



OPEN ACCESS

EDITED BY

Hamid Mattiello,
Fachhochschule des Mittelstands, Germany

REVIEWED BY

Dan Lupu,
Alexandru Ioan Cuza University, Romania
Szilárd Hegedus,
Budapest Business School, Hungary

*CORRESPONDENCE

Evgeny Kuzmin
✉ kuzmin.ea@uieec.ru

RECEIVED 10 February 2025

ACCEPTED 28 April 2025

PUBLISHED 22 May 2025

CITATION

Kuzmin E, Rakhimova G, Nasirova H and
Namozov J (2025) Assessing the spread and
coverage of ESG practices in Russian
companies. *Front. Sustain.* 6:1574190.
doi: 10.3389/frsus.2025.1574190

COPYRIGHT

© 2025 Kuzmin, Rakhimova, Nasirova and
Namozov. This is an open-access article
distributed under the terms of the [Creative
Commons Attribution License \(CC BY\)](#). The
use, distribution or reproduction in other
forums is permitted, provided the original
author(s) and the copyright owner(s) are
credited and that the original publication in
this journal is cited, in accordance with
accepted academic practice. No use,
distribution or reproduction is permitted
which does not comply with these terms.

Assessing the spread and coverage of ESG practices in Russian companies

Evgeny Kuzmin^{1*}, Guzalbegim Rakhimova^{2,3}, Hatidje Nasirova²
and Jasurbek Namozov²

¹Department of Regional Economic Policy and Economic Security, Institute of Economics of the Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russia, ²Department of Accounting and Auditing, "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" National Research University, Tashkent, Uzbekistan, ³Department of Science and Rating, Diplomat University, Tashkent, Uzbekistan

KEYWORDS

ESG agenda, companies, Russia, sustainable development, empirical data, non-financial reports

1 Introduction

In the last decade, sustainability issues have significantly gained in popularity (Bebbington, 2001; Bansal, 2002; Barkemeyer et al., 2014; Mio et al., 2020; ElAlfy et al., 2020; Van Zanten and van Tulder, 2021). Environmental, social and governance (ESG) aspects have become an important part of modern companies' strategies, having a significant impact on their reputation (Jeffrey et al., 2019; Liu, 2022; Kim et al., 2023), financial stability (Koundouri et al., 2022; Lisin et al., 2022; Lupu et al., 2022) and competitiveness (Mohammad and Wasiuzzaman, 2021; Chang and Lee, 2022; Katsamakos and Sanchez-Cartas, 2023). One of the key components of sustainable development is ESG principles implemented and followed by business entities (Li et al., 2021; Dathe et al., 2024). This area is becoming especially relevant amid the growing pressure from investors, regulators and the public demanding corporate practices to be transparent and responsible (Kolk, 2008; Heikkurinen and Bonnedahl, 2013; Calabrese et al., 2021; Krasodomska et al., 2023). The fact of ESG factors being crucial for sustainable business development is convincingly confirmed. In this context, special attention is paid to empirical studies aimed at assessing the current state and prospects for the spread of the ESG agenda in various countries, industries and companies (for example, companies in Canada—Davis and Searcy, 2010; in the Netherlands—Asif et al., 2013; in Australia—Lokuwaduge and Heenetigala, 2017; in Italy—Izzo et al., 2020; Bonfanti et al., 2023; multinational companies—Kolk, 2008).

Globally, significant progress has been made in standardizing ESG disclosure through regulations and market-driven initiatives. In the European Union, the Corporate Sustainability Reporting Directive (CSRD) mandates ESG disclosures for large and listed companies, fostering data comparability and reliability across member states. Similarly, China has developed a national ESG framework aligned with its green finance policies, while the United States increasingly relies on ESG data for risk assessment and shareholder advocacy. These developments contrast with the situation in Russia.

By turning to the experience of Russian companies, we aim to demonstrate local peculiarities of the ESG agenda. Under global challenges, Russian business faces the need to adapt to new requirements for sustainable development (Blokhin and Kuvalin, 2023). Despite significant progress, the introduction of the ESG agenda in Russia is associated with a number of barriers and restrictions (Bella and Ani, 2023; Izmaylova, 2022). In Russia, ESG reporting is not mandatory for companies. Instead, the government

has proposed a standard of a recommendatory nature (the Order of the Ministry of Economic Development of the Russian Federation, 2023), which includes 44 basic indicators of sustainable reporting. These indicators are designed to form a basis for voluntary disclosure of corporate responsibility data. Lack of mandatory requirements for non-financial disclosure in Russia causes a serious problem in assessing companies' current ESG commitment, which is primarily due to a significant information gap. Furthermore, amid the sanction standoff, in 2022 the Russian government allowed issuing companies to publish corporate information only partially or avoid disclosing it at all if this could interrupt their ongoing operations. This relaxation applies to interim and annual financial statements, including consolidated ones, audit reports and other sensitive corporate information, which may also cover details on the ESG agenda. Owing to this information gap, it is rather problematic to fully understand and analyze the extent to which companies in Russia integrate environmental, social and governance principles into their activities. This dual context underscores the significance of the research and highlights the urgent need for a more comprehensive understanding of the reporting practices. Therefore, the relevance of the research is due not only to the growing interest in the topic of sustainable development, but also to the need for systematizing and generalizing the Russian companies' ESG experience to close the gaps.

These premises outlined the purpose of our study, that is to form and conduct a primary analysis of a data set reflecting the level of distribution and coverage of the ESG agenda in Russian companies. The central research question underlying this article is formulated as follows: To what extent do Russian companies integrate the principles of environmental, social, and corporate responsibility into their operations? This question directs the analysis of the results obtained and frames the discussion. The research aims to close the current information gaps in this area, the present a novel empirical dataset, which will contribute to a deeper and more objective assessment of ESG principles in Russian corporate practice and will also provide a more transparent and high-quality basis for decision-making. To that end, a data panel was compiled based on 2022 non-financial reports of companies operating in various sectors of the economy. The study's methodology integrates the systematic collection of ESG metric data with an analysis of the sample structure, descriptive statistics, and the representativeness of the sample. Unlike existing qualitative assessments or sector-specific case studies, our approach allows for a comparative analysis of ESG adoption levels and highlights systemic challenges in corporate sustainability disclosure. The results of the empirical analysis can be useful both for companies seeking to improve their ESG indicators and get a deeper understanding of the current state and prospects, and for stakeholders interested in the sustainable development of business in Russia.

2 Literature review

The growing academic interest in ESG practices reflects the expanding role of sustainability in corporate strategy. Numerous international studies examine how companies integrate

ESG principles into business operations and how these factors influence financial and non-financial outcomes. Kolk (2008) and Heikkurinen and Bonnedahl (2013) analyze the reporting strategies of multinational companies, emphasizing differences between market- and stakeholder-oriented approaches. Izzo et al. (2020) and Bonfanti et al. (2023) assess the quality of sustainability disclosures, finding that alignment with Sustainable Development Goals remains inconsistent across sectors. Studies from Canada (Davis and Searcy, 2010), the in Dutch (Asif et al., 2013), and Australia (Lokuwaduge and Heenetigala, 2017) reveal a gradual institutionalization of ESG reporting frameworks. Mohammad and Wasiuzzaman (2021) show that Malaysian firms with stronger ESG disclosure benefit from greater competitive advantage. Katsamakas and Sanchez-Cartas (2023) use computational modeling to demonstrate the impact of ESG strategies on market competition. These works provide valuable comparative insights, yet they largely focus on countries with institutionalized ESG disclosure mechanisms, which may limit their applicability to countries with voluntary reporting systems.

In the Russian context, the literature is less developed and primarily descriptive in nature. Studies by Izmaylova (2022) and Bella and Ani (2023) discuss barriers to ESG implementation under geopolitical and regulatory uncertainty, highlighting limited adoption of global standards. A small number of empirical studies have emerged, offering partial quantitative insights into ESG-related issues. For example, Bataeva et al. (2021) assessed the impact of ESG disclosure on the financial performance of Russian public companies, finding that more transparent reporting practices are associated with improved financial indicators. In a related study, Bataeva and Karpov (2023) examined how elements of corporate governance affect the extent of ESG information disclosure, highlighting the role of board independence and ownership concentration. Fedorova and Salnikova (2024) explored the market effects of environmental disclosures, demonstrating a statistically significant relationship between the publication of green initiatives and short-term stock price movements. However, these studies do not provide a comprehensive statistical overview of ESG metrics across the broader corporate landscape. Most studies rely focus on financial performance linkages, without examining the structure and variability of ESG disclosures themselves. Our study addresses this gap by assembling a structured and statistically validated dataset of ESG indicators and analyzing coverage patterns across a representative sample of Russian companies from different sectors.

3 Materials and methods

3.1 Research concept

For the purposes of the study, we have collected and analyzed 2022 non-financial reports of Russian companies from various industries published in the public domain (the latest available report at the time of the research). The reports covered information on the companies' environmental impact, social aspects of their activities and corporate governance issues.

Inclusion and exclusion criteria for forming the sample can be formulated as follows.

Non-financial reports were collected through a search query focused on companies that had publicly posted a “sustainability report” or a “non-financial report” for 2022. The search was carried out in January–February 2024. The data for analysis were retrieved from companies either indexed in the Interfax Corporate Information Disclosure Center system (Interfax-CIDC, <https://www.e-disclosure.ru>) which stores mandatory and voluntary reports of issuing companies or those posting this information on their own websites.

Certain industries, particularly small and medium-sized enterprises (SMEs), were excluded due to a lack of publicly available non-financial reports. This limitation arises from resource constraints and the absence of mandatory disclosure requirements, which hinders their ability to produce detailed sustainability reports. As a result, the dataset predominantly reflects the practices of large companies.

The scope of the empirical study covers objects of various organizational and legal forms. The study included legal entities in the form of both commercial corporate organizations (joint stock companies, limited liability companies) and commercial unitary organizations (federal state unitary enterprises). The exception is the state corporation *Rosatom*, which, according to its organizational and legal form, is a non-profit unitary organization. However, it should be borne in mind that *Rosatom*’s activity should be regarded as exclusively commercial considering the other firms owned by the holding company.

The empirical study did not include legal entities in the form of non-profit corporations, as well as organizations without forming a legal entity, and international organizations operating in Russia. The sample does not cover organizational and legal forms of individual activity (sole proprietorship).

3.2 Composition and structure of the sample

The sample included 109 companies varying in revenue and the number of employees. The composition of the sample is given in the dataset (available in [Supplementary Table S1](#)).

More than half of the sample (58.7%) is comprised of power suppliers and gas companies (31.2%) and manufacturing companies (27.5%); mining companies and transport/storage companies constitute 16.5% and 14.7% of the sample, respectively. This quantitative distribution of the companies emphasizes the importance of fuel, energy and manufacturing sectors in the sample under study (available in [Supplementary Table S2](#)). The other companies in the sample are engaged in agriculture and forestry (0.9%), water supply and waste management (1.8%), construction (1.8%), finance and insurance (1.8%), information and communications (2.8%), and real estate (0.9%). Companies from other sectors of the economy were not included in the sample.

The quantitative distribution of the companies in the sample does not provide a full picture of how significant their contribution is to the overall spread of ESG principles among all companies. To assess this contribution more accurately, we refine the sample structure based on the companies’ staff numbers and their revenue for the reporting period (available in [Supplementary Figure S1](#)). By

doing so, we take into account the scale of the companies’ activities, their economic and social impact, which is of high importance for understanding the real dissemination and implementation of ESG principles.

As seen from [Supplementary Figure S1](#), the sample companies are concentrated in a few key areas. More than 60% of companies have an average headcount of 1,000 to 25,000 workers (available in [Supplementary Figure S2](#)). Annual revenue of the same 60% of companies ranges from 10 to 250 billion rubles (available in [Supplementary Figure S3](#)). This indicates the predominance of large businesses in the sample, which more accurately reflects the overall corporate ESG approach. The spread of ESG initiatives begins with large businesses and gradually extends to medium-sized and small businesses. Large companies play a leading role in the design and implementation of sustainable development strategies ([Aastha and Shazi, 2019](#); [Karuppiyah et al., 2020](#); [Mahmood et al., 2021](#); [Bielawska, 2022](#); [Morais et al., 2022](#)), thus setting an example for others. Medium-sized and small businesses, following the example of large corporations, also start actively implementing ESG principles by adapting them to their scale and activities ([Jenkins, 2006](#)).

According to [Supplementary Figures S2 and S3](#), small and medium-sized enterprises (SMEs) are virtually not represented in the sample. In terms of revenue, only five companies from the sample (4.6%) can be classified as SMEs hiring <1% of the sample companies’ employees. These two parameters taken together indicate that there are no SMEs in the sample.

At the same time, SMEs may follow the ESG agenda, but not record the results in non-financial report ([Rossi and Luque-Vílchez, 2021](#); [Shalhoob and Hussainey, 2022](#)). This may be due to various reasons, including limited resources, lack of experience in preparing such reports or lack of requirements for their mandatory publication ([Coppa and Sriramesh, 2013](#); [Conway, 2015](#); [Nikadimovs, 2023](#)). As a result, these companies’ remarkable achievements in the field of sustainability and corporate social responsibility may go unnoticed.

It is worth noting here that SMEs criteria differ substantially in various countries. These criteria usually include the number of employees, annual revenue and/or balance sheet/capital of the company, industry ([Campa et al., 2015](#)). Therefore, the conclusions and analysis of the sample distribution were made based on the regulatory requirements for determining SMEs types in Russia. Using other criteria may to some extent alter or limit conclusions and assumptions; however, in our opinion (based on the variation of SMEs criteria applied globally), they will be consistent with the general corporate trend toward the spread of the ESG agenda.

3.3 Sample quality test

To assess the quality of the sample, the margin of error for the proportion without repeated observations was calculated with an accuracy of 90%, 95%, and 99% (available in [Supplementary Table S3](#)). In all cases under study, the actual error did not exceed 9% with an average Δp of 6.82% with an accuracy of 99% based on the companies’ revenue and headcount. This indicates that the sample is sufficiently representative for

further research. The sample mirrors the real state of the studied characteristics within acceptable deviations. This assessment confirms that the sample adequately represents the population and allows drawing informed conclusions about the state and trends in the field of sustainable development of companies in Russia.

The margin of error was not calculated for the parameter 'the total number of legal entities (companies)', since the sample coverage rate for this parameter is extremely small (0.004%). This is compensated by sufficient sample coverage in terms of revenue (coverage of 2.524%) and headcount (coverage of 5.424%). Therefore, despite the low coverage rate by the number of legal entities, the sample remains reliable and suitable for analysis. High coverage by these key parameters allows us to arrive at informed conclusions about the state of the population under study.

3.4 Research design

Non-financial reports were structured according to a set of indicators that can be classified as ESG metrics, including the following: the share of employees working under open-ended and fixed-term employment contracts; the proportion of female employees; the proportion of workers with disabilities; the proportion of working pensioners; the proportion of young workers under the age of 30; audit of non-financial reporting for the covered period; environmental protection costs in total and by expense item; share of training costs in the wage fund; number of training hours per one employee; the Lost Time Injury frequency rate (LTIFR); the number of fatal work injuries; expenses incurred in the implementation of regional, social, charitable programs; staff turnover rate; share of independent directors on the board of directors (if applicable); proportion of women in managerial positions of all levels; confirmation of compliance with ISO 14001 Certificate and ISO 45001 Certificate; greenhouse gas emissions in CO₂ equivalent at different coverage levels; own water consumption from all water supply sources; discharge of wastewater (including onto the terrain) and/or transfer of contaminated wastewater to other enterprises for treatment; pollutant releases to air from stationary sources; volume of generated waste of various hazard classes; share of waste for recycling; share of energy resources produced from renewable energy sources (RES) in total energy consumption; the share and number of points of the Corporate Governance Code (for joint-stock companies) observed according to the form of the Central Bank of Russia.

This list of indicators is compiled according to the recommendations in the Order of the [Ministry of Economic Development of the Russian Federation \(2023\)](#) as well as the methodological provisions of non-financial reporting organizations (GRI, SASB, IIRC, CDSB, and CDP) and a primary review of non-financial reports collected as part of the study to highlight their similarities and differences.

It is noteworthy that the non-financial reports under review were heterogeneous in terms of completeness and degree of information disclosure. They were formed irrespective of a specific standard, thereby indicating the problem of a unified reporting form. For this and many other reasons, the five largest non-financial reporting organizations (GRI, SASB, IIRC, CDSB, and CDP)

have published a Statement of Intent to Work Together Toward Comprehensive Corporate Reporting ([KPMG, 2020](#)).

Descriptive statistical methods were applied to analyze ESG metrics, with a focus on assessing the variability and distribution of ESG indicators among the companies examined in the study. The analysis involved computing key statistical parameters, including Minimum (Min), Maximum (Max), Mean, and Median, for each ESG metric. These calculations enabled an objective evaluation of the distribution patterns and variability of values within the sample, offering insights into the extent of ESG integration across companies.

3.5 Research limitations and assumptions

The study represents a snapshot of the companies' ESG metrics, which causes certain difficulties in making both horizontal (analysis of internal dynamics) and vertical (analysis of dynamics between different objects) comparisons. This hampers identification of long-term trends and changes, which is especially important for understanding the evolution of companies' ESG agenda. For a more complete and accurate analysis, it is necessary to regularly monitor and accumulate data over long periods of time. Thus, the study represents the first step in a long-term process of monitoring and evaluating ESG metrics, which requires further in-depth analysis.

One limitation is the reliance on publicly available non-financial reports. While these sources provide valuable insights, they may exclude significant but non-disclosed information, particularly from companies that choose not to report certain ESG metrics due to strategic, regulatory, or resource-related reasons. As a result, important sustainability practices within SMEs may remain undocumented, leading to a potential underestimation of their contributions to ESG development. This emphasis also raises questions about the generalizability of the results to the broader corporate landscape in Russia.

At the same time, the companies' non-financial reports are assumed to be a reliable source of information and reflect true ESG indicators. Our analysis is based on standard ESG metrics, which may disregard the specific factors affecting sustainability in different industries. We assume that the ESG metrics under study are key indicators of sustainable development and corporate responsibility. In some additional calculations, in the absence of data for the reporting period, data for the last available period were used, while following the general trend in the indicators' dynamics (such as the average annual number of employees); this does not distort the data obtained. To juxtapose and evaluate the current situation, both absolute values and calculated specific values for a number of indicators were utilized. The use of specific values allows considering differences in the scale of the companies' business. Due to such an approach, the enterprises are compared more objectively. Therefore, it is assumed that the selected ESG metrics and indicators are sufficient for a comprehensive analysis and echo the key aspects of the companies' sustainable development.

The companies under the review are taken from various industries and with different concentration, which to some extent makes it less representative in relation to the entire Russian corporate sector. At the same time, the sample quality test indicates an acceptable margin of error (in terms of revenue

and headcount). It should be noted that the sample covers predominantly large companies, while small and medium-sized enterprises are practically not represented. The selected companies are supposed to be sufficiently representative for analyzing general trends in the ESG agenda of large Russian enterprises. The assumption here is that large companies are leaders in ESG and their practices can be used by SMEs.

The main focus of the study is on companies with a high carbon footprint, represented in sectors such as power supply, manufacturing, mining, etc. This is due to the specificity of non-financial reporting, since these are the companies that are of the greatest interest in terms of anthropogenic impact on the environment, as well as implementation of social and management policies. The preponderance of these sectors in the sample may bias the results toward their specificities. Omission of companies from other sectors can distort the overall picture of ESG principles implementation in various sectors of the economy. Here, one should take into account the diversity of industries and the specific characteristics of each company, which may affect their performance. Subsequent data analysis should include comparison with international standards, local and global practices, which will help identify potential areas for improvement and adaptation. The results of the analysis of companies from different industries are assumed to be comparable, despite industry peculiarities and differences in ESG practices.

These limitations and assumptions should be considered when interpreting the research results.

4 Dataset

4.1 ESG metrics: a corporate governance component

Corporate governance quality indicators in the companies under review are shown in [Supplementary Table S4](#). They cover such aspects of corporate governance as transparency and accountability, strategic planning, risk management, compliance with international standards, and the involvement of independent directors. Taken together, these indicators allow assessing the current state of corporate governance.

4.2 ESG metrics: a social responsibility component

Based on the data collected from the companies that submitted non-financial reports, several key trends in human capital development can be outlined. These trends reflect the investment policy in the field of employee training and professional development, the effectiveness of programs to improve working conditions, the implementation of measures to ensure inclusivity in the work environment, and guarantee the health and wellbeing of employees. The main indicators analyzed as part of the study characterize various aspects of employment, gender and demographic composition of staff, training activity and labor safety (available in [Supplementary Table S5](#)).

4.3 ESG metrics: an environmental responsibility component

In our study, the environmental responsibility metrics were divided into two subgroups. The first subgroup (available in [Supplementary Table S6](#)) covers pollution issues; the (available in [Supplementary Table S7](#)) characterizes the measures that the companies implement to mitigate environmental effects and make environmental improvements.

5 Brief analysis and interpretation of data

The empirical analysis reveals significant variation in ESG disclosure levels across the sample, reflecting sectoral differences and the voluntary nature of ESG practices in Russia. While 68% of companies had more than five years of experience in non-financial reporting, only 28% conducted external audits of these reports, indicating low assurance levels and lack of standardized oversight. Among governance indicators, the average share of independent board members remains modest (30%), falling short of international best practices. Moreover, only 35% of companies have adopted formal ESG risk management frameworks, which limits their ability to systematically address non-financial risks.

Environmental indicators are unevenly disclosed. Companies from high-carbon sectors, especially the energy and extractive industries, exhibit more complete reporting. Companies in the fuel and energy complex (FEC) were more likely to disclose environmental metrics in terms of the share of waste generated by hazard class, and provided no less information on other metrics. The analysis of deviations between the overall sample and the companies of the fuel and energy complex (FEC) did not reveal significant differences in environmental responsibility indicators related to the level of environmental pollution.

Social metrics were more commonly reported across all sectors. Over 76% of companies disclosed gender composition and training hours per employee. However, the average proportion of women in managerial positions remains at 26%, compared to 34% in the total workforce. This highlights persistent vertical gender inequality. In FEC companies, these gaps were more pronounced due to industry-specific gender segmentation and operational risks. Additionally, only 32% of companies reported data on employees with disabilities or working pensioners, indicating the limited scope of inclusivity practices.

These findings represent only a part of the insights that can be derived from the analysis of the dataset. The structured and multi-dimensional nature of the data enables further exploration of interrelations between ESG indicators and company-specific characteristics (such as sector affiliation). Future studies may build on this foundation to conduct longitudinal assessments, benchmark analysis, and policy-oriented evaluations of ESG integration dynamics.

6 Conclusion

The study collected an extensive data set covering key aspects of environmental, social and governance performance of Russian

companies. The data was structured according to a wide range of ESG agenda metrics. Analysis of the collected data allows us to assess the extent of coverage and prevalence of ESG principles in the corporate sector, as well as identify existing gaps and challenges related to disclosure and standardization of ESG reporting. The results obtained contribute to a deeper understanding of the current level of ESG responsibility and serve as an important basis for further research and practical recommendations in the field of sustainable development. The study laid the foundation for subsequent monitoring of corporate outreach of the ESG agenda. Future research should focus on several key directions. First, a more detailed analysis of the dynamics of ESG principle adoption across various industries and companies of different scales is recommended to identify success factors and barriers. Second, the methodology for analyzing ESG reporting requires further refinement, including the development of more standardized approaches for comparing data presented by companies. Third, conducting comparative analyses of ESG practices across regions or countries would help identify distinctive trends and establish benchmarks, enhancing the contextual understanding of ESG implementation. Fourth, longitudinal analysis can be conducted to explore temporal trends in ESG adoption, enabling an assessment of the evolution of practices over time. Finally, based on the results of the analysis, it is essential to formulate recommendations for the effective dissemination of ESG practices across all levels of business, ensuring the coherence of sustainable development policies and their integration into corporate strategies. These directions will enable a deeper understanding of long-term trends and provide practical recommendations for achieving sustainability in corporate activities.

Author's note

Some preliminary results of the study were discussed at the 1st International Scientific Conference “Green Taxonomy for Sustainable Development: From Green Technologies to Green Economy” (June 14–16, 2024; Tashkent, Uzbekistan). The first published conference paper is available online: <https://doi.org/10.1051/e3sconf/202457403002>

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

References

- Aastha, B., and Shazi, S. J. (2019). Corporate social responsibility practices in small and medium enterprises. *Polish J. Manage. Stud.* 19, 9–20. doi: 10.17512/pjms.2019.19.1.01
- Asif, M., Searcy, C., Santos, P. D., and Kensah, D. (2013). A review of Dutch corporate sustainable development reports. *Corp. Soc. Respons. Environ. Manage.* 20, 321–339. doi: 10.1002/csr.1284
- Bansal, P. (2002). The corporate challenges of sustainable development. *Acad. Manage. Perspect.* 16, 122–131. doi: 10.5465/ame.2002.7173572
- Barkemeyer, R., Holt, D., Preuss, L., and Tsang, S. (2014). What happened to the ‘development’ in sustainable development? Business guidelines two decades after Brundtland. *Sustain. Dev.* 22, 15–32. doi: 10.1002/sd.521

Author contributions

EK: Conceptualization, Data curation, Formal analysis, Methodology, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. GR: Formal analysis, Validation, Visualization, Writing – review & editing. HN: Formal analysis, Validation, Visualization, Writing – review & editing. JN: Formal analysis, Validation, Visualization, Writing – review & editing.

Funding

The author(s) declare that no financial support was received for the research and/or publication of this article.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Supplementary material

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/frsus.2025.1574190/full#supplementary-material>

- Bataeva, B. S., and Karpov, N. A. (2023). The influence of corporate governance factors on the level of ESG information disclosure by Russian public companies. *Manager* 14, 30–43. doi: 10.29141/2218-5003-2023-14-3-3
- Bataeva, B. S., Kokurina, A. D., and Karpov, N. A. (2021). The impact of ESG disclosure on the financial performance of Russian public companies. *Manager* 12, 20–32. doi: 10.29141/2218-5003-2021-12-6-2
- Bebbington, J. (2001). "Sustainable development: a review of the international development, business and accounting literature," in *Accounting Forum* (vol. 25) (Milton Park: Taylor and Francis), 128–157.
- Bella, G., and Ani, O. (2023). Problems and prospects for the development of ESG investing in the EAEU countries. *Econ. Bull. ICS RAS* 4, 61–67. doi: 10.25728/econbull.2023.4.7-gabrielyan
- Bielawska, A. (2022). Socially responsible activity of micro-, small-, and medium-sized enterprises—benefits for the Enterprise. *Sustainability* 14:9603. doi: 10.3390/su14159603
- Blokhin, A. A., and Kuvalin, D. B. (2023). Global challenges for the strategic planning system in Russia. *Stud. Russ. Econ. Dev.* 3, 24–41. doi: 10.1134/S1075700723030024
- Bonfanti, A., Mion, G., Brunetti, F., and Vargas-Sánchez, A. (2023). The contribution of manufacturing companies to the achievement of sustainable development goals: an empirical analysis of the operationalization of sustainable business models. *Bus. Strat. Environ.* 32, 2490–2508. doi: 10.1002/bse.3260
- Calabrese, A., Costa, R., Gastaldi, M., Ghiron, N. L., and Montalvan, R. A. V. (2021). Implications for sustainable development goals: a framework to assess company disclosure in sustainability reporting. *J. Clean. Prod.* 319:128624. doi: 10.1016/j.jclepro.2021.128624
- Campa, A., Pletnev, D., and Nikolaeva, E. (2015). *Comparative Analysis of Small and Medium-Sized Business Criteria in Russia and Other Countries*. Available online at: <https://ssrn.com/abstract=2955581> (accessed September 9, 2015).
- Chang, Y. J., and Lee, B. H. (2022). The impact of ESG activities on firm value: multi-level analysis of industrial characteristics. *Sustainability* 14:14444. doi: 10.3390/su142114444
- Conway, E. (2015). Engaging small and medium-sized enterprises (SMEs) in the low carbon agenda. *Energy Sustain. Soc.* 5, 1–9. doi: 10.1186/s13705-015-0060-x
- Coppa, M., and Sriramesh, K. (2013). Corporate social responsibility among SMEs in Italy. *Public Relat. Rev.* 39, 30–39. doi: 10.1016/j.pubrev.2012.09.009
- Dathe, T., Helms, M., Dathe, R., and Dathe, I. (2024). *Implementing Environmental, Social and Governance (ESG) Principles for Sustainable Businesses: A Practical Guide in Sustainability Management*. Berlin: Springer Nature.
- Davis, G., and Searcy, C. (2010). A review of Canadian corporate sustainable development reports. *J. Global Respons.* 1, 316–329. doi: 10.1108/20412561011079425
- ElAlfy, A., Palaschuk, N., El-Bassiouny, D., Wilson, J., and Weber, O. (2020). Scoping the evolution of corporate social responsibility (CSR) research in the sustainable development goals (SDGs) era. *Sustainability* 12:5544. doi: 10.3390/su12145544
- Fedorova, E. A., and Salnikova, P. A. (2024). The effect of environmental initiative disclosures on the stock prices of Russian public companies. *HSE Econ. J.* 28, 223–247. doi: 10.17323/1813-8691-2024-28-2-223-247
- Heikkurinen, P., and Bonnedahl, K. J. (2013). Corporate responsibility for sustainable development: a review and conceptual comparison of market- and stakeholder-oriented strategies. *J. Clean. Prod.* 43, 191–8. doi: 10.1016/j.jclepro.2012.12.021
- Izmaylova, M. A. (2022). Implementation of ESG strategies of Russian companies under sanctions restrictions. *MIR* 13, 185–201. doi: 10.18184/2079-4665.2022.13.2.185-201
- Izzo, M. F., Ciaburri, M., and Tiscini, R. (2020). The challenge of sustainable development goal reporting: the first evidence from Italian listed companies. *Sustainability* 12:3494. doi: 10.3390/su12083494
- Jeffrey, S., Rosenberg, S., and McCabe, B. (2019). Corporate social responsibility behaviors and corporate reputation. *Soc. Respons. J.* 15, 395–408. doi: 10.1108/SRJ-11-2017-0255
- Jenkins, H. (2006). Small business champions for corporate social responsibility. *J. Bus. Ethics* 67, 241–256. doi: 10.1007/s10551-006-9182-6
- Karuppiah, K., Sankaranarayanan, B., Ali, S. M., Chowdhury, P., and Paul, S. K. (2020). An integrated approach to modeling the barriers in implementing green manufacturing practices in SMEs. *J. Clean. Prod.* 265:121737. doi: 10.1016/j.jclepro.2020.121737
- Katsamakos, E., and Sanchez-Cartas, J. M. (2023). A computational model of the competitive effects of ESG. *PLoS ONE* 18:e0284237. doi: 10.1371/journal.pone.0284237
- Kim, J. W., Gim, G. Y., Lee, H. Y., and Zul-Erdene, D. (2023). "The Impact of Company's ESG Activities on Corporate Reputation," in *IEEE/ACIS International Conference on Big Data, Cloud Computing, and Data Science Engineering* (Cham: Springer Nature Switzerland), 131–141.
- Kolk, A. (2008). Sustainability, accountability and corporate governance: exploring multinationals' reporting practices. *Bus. Strat. Environ.* 17, 1–15. doi: 10.1002/bse.511
- Koundouri, P., Pittis, N., and Plataniotis, A. (2022). The impact of ESG performance on the financial performance of European area companies: an empirical examination. *Environ. Sci. Proceed.* 15:13. doi: 10.3390/envirosci2022015013
- KPMG (2020). "The time has come," in *The KPMG Survey of Sustainability Reporting 2020*. Available online at: <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf>
- Krasodomska, J., Zieniuk, P., and Kostrzewska, J. (2023). Reporting on sustainable development goals in the European Union: what drives companies' decisions? *Comput. Rev. Int. Bus. J.* 33, 120–146. doi: 10.1108/CR-12-2021-0179
- Li, T. T., Wang, K., Sueyoshi, T., and Wang, D. D. (2021). ESG: Research progress and future prospects. *Sustainability* 13:11663. doi: 10.3390/su14010395
- Lisin, A., Kushnir, A., Koryakov, A. G., Fomenko, N., and Shchukina, T. (2022). Financial stability in companies with high ESG scores: evidence from North America using the Ohlson O-Score. *Sustainability* 14:479. doi: 10.3390/su14010479
- Liu, D. (2022). The impact of ESG on financial performance of listed companies—an analysis based on corporate reputation perspective. *BCP Bus Manage* 20, 1258–1273. doi: 10.54691/bcpbm.v20i.1125
- Lokuwaduge, C. S. D. S., and Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for a sustainable development: an Australian study. *Bus. Strat. Environ.* 26, 438–450. doi: 10.1002/bse.1927
- Lupu, I., Hurdzeu, G., and Lupu, R. (2022). How is the ESG reflected in European financial stability? *Sustainability* 14:10287. doi: 10.3390/su141610287
- Mahmood, A., Naveed, R. T., Ahmad, N., Scholz, M., Khalique, M., Adnan, M., et al. (2021). Unleashing the barriers to CSR implementation in the SME sector of a developing economy: a thematic analysis approach. *Sustainability* 13:12710. doi: 10.3390/su132212710
- Ministry of Economic Development of the Russian Federation (2023). *The Order of the Ministry of Economic Development of the Russian Federation No. 764 of November 1, 2023 "On approval of methodological recommendations for preparing sustainable development reports"*. Russia: Ministry of Economic Development of the Russian Federation. Available online at: https://www.economy.gov.ru/material/file/70c9039795779d4b5b55c3fb8066afd3/764_2023-11-01.pdf
- Mio, C., Panfilo, S., and Blundo, B. (2020). Sustainable development goals and the strategic role of business: a systematic literature review. *Bus Strat Environ.* 29, 3220–3245. doi: 10.1002/bse.2568
- Mohammad, W. M. W., and Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Clean. Environ. Syst.* 2:100015. doi: 10.1016/j.cesys.2021.100015
- Morais, F., Simnett, J., Kakabadse, A., Kakabadse, N., Myers, A., Ward, T., et al. (2022). "ESG in growth listed companies: closing the gaps," in *The Palgrave Handbook of ESG and Corporate Governance* (Cham: Springer International Publishing), 359–374.
- Nikadimovs, O. (2023). Corporate social responsibility—assessment of facilitating and impeding factors for small and medium-sized enterprises in Latvia. *Eur Integr Stud.* 17, 222–241. doi: 10.5755/j01.eis.1.17.33542
- Rossi, A., and Luque-Vilchez, M. (2021). The implementation of sustainability reporting in a small and medium enterprise and the emergence of integrated thinking. *Meditari Account. Res.* 29, 966–984. doi: 10.1108/MEDAR-02-2020-0706
- Shalhoob, H., and Hussainey, K. (2022). Environmental, social and governance (ESG) disclosure and the small and medium enterprises (SMEs) sustainability performance. *Sustainability* 15:200. doi: 10.3390/su15010200
- Van Zanten, J. A., and van Tulder, R. (2021). Improving companies' impacts on sustainable development: a nexus approach to the SDGs. *Bus. Strat. Environ.* 30, 3703–3720. doi: 10.1002/bse.2835