ESG in corporate real estate management: global trends and Russian experience

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Abstract. Environmental, Social, and Governance (ESG) factors have gained increasing importance in corporate real estate management in recent years. This article provides a comprehensive review of current trends and practices regarding the integration of ESG factors in corporate real estate management. The methods used to obtain the results include a thorough review of relevant literature and case studies. The results show that ESG factors have a significant impact on corporate real estate performance, and there is a growing trend of companies integrating ESG factors into their real estate management strategies. The discussion emphasizes the significance of the results and their implications for future research and practice. The article concludes with a summary of the main findings and recommendations for real estate managers to effectively integrate ESG factors into their strategies.

Keywords: ESG factors, corporate real estate management, sustainability, environmental impact, social impact, governance, case studies.

1 Introduction

The last few years have not been the easiest for the global community. Climate devastation, pandemics, and a large number of social protests have all increased the focus on environmental and social issues. With the established globalization of the world economic system and the great power concentrated in the hands of corporations, the most important aspect is the formation and implementation of ESG (Environmental, Social, and Corporate Governance) principles into corporate policies.

Corporate real estate management (CREM) involves the management of real estate assets owned and/or used by corporations [1]. As a consequence, it is obvious that the area of corporate real estate portfolio management, being an integral part of corporate strategy, should also be based on ESG principles. This article proposes considering the impact of the ESG agenda on corporate real estate portfolio management strategy. It is conditioned by the fact that sustainable growth of large geographically distributed corporations with a significant influence on the economy on a national scale (Sberbank, Gazprom, Russian...
Railways, etc.) is impossible without the construction of property complexes. The integration of ESG factors in corporate real estate management is essential as it helps companies optimize their real estate assets' performance while reducing their impact on the environment and society. This article aims to provide a comprehensive review of current trends and practices regarding the integration of ESG factors in corporate real estate management.

ESG factors refer to a set of non-financial performance indicators that measure a company's impact on the environment, society, and governance. Nevertheless, one cannot deny the positive indirect impact of social and environmental investments on the overall value of the company. Thus, the study substantiates that adherence to ESG principles is a driver of increased corporate profitability [2].

2   Materials and Methods

To obtain a comprehensive understanding of the current trends and practices of integrating ESG factors in corporate real estate management, a systematic review of the relevant literature was conducted, and case studies of companies that have implemented ESG strategies in their real estate management were analyzed.

Firstly, the author searched for relevant academic papers in several databases, including Web of Science, Scopus, and Google Scholar. The author used various search terms such as ESG factors, corporate real estate management, sustainability, environmental impact, social impact, and governance. Papers published from 2010 to 2022 and only considered peer-reviewed articles were included.

Secondly, case studies of companies that have implemented ESG strategies in their real estate management were analyzed. The author identified case studies by searching through several databases such as Harvard Business Review and MIT Sloan Management Review. The author also looked into the sustainability reports and websites of some leading companies known for their sustainability initiatives in the real estate sector.

Finally, the data from the literature review and case studies were synthesized to identify the current trends and practices in integrating ESG factors into corporate real estate management.

3   Results

As stated before, there has been a high increase in interest in the social and environmental impact of businesses in recent years. However, even in the first decade of the 21st century, this topic received a lot of attention. At least some companies started integrating sustainability reporting into their management system, and in some cases, we can see that companies develop a KPI system that takes into account non-financial indicators and also uses these indicators in decision-making [3].

From the perspective of real estate management, the concept of ESG is reflected in the company's involvement in solving environmental and social problems [4] during the real estate portfolio management and implementation of projects for the development of corporate real estate. Ultimately, the implementation of these principles leads to the creation of "high-performing" buildings and real estate portfolios [5].

However, it is worth noting that several different strategies can be identified for implementing the ESG approach in the corporate real estate portfolio management process:

Regarding the Russian experience with implementing ESG practices in real estate management, the most common format is building certification. In 2022, the number of
buildings with green certification has increased significantly, as shown by the statistical data presented in Figure 1.

The fact that the number of certified properties has increased by 70% is evidence of property owners' deep involvement in the process of certifying their property complexes. Approximately 64% of certified buildings are used for commercial purposes, which indicates high interest from businesses and corporations in increasing their environmentally friendly real estate portfolios [14-15].

Table 1. ESG strategies adopted by companies in real estate management
<table>
<thead>
<tr>
<th>ESG strategies</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Energy efficiency     | Companies focus on energy-efficient buildings and appliances to reduce energy consumption and greenhouse gas emissions [6]. | ● Blackstone's Retrofit Program, which aims to improve energy performance in its real estate portfolio through energy-efficient retrofits.  
   ● British Land's Energy Performance Contracting program, which invests in energy-efficient measures to reduce energy consumption and costs. |
| Green building        | Companies seek to obtain certifications such as LEED, BREEAM, or WELL, which recognize the sustainability and environmental performance of their buildings. | ● JLL's Green Building Certification Program, which supports clients in obtaining green building certifications.  
   ● CBRE's Green Lease Leaders program, which encourages landlords and tenants to collaborate on sustainability initiatives in leased buildings [7]. |
| certifications        |                                                                             |                                                                                                                                          |
| Sustainable sourcing  | Companies aim to source sustainable materials, products, and services in their real estate projects. | ● Lendlease's Timber Solutions, which uses sustainably sourced timber in its construction projects.  
   ● Skanska's Green Procurement Policy, which prioritizes the use of environmentally friendly products and services in its real estate projects. |
| Community engagement  | Companies engage with local communities to understand their needs and interests and involve them in their real estate projects. | ● The Crown Estate's Community Investment Program, which supports local communities through various initiatives such as affordable housing and community centers [8].  
   ● Hammerson's Positive Places program, which aims to create sustainable and inclusive places that benefit local communities [9]. |
| Technology            | Companies use technology such as building automation systems, smart sensors, and data analytics to monitor and optimize energy consumption, water usage, and indoor air quality in their buildings. | ● Siemens' Navigator, which uses artificial intelligence to optimize building performance and reduce energy consumption [10].  
   ● Schneider Electric's EcoStruxure Building Advisor, which uses real-time data to identify energy-saving opportunities in buildings. |
ESG strategies

**Description**

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**Figure 1.** Quantity of properties certified according to green standards in Russia – compiled by the author on the basis of [11-13]

The territorial distribution of certified buildings, as illustrated in Figure 2, also confirms companies' high involvement in the certification process of their assets.
The chart shows that most certified buildings are in major cities with high business activity, such as Moscow and St. Petersburg, as well as large industrial and tourist centers, including Kazan and Krasnodar Krai. It is also worth noting that regional environmental programs that contribute to sustainable development play an important role in the building certification process [16].

Another significant area for integrating the ESG component into corporate real estate portfolio management is the introduction of technologies that improve efficiency and reduce the resource consumption of buildings. X5 Retail Group, one of the largest food retail companies in Russia with an impressive real estate portfolio, implemented many measures to reduce energy consumption, achieving the results shown in Table 2.

Table 2. Measures and results to reduce energy consumption in X5 Retail group's property portfolio – compiled by the author on the basis of [17]

<table>
<thead>
<tr>
<th>Measures to reduce energy consumption</th>
<th>Direct results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pioneering solar panels in four retail stores</td>
<td>Electricity consumption from renewable sources was 147,167 MWh</td>
</tr>
<tr>
<td>11 distribution centers were converted to hydropower. All distribution centers are converted to low-carbon energy sources</td>
<td>-</td>
</tr>
<tr>
<td>In December 2021, an agreement was made to transfer stores. The agreement to switch «Pyaterochka» stores in the Republic of Karelia to renewable energy sources was signed in December 2021.</td>
<td>Today, the share of renewables in the total energy consumption of the grid in the region is 17%.</td>
</tr>
<tr>
<td>Setting up a «Smart Store» system in «Pyaterochka» stores</td>
<td>Saving 32,200 MWh of electricity</td>
</tr>
<tr>
<td>Setting up remote monitoring system for refrigeration equipment</td>
<td>Saving 14,478 MWh of electricity</td>
</tr>
<tr>
<td>39 «Perekrestok» supermarkets were additionally connected to the «Smart Store» system</td>
<td>Energy savings averaged 12%</td>
</tr>
<tr>
<td>Refrigeration equipment in 189 stores is connected to the &quot;Smart store&quot; system</td>
<td>Energy cost savings of 4%</td>
</tr>
<tr>
<td>For 178 stores and distribution centers, direct renewable energy agreements have been signed with energy suppliers who have offered discounts.</td>
<td>This resulted in energy cost savings of 2-3%</td>
</tr>
</tbody>
</table>

However, not only companies in the retail sector have significant property complexes. Sberbank PJSC, the largest backbone company in the Russian banking sector, has also achieved key milestones in reducing energy consumption in their real estate portfolio, as indicated in the company's environmental impact report [18]:

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For existing facilities, continuous work is being done to introduce automated control systems for engineering systems, first of all, telemetry and remote control systems (RTMS). In 2021, 3,400 facilities with RTMS installed, resulting in a reduction of the bank's energy costs by 230 million rubles per year;

- In 2021, 32,000 energy-efficient fixtures were installed, increasing the number of LED lights to 90%);
- Due to the implementation of energy saving and energy efficiency measures, the total consumption of fuel and energy resources at Sberbank decreased by 22% from 2018 to 2021, reaching 7,158,232 GJ in 2021;
- Purchased electricity accounts for the largest share of energy consumption (45%), followed by purchased thermal energy (31%), and own generation from non-renewable sources (23%). The latter category includes consumption of diesel (15%), natural gas (6%), gasoline (2%), and coal, wood, and kerosene (less than 1%).

The results of the review indicate that the integration of ESG factors in corporate real estate management has become a significant trend in recent years. To provide a more detailed analysis of the data, the author has compiled some key findings in Table 3 below:

**Table 3. Key findings of integrating ESG factors in corporate real estate management**

<table>
<thead>
<tr>
<th>Key findings</th>
<th>Supporting evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG factors have a significant impact on corporate real estate performance</td>
<td>Companies that have integrated ESG factors into their real estate management strategies have seen improved financial performance, reduced environmental impact, and enhanced social impact.</td>
</tr>
<tr>
<td>Companies that integrate ESG factors into their real estate management strategies tend to have a more sustainable and responsible approach to managing their assets.</td>
<td>Companies prioritize energy efficiency, green building certifications, and community engagement in their real estate projects.</td>
</tr>
<tr>
<td>There is a growing trend of companies adopting ESG reporting frameworks in their real estate management practices</td>
<td>Companies are adopting ESG reporting frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) in their real estate management practices.</td>
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</tbody>
</table>

Overall, this article highlights the importance of integrating ESG factors in corporate real estate management. Companies that adopt ESG strategies in their real estate operations not only improve their financial performance but also contribute to a more sustainable and responsible future. By implementing ESG strategies, companies can mitigate risks, reduce costs, and enhance their reputation in the market.

4 Discussion

The study's results suggest that ESG factors play an essential role in CREM practice. The study contributes to a growing body of literature on the integration of ESG factors in real estate management. Previous research emphasized the importance of ESG in real estate
investment decisions, but this study provides new insights into the role of ESG in CREM practice. Companies with high ESG scores are more likely to invest in sustainable CREM practices as they perform better financially.

Although this study has some limitations that should be acknowledged. Firstly, the sample was restricted to the Russian real estate sector, and the findings cannot be generalized to other regions and sectors. Second, the study is based on publicly available data, which may have limitations regarding accuracy and completeness. Finally, the study examines only the relationship between ESG and CREM practices, not the influence of CREM practices on financial performance.

5 Conclusion

This study provides empirical evidence of the integration of ESG into corporate real estate management practices. The results suggest that companies increasingly recognize the importance of ESG in their real estate decision-making processes. Nonetheless, there is scope to enhance transparency and accountability in reporting ESG performance. These findings highlight the potential advantages of integrating ESG into real estate management practices, including financial performance, brand reputation, and stakeholder trust.

References

5. Arlein, J. (2021, April 1). Corporate real estate's role in ESG. Retrieved from https://www.corenetglobal.org/KCO/content.aspx?ItemNumber=46066&ss0=1


