investigates the interaction between risk management, responsible property investment (RPI) and environmental, social, and governance (ESG) criteria, and their impact on investment decision making in the commercial real estate sector. Based on empirical data from a study of real estate firms in Poland, this research adds value to the risk management discourse by offering insights into how investors steer through changing market challenges while embedding sustainability principles into their plans.

2. Managing Risk and Responsibility in the Context of Property Investing

The integration of environmental and social risk management in the commercial real estate sector has received much attention as all types of risks are addressed while complying with the principles of RPI and most recently with ESG criteria. In this context, this literature review aims to discuss only key areas of risk management in real estate and how they are related to RPI. Investment in the commercial real estate sector is always accompanied by various risks such as market risk, financial risk, operational risk, reputational risk, and purchasing power risk (McNeil, Frey, 2005; Hopkin, 2010; Siemińska, 2013). Market risk is one of the most common risks in economic activities and can include factors beyond the control of market participants such as natural disasters or changes in economic conditions that are averse to property values (Fraser, Simkins, 2010; Bryx, 2021). This is because property investors, especially in the commercial sector are usually dependent on the funding from other sources including banks. Interest rate risks, liquidity risks, or difficulties in the flow of funds are major risks that can jeopardize the investments (Vose, 2006; Siemińska, 2013). Reputational risks have also become more important with growing interests of stakeholders in social and environmental responsibility (Brodowicz, 2017). Focus on sustainability and compliance with environmental standards has expanded the risk scope and this applies to all property sectors, including housing (Bryx, 2021). For instance, the Green Real Estate Financing Market Report (2024) lists regulatory factors, such as the sustainable finance initiatives of the European Union, as the main factors that determine risk in property investment (Saari et al., 2024). Therefore, risk management cannot be based only on the financial analysis but must include an assessment of environmental impacts and social implications of property investment in specific location.

Already in 2005 one of the pioneers of RPI, Gary Pivo, identified this concept as a key strategy in the real estate industry that seeks to balance investment returns with social and environmental bottom-line. This approach goes beyond the normal investment practices to include sustainability in the investment decision. Some of the aspects of RPI include energy conservation through building, waste management (Schueth, 2003) other go far beyond and include social considerations (Brodowicz, 2017; Newell, Marzuki, 2022). RPI is defined by its focus on long-term investment performance that is advantageous to the investor and society, or more specifically local communities and stakeholders directly affected by the investment. Properties that meet the green building standards such as LEED and BREEAM certifications have been seen to have a better financial return than those that do not (Belniak, Głuszak, Zięba, 2013). This includes lower operating costs due to energy consumption and higher levels of tenant satisfaction that mean lower vacancies. A study by Jamaludin and Razali on real estate firms revealed that companies that embrace RPI not only have financial gain but also improve their competitive standing to meet the changing market demands of sustainable properties (Jamaludin, Razali, 2024). The importance of green buildings in RPI is evident since sustainable

construction is known to improve property value and reduce the adverse impact on the environment (UNEP FI, 2016). Recent studies show that the integration of social responsibility and environmental stewardship into property investment decisions is not only the right thing to do among entities operating in the EU but is required by financial institutions (European Commission, 2021; EBA, 2025). Risk management, RPI and ESG frameworks are converging, and this is becoming a major issue in the commercial real estate sector. At present, ESG is critical in the management of long-term risks such as climate change, social changes and changes in regulations (Galkiewicz, Wollmann, 2023). The Sustainable Real Estate Development survey conducted in 2023 shows that the adoption of ESG increases investor confidence, the accessibility of capital and compliance with environmental standards (Haryani, Anjani, 2023) which are also part of RPI principles. However, the market also has its negative phenomena, which are usually referred to as greenwashing. This is the practice of companies or organizations harming the environment and at the same time trying to portray themselves as environmentally friendly to the consumers through their products, policies and initiatives.

3. Materials and Methods

To investigate the challenges to implementing RPI the study was divided into three, interconnected stages throughout the 2024. First, the desk-top research regarding the strategies, projects and investment plans of leading property investors active in Polish cities was conducted between February and April leading to the identification of 100 large and medium size enterprises investing in commercial real estate market in Poland. Secondly, over a dozen of interviews with real estate professionals was conducted by the researcher between May and June to identify major, contemporary risk and challenges connected to property investing with a specific focus of social and environmental issues. Thirdly, based on the secondary and primary data gathered in first two stages, a survey was conducted among leading real estate investors between August and October.

Survey data collection was done through telephone interviews, specifically Computer-Assisted Telephone Interviewing (CATI). The survey was directed at one hundred real estate investment companies that were very active in the Polish urban property markets. These firms were recognized from market reports from big real estate consulting firms including Jones Lang LaSalle (JLL) and CBRE, which provide analysis of real estate markets worldwide, including Poland. Out of the one hundred companies contacted, fifty-four firms participated in the survey, thus achieving a response rate of 54% ($N = 54$). The sampling technique was made on firms that have engaged in large format commercial and residential developments in the major Polish cities included Skanska, Yareal and Ghelamco. The survey was administered by the research laboratory specializing in CATI, based on 17 questions and contacts to 100 investing companies

provided by the author of this article. The questioner was in multiple choice format where the respondents were to pick from the options provided but were also free to offer feedback. This approach was useful in providing both quantitative and qualitative data on the investment strategies, sustainability practices, and decision making of the surveyed companies. With a systematic survey with CATI, the study ensured that data collected was accurate and that comparison between different responses was possible, to provide an assessment of responsible investment in the Polish real estate sector.

4. Results and discussion

In the first stage of the study, an investigation of real estate investors from the Polish real estate market was made, and an analysis of websites, market reports, and media coverage was done. This phase was to examine the current state of play regarding RPI and its presence within the market. The second phase of the study was to gather insights on the risks and challenges of investing in real estate. It was done through interviews with over a dozen property professionals, all focusing on green buildings, social responsibility, environmental responsibility, and the role that sustainability plays in investment decisions.

A major finding from these interviews was the perception of RPI as risk management tool and a very strong willingness to use it as a support mechanism when getting ready for ESG reporting. Moreover, both positive and negative cases of RPI were presented, and doubts were raised as to its possible abuse, which is often called “greenwashing”. In connection with the results of the first and second stages of the research, the third stage was carried out. This phase included a CATI study to quantitatively examine the role of RPI as a risk management tool, the relative importance of various aspects, and possible misuse in the real estate market.

All participants of CATI have been provided a definition of RPI which is an investment approach that integrates environmental, social and governance factors into investment decisions. The purpose of this is to generate sustainable value, considering the long term social and environmental impacts along with the financial returns. Some of the key aspects include environmental management, social equity and ethical governance, thus supporting sustainable and fair urban development while reducing investment risks for real estate market entrepreneurs. The firms that were selected for the study have been operating on the Polish market for more than 15 years. Furthermore, 50% of them were large enterprises with more than 250 employees and more than one-fourth were representatives of companies with 50-250 employees. The data shows (see Fig. 1) that most of the surveyed companies (53.7%) regard RPI as risk management tool, in line with the concept that sustainability is part of risk management strategies in the real estate sector. Nevertheless, the result shows that 38.9% of

respondents are not sure what their company's position is on this issue, which may be related to lack of knowledge or clear definition of investment strategies within organizations and as it was stated in numerous interviews from stage one, with strong shift towards ESG with weaker interest in RPI itself. The results also show that only 7.4% of respondents rejected RPI as a risk management tool.

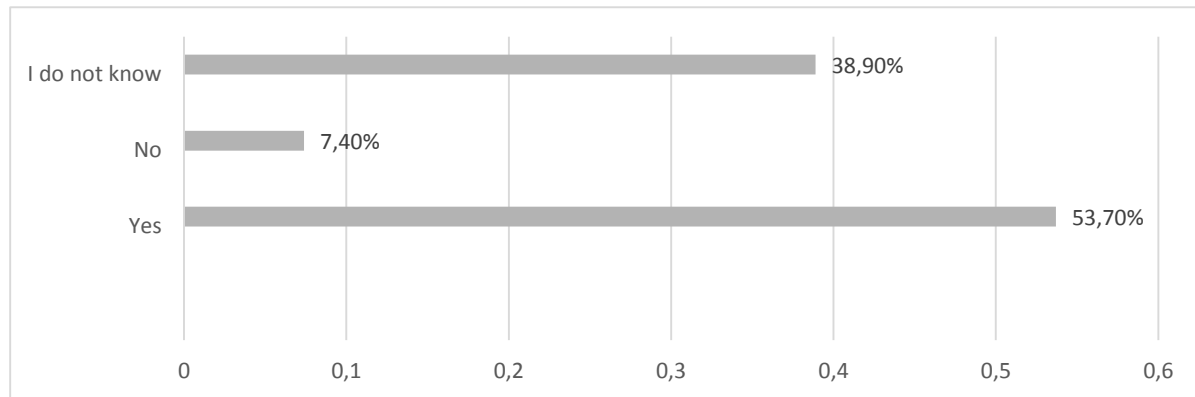


Figure 1. Use of RPI as a risk management tool.

Source: own elaboration based on conducted research.

The analysis of the importance of RPI aspects for a company's investment strategy provided insights into the perceived importance of the various factors associated with RPI in the decision-making process (see Fig. 2). The data revealed a distinction in the emphasis placed on different sustainability-related factors, especially regarding ESG factors.

The most important factors from a strategic point of view were the degree of investment compatibility with building standards, which was evaluated as highly important by half of the respondents; energy efficiency of the implemented investment, which was assessed as highly important by around 4 in 10 respondents and as a determining factor by over one-third; and the realization of environmental certifications, including ISO 14001. A little over one-third of respondents said that the actual implementation or the processes which are currently in progress for environmental protection certification are of high significance. However, 50 per cent of them argued that it is crucial. These results show that legal requirements, formally established sustainability processes and certifications are the primary drivers of investment decisions – given the existence of legal requirements and the increasing focus on sustainability reporting.

In addition, the strong presence of energy efficiency in investment choices highlights the sector's recognition of long-term operational cost optimization and environmental benefits as critical drivers of responsible investment. Social aspects of sustainability were not as clearly understood in terms of their significance. Community engagement in investment planning and project development was considered highly significant by nearly half of the respondents, but only around 1 in 20 viewed it as a decisive factor. In the same manner, sustainability-based tenants and buyers' attraction was considered highly significant by over one-third of respondents, but decisive by only fewer than 1 in 10. This showed that although survey

participants were aware of the advantages of power sharing in decision making, it was not as critical as legal requirements or financial returns. A significant phenomenon was observed in the integration of ESG factors into investment decisions and compliance with the EU taxonomy, which was considered highly significant by close to 4 in 10 respondents, while only around 1 in 20 saw it as a decisive factor. This aligns with the increasing institutionalization of ESG standards in investment frameworks that are also consistent with other market trends targeting sustainable finance regulations and climate impact risk management. Nevertheless, the role of ESG factors as drivers of action is not as straightforward as it seems, indicating that investors are still in the process of moving from compliance to sustainability leadership.

The data overall showed that compliance, efficiency and formal certification were the dominant RPI themes. The results of the study show a slow but asymmetric integration of ESG principles, which indicates that regulatory incentives, investor education, and market signals will need to be further enhanced to drive the strategic effectiveness of sustainability actions in the real estate sector. This is especially important as not all real estate investors are listed on a stock exchange or must comply with ESG principles, and some reporting is voluntary.

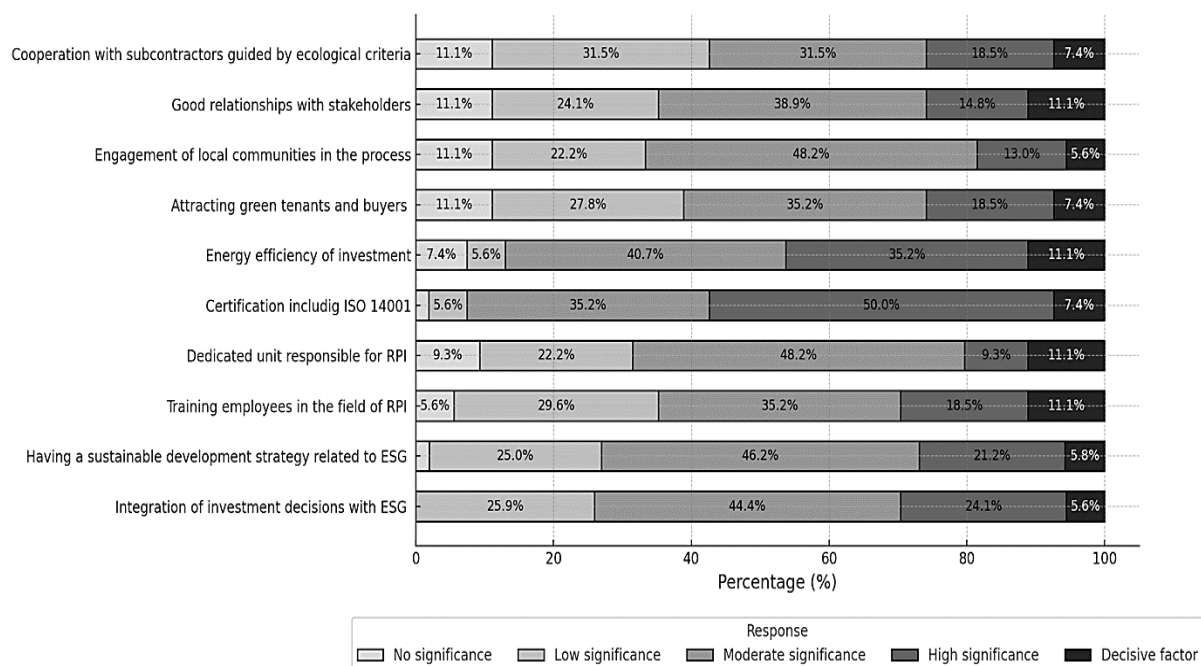


Figure 2. The importance of RPI aspects for company's investment strategy.

Source: own elaboration based on conducted research.

Following the issues raised during the second stage of the study, the problem of greenwashing among property investors was investigated further in CATI (see Fig. 3). The data showed that selective reporting and the exaggeration of results are the most common forms of greenwashing. Nearly 3 in 10 respondents rated selective reporting as moderate, about 1 in 8 as high, and fewer than 1 in 10 as the primary form of communication. For instance, one-third of respondents reported that exaggerated claims occur with moderate frequency, nearly 1 in 5 saw

them as frequent, and around 1 in 20 considered them exclusive. This means that many investors only present the positive environmental aspects of their projects while not showing or downplaying the negative aspects.

Another important problem was the use of symbolic initiatives, which do not have a significant impact overall, such as planting trees or installing bike racks. Such initiatives, according to the respondents, are reported to happen infrequently by 20%, moderately by 25%, and frequently or only by less than 10%. This implies that investors could have more interest in the image-based RPI initiatives than in the real environmental responsibility. Furthermore, the results indicated that investors tend to overlook the life cycle of buildings. The results also showed that 1 in 5 respondents agreed that this only happens rarely, over 1 in 4 said that it happens moderately, and fewer than 1 in 10 stated that it occurs frequently or exclusively. This omission gives a false impression of sustainability since the long-term environmental impacts of construction, demolition, and material sourcing are not captured (often referred to as the cradle-to-cradle approach).

A particular issue that came up during the data analysis was the use of misleading advertisements. The CATI study found that 1 in 5 respondents employed misleading advertisements occasionally, another 1 in 5 used them moderately, and about 1 in 20 used them frequently or exclusively. This suggests a need to investigate further the reasons behind the use of such advertisements. Green visuals and terminology are often used to give the consumer a positive perception without the actual implementation of such solutions. This raises concerns about regulatory oversight and the need for more stringent standards regarding the accuracy of sustainability information in real estate advertising. In addition, the data show that social aspects of sustainability are not well captured. The results showed that omitting social aspects was reported to happen infrequently by 1 in 5 respondents, occurred moderately by around 1 in 4, and happened frequently or exclusively by fewer than 1 in 10. Most investors do not involve local communities in the planning process, despite social responsibility being an important aspect of sustainable development. This lack of engagement is consistent with an approach to RPI that focuses more on environmental aspects while being indifferent to social considerations.

The results of the study presented in this analysis show that greenwashing is widespread in the real estate investment industry and that professionals representing this sector see it as a challenge. The data indicate that while RPI and ESG are frequently discussed, actual practices are inconsistent and often superficial. These findings underscore the need for stronger regulatory frameworks and more accurate reporting.

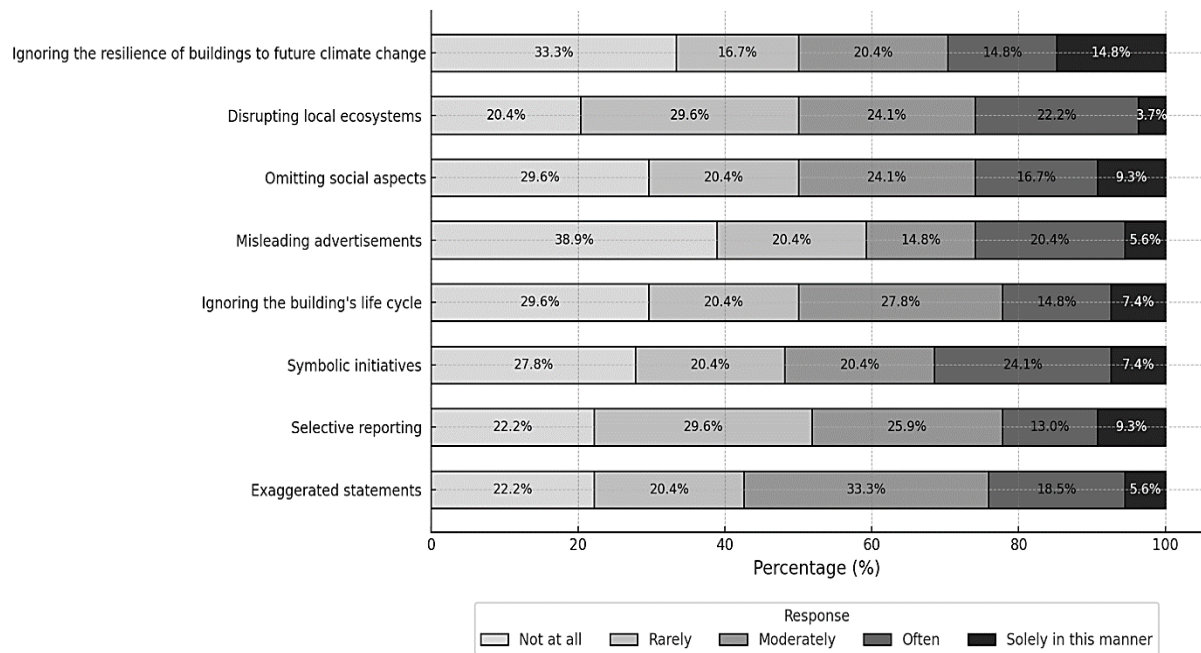


Figure 3. Greenwashing practices among property investors.

Source: own elaboration based on conducted research.

5. Conclusions

The study reveals RPI as a framework that should be used to manage environmental and social risks in the commercial real estate sector. The results show that more and more real estate investors are bringing ESG risk into their risk management approaches and understand the financial and social benefits of green investment. However, there are still many problems regarding integration of RPI and its application as risk management tool. The last conclusion of the study is the polarization of the adoption of RPI principles across real estate firms. Nevertheless, most companies embrace RPI ideas, but many of the organizations are lagging or have not incorporated these concepts into their investment plans. This lack of clarity suggests that internal communication gaps and policy implementation inconsistencies might be limiting the adoption to the wider audience.

The research also reveals the problem of greenwashing in the real estate sector. Responsibility, greening and other broader ESG commitments are often used by investors in their marketing and reporting, but in practice, these commitments are not always backed by real action. Common problems include selective reporting, greenwashing, limited focus on social capital, and lack of accountability for sustainability metrics, thus highlighting the need for better oversight, new and better sustainability metrics, and stronger accountability measures to create real progress in responsible investing. All things considered, the results show that while the overall trend within the commercial real estate sector is towards integration of sustainability

and ESG principles, there is much scope for enhancing the synchronisation of policies with long term environmental and social value. Maturities, sustainability and risk resilience in the real estate market will require therefore stronger regulatory frameworks, improved investor education, and better transparency.

Acknowledgements

The research presented in this article was supported by the Collegium of Business Administration at the Warsaw School of Economics (SGH) as part of the project The Green Transformation of Polish Cities, Building Standards, and Responsible Investment in the Real Estate Market. The author gratefully acknowledges this institutional support.

References

1. Areco, M.V. (2023). *The challenge of greenwashing in the real estate sector*. Retrieved from: <https://ineriamanagement.com/en/the-challenge-of-greenwashing-in-the-real-estate-sector/>, 05.02.2025.
2. Belniak, S., Głuszak, M., Zięba, M. (2013). *Sustainable development in real estate: Trends and challenges*. Krakow: Krakow University of Economics.
3. Brodowicz, D.P., Kalinowski, M., Michalska, M. (2017). *Rozwój zrównowagony – perspektywa różnych branż [Sustainable development – the perspective of various sectors]*. Warsaw: Texter, pp. 5-55.
4. Brodowicz, D.P., Pospieszny, P., Grzymała, Z. (2015). *Eco-cities* [E-book]. Warsaw: CeDeWu, pp. 14-58.
5. Bryx, M. (2021). *Mieszkanie dostępne w zrównowagonym mieście [Affordable housing in the sustainable city]*. Warsaw: CeDeWu.
6. Coakley, D. (2024). *ESG Investment in Commercial Real Estate: A Structured Literature Review*. Retrieved from: <https://ssrn.com/abstract=4948030>, 05.02.2025.
7. European Banking Authority (EBA) (2025). *Final report, Guidelines on ESG Risks and Financial Institutions' Disclosure Obligations*. Retrieved from: <https://www.eba.europa.eu/sites/default/files/2025-01/fb22982a-d69d-42cc-9d62-1023497ad58a/Final%20Guidelines%20on%20the%20management%20of%20ESG%20risks.pdf>, 05.02.2025.
8. European Commission (2021). *Strategy for Financing the Transition to a Sustainable Economy*. Retrieved from: https://finance.ec.europa.eu/publications/strategy-financing-transition-sustainable-economy_en, 05.02.2025.

9. Fraser, J., Simkins, B. (2010). *Enterprise risk management: Today's leading research and best practices for tomorrow's executives*. Hoboken: John Wiley & Sons.
10. Galkiewicz, D.P., Wollmann, B. (2023). *Environmental (Sustainability) Reporting in 2020 and 2021 by Real Estate Companies from German-Speaking Countries*. Retrieved from: <https://www.ceeol.com/search/chapter-detail?id=1221385>, 05.02.2025.
11. Haryani, M., Anjani, Z. (2023). The importance of environmental, social, and governance (ESG) principles in public works and housing infrastructure. *Journal of Infrastructure Policy and Management*, Vol. 3, Iss. 2, pp. 15-31.
12. Hopkin, P. (2010). *Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Risk Management*. London: Kogan Page.
13. Jamaludin, A.F., Razali, M.N. (2024). Assessing the implementation of environmental, social, and governance (ESG) by Southeast Asian listed property companies. *Pacific Rim Property Research Journal*, Vol. 29, Iss. 2.
14. McNeil, A.J., Frey, R. (2005). *Quantitative Risk Management: Concepts, Techniques, and Tools*. Princeton: Princeton University Press.
15. Newell, G., Marzuki, J. (2022). The increasing importance of environmental sustainability in global real estate investment markets. *Journal of Property Investment and Finance*, doi: 10.1108/JPIF-01-2022-0005.
16. Pivo, G. (2005). Is there a future for socially responsible property investments? *Real Estate Issues*, Vol. 30, No. 1, pp. 16-27.
17. Pivo, G., McNamara, P. (2005). Responsible property investing. *International Real Estate Review*, Vol. 8, No. 1, p. 129.
18. Saari, A., Sinclair, S., Ciro, T., Holopainen, M., Leshinsky, R., Junnila, S., Salakka, A. (2024). *Green Real Estate Financing Market Report*. Helsinki: Aalto University, School of Engineering. Retrieved from: <https://aaltodoc.aalto.fi/server/api/core/bitstreams/5c66e60f-1a0d-450f-b1e2-76f86d8d0b22/content>, 05.02.2025.
19. Sayce, S. (2013). Sustainability and real estate values: Time for the agenda to move on? *Property Management*, Vol. 31, No. 3.
20. Schueth, S. (2003). Socially responsible investing in the United States. *Journal of Business Ethics*, Vol. 43, No. 3, pp. 189-194.
21. Seele, P., Gatti, L. (2017). Greenwashing revisited: In search of a typology and accusation-based definition incorporating legitimacy strategies. *Business Strategy and the Environment*, Vol. 26, No. 2, pp. 239-252, doi: 10.1002/bse.1912.
22. Siemińska, E. (2013). *Ryzyka inwestowania i finansowania na rynku nieruchomości w kontekście etyki i społecznej odpowiedzialności [Risks of investing and financing in the real estate market in the context of ethics and social responsibility]*. Toruń: Wydawnictwo Naukowe UMP, pp. 236-263.

23. Siemińska, E. (2023). Strategia ESG w budownictwie na wybranych przykładach. In: A. Szelągowska (Ed.), *Idealizm a pragmatyzm współczesnego miasta* (pp. 159-180). Warsaw: SGH Oficyna Wydawnicza.
24. UNEP FI (2016). *Real Estate Investment Implementing the Paris Climate Agreement: An Action Framework*. Retrieved from: <https://www.unepfi.org/fileadmin/documents/SustainableRealEstateInvestment.pdf>, 05.02.2025.
25. Vose, D. (2006). *Risk Analysis: A Quantitative Guide* (2nd ed.). Hoboken: John Wiley & Sons.