SYSTEM SAFETY: HUMAN - TECHNICAL FACILITY – ENVIRONMENT
7(1), 2025, pp. 234-246

FROM CSR TO ESG – THE NEW ERA IN CORPORATE RESPONSIBILITY

DOI: 10.2478/czoto-2025-0022
Received: 05/11/2025
Accepted: 04/12/2025

Joanna Rosak-Szyrocka – *orcid id:* 0000-0002-5548-6787, *e-mail: joanna.rosak-szyrocka@wz.pcz.pl*
[1] Czestochowa University of Technology, **Poland**

Abstract: The manuscript aims to propose the evolution of corporate responsibility from the old-fashioned Corporate Social Responsibility model to its modern Environmental, Social and Governance variant. The research is basing on the bibliometric analysis realized by means of VOSviewer and oriented on 1.182 documents taken from the database of Scopus, published from 2008 to 2025. The co-citation of keywords points to the broadening of the scope of the academic discussion from the mere aspects of CSR, including reputation exemplified by philanthropy, to the more complex grounds of ESG, such as environmental performance, data transparency, or corporate. Following the results, a new original conceptual model was proposed, where the aspects of CSR, ESG and sustainable development (SD) are related. The examples of the individual relation of CSR with ESG and of ESG with SD prove that: the new conceptual platform is based not on the voluntary or image-oriented level, but on the one that can be measured and audited and even regulated. The manuscript enriches the scientific discussion by showing ESG as the new, adult form of corporate responsibility combining ethics, efficiency, transparency, and value creation for the long-term perspective in the dimensions of sustainable development.
Keywords: ESG, CSR, CSRD, ESRS, sustainable development, greenwashing, model

1. INTRODUCTION

Modern enterprises operate in a rapidly changing global environment where corporate responsibility has become a fundamental element of strategic management (*Corporate social responsibility: The centerpiece of competing and complementary frameworks* 2015). Climate change, social inequalities, geopolitical instability, and regulatory pressure have driven organizations to rethink how they address sustainability and transparency (Kvasničková Stanislavská et al. 2023; Usman et al. 2023; Dahlsrud 2008; Sheta, Osman & Elamer 2025). The global environment, characterized by geopolitical instability, requires enterprises not only to adapt strategically but also to redefine the principles of sustainable development. Research indicates that even under extreme conditions such as war, implementing adaptive strategies within sustainable consumption and production systems is essential, demonstrating the indispensable nature of this paradigm (Kuzior et al., 2025). In this context, the transition from Corporate Social Responsibility (CSR) to Environmental, Social, and Governance (ESG) frameworks represents a structural transformation from voluntary and reputation-oriented initiatives toward a measurable, data-driven, and regulated model of accountability (Xue et al. 2025).

CSR traditionally referred to voluntary actions undertaken by companies to contribute to society and the environment beyond what is required by law. It emphasized ethical leadership, philanthropy, community engagement, and environmentally conscious practices (Karwowski & Raulinajtys-Grzybek 2021). During the 1990s and 2000s, CSR became a central narrative of responsible business, aiming to strengthen public trust and stakeholder relations (*Corporate social responsibility: The centerpiece of competing and complementary frameworks* 2015). However, as highlighted in global reports (PwC, Purpose-driven Business, 2024; OECD, Corporate Responsibility Outlook, 2023), CSR initiatives often lacked measurable outcomes and standardized reporting. Their impact was largely communicative rather than verifiable, leading to growing criticism that CSR could not effectively demonstrate real corporate accountability.

This led to the ESG model, a more systematic and quantifiable method for assessing corporate performance in these three dimensions (Xue et al. 2025; Wieland 2017):

- Environmental (E) – the impact or performance of the company's operations on the environment, such as carbon emissions/energy use/resource usage, waste production and other disposals;
- Social (S) – includes labour practices, diversity, human rights and community involvement;
- Governance (G) – transparency, ethics, board oversight, and anti-corruption.

ESG is not voluntary and relies on mandatory reporting, standardization and external assurance unlike CSR (Sarpong 2021; Tripathy, Verma & Misra 2025). It combines financial and strategic management disciplines with sustainability, enabling a comparable and auditable evaluation of corporate conduct. This institutionalization of accountability is reinforced by the EU Corporate Sustainability Reporting Directive (CSRD), which was adopted in December 2022 (*Global ESG assets predicted to hit $40 trillion by 2030, despite challenging environment, forecasts Bloomberg Intelligence* 2024; Xue et al. 2025; Li et al. 2021).

The aim of this manuscript is to highlight the major characteristics of the corporate responsibility transformation from CSR to ESG and to indicate the reasons why in the current economic and regulatory environment ESG has turned into a vital component of responsible and sustainable management. Despite the growing number of studies dedicated to CSR and ESG, the majority of them are still fragmentary, covering various aspects of the given concepts and omitting their interactions and the evolving transition process between CSR and ESG, as well as the alignment with the paradigm of SD in the context of the current regulation, including CSRD and ESRS.

The scientific novelty of the manuscript is to obtain an original conceptual model that reflects these relationships between CSR, ESG and SD.

The model involves elements of modern corporate governance such as reporting transparency or the strategy of decarbonisation. ESG is presented as a stage of mature development of corporate responsibility with dynamic metrics and audit indicators between ethical principles and resource performance, through accountability and further sustainable value creation.

2. LITERATURE REVIEW

ESG's relevance lies in the inevitability of the 21st century organisation to exist, not just as economic entities, but as contributors to solutions relating to global challenges. Investors are increasingly looking for companies to run not just their finances, but also weigh the social and environmental aspects of their businesses, as well. Ethics and sustainability are values consumers are using to inform their purchasing choices, and financial bodies have made access to capital contingent on the quality of ESG reporting. Specific evidence from the automotive industry supports this trend; for instance, Sitinjak and Ober (2025) demonstrate that product innovation and service quality are critical drivers of the willingness to purchase electric vehicles, thereby linking sustainable product features directly to customer satisfaction and market demand. In addition, new regulations such as Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS) will impose mandatory non-financial reporting on thousands of companies in EU, including Poland. In this new context then, corporate responsibility is no longer a voluntary action but part of the system that companies must apply (Xue et al. 2025; Li et al. 2021).

From this perspective, ESG can be considered a novel dimension of corporate responsibility (Santos et al. 2025; Saivinod & Sivakumar 2025a; Sarpong 2021). It establishes a level of transparency that not only allows to judge how sincere a company is being, but also to measure the actual impact that company has on the environment and society (Tripathy, Verma & Misra 2025). ESG is the missing link between ethics and efficiency, pursuing social engagement along with economic value creation. In this way, it conceptualizes the moral imperative associated with CSR as a strategic liability that is bundled with decision-making and risk management, competition and sustainability (Gillan, Koch & Starks 2021; Alqudah, Sierra-García & Garcia-Benau 2025; Clément, Robinot & Trespeuch 2025).

Modern corporations under a growing wave of regulation and social expectation need not just to say what they are responsible but also show it with numbers, indicators, reports that could be verified. ESG has thus developed from a communication resource to a managerial tool that allows organizations to align sustainability with their financial and strategic ambitions (Ongan, Gocer & Işık 2025a; Subhani, Zunhuan & Khan 2025).

As numerous studies indicate (Porter & Kramer 2019), ESG represents a new generation of corporate responsibility, in which ethical values are combined with managerial efficiency, and social engagement is linked with economic value creation. Modern enterprises are expected not only to declare their responsibility but also to demonstrate it empirically through data, metrics, and verifiable reports. It is precisely this measurable and transparent dimension that distinguishes ESG from traditional CSR, transforming it into an instrument for managing reputational, environmental, and financial risks (*Corporate Social Responsibility (CSR) Versus Environmental Social Governance (ESG). Management for Professionals Part F361: 117–141* 2022).

According to the KPMG Global ESG Due Diligence Study (2024), as many as 71% of global investors have confirmed an increased importance of ESG factors in transaction decisions over the past 18 months, while 59% stated they are willing to pay a premium for companies with a high level of ESG maturity. Similar findings are reported by Bloomberg (2024), showing that more than 60% of European companies identify the lack of high-quality ESG data as the main barrier to achieving sustainability goals. These results

demonstrate that corporate responsibility is evolving from a voluntary ethical practice into a systemic and strategic dimension of business management.
Empirical research by Nugroho, Sari, and Chen (Nugroho et al. 2024) also confirms that ESG constitutes a new quality in corporate responsibility, shifting the focus from voluntary CSR declarations toward measurable and strategically integrated performance criteria. While CSR emphasizes ethical and social values, ESG introduces a set of standards that enable the assessment of effectiveness and the tangible impact of these actions on stakeholders and investors. ESG is therefore not a mere continuation of CSR but its transformation into a data-driven and transparent governance framework based on strategic accountability. As the authors note, contemporary companies can no longer rely solely on moral declarations; instead, they must provide reliable, verifiable, and comparable data that can be audited and externally validated.
In order to select the most relevant studies in the ESG and CSR field, bibliometric analysis was used, with the principal source of scientific manuscripts selected being the academic platform Scopus. The content of 1182 research manuscripts has been taken into consideration from 2008 and 2025 years. The search documents related to “ESG” and “CSR” issue in title, abstract and keywords. In order to highlight the structure of the scientific field a content analysis was used, inspecting the most common words and the relationships between words. Additionally, a network of co-occurrences was taken into account. The analysis was performed using the VosWiever program (version 1.6.20). Fig. 1 presents a co-occurrence map of keywords used across the scientific publications concerned with the presented concepts. Every keyword is presented as a separate node which size depends on the frequency of use of that term across the whole study. The connections and distance between nodes reflect the intensity of relationship. The largest clusters followed the groupings around the terms ESG, CSR, corporate governance, financial performance, and sustainable development reflect the major thematic area of research focused around integration of corporate responsibility with economic performance and organizational governance. At the same time, the visible move from CSR-related concepts like corporate reputation and philanthropy to terms related to ESG such as ESG disclosure, ESG performance, and data transparency reflects the shift from the declarative and value-related topics to more measurable and thus, reportable, aspects of sustainable development. Thus, the graphical analysis supports the hypothesis on the trend of increased importance of ESG area in research of Corporate Responsibility and strategy. Fig. 2 presents co-occurrence index keywords in ESG and CSR area.
The map exhibits four key thematic clusters. The first cluster , shown in red, is focused on corporate social responsibility and involves keywords that are easy to identify with the traditional understanding of business responsibility. These concepts, such as stakeholder, ethics, sustainability, and management practices, have been the heart of the concept since its inception. The second cluster, shown in green, pertains to financial and managerial issues; these issues include financial performance, investments, corporate governance, economic and social effects. Thus, this cluster, to a significant extent, mirrors the bond existing between corporate responsibility, economic efficiency, and financial risk. The third cluster, with a blue color, captures terms connected with environmental protection and climate management: environmental performance, climate change, environmental protection, carbon emissions. Therefore, this cluster undoubtedly indicates the growing role of the “E” pillar within ESG. Finally, the fourth cluster, shown in yellow, combines sustainability development, public policy alignment, and strategic management.

The network structure analysis demonstrates that corporate social responsibility is still entrenched in the general system of sustainability research while being associated with the terms usually characteristic of ESG, such as financial performance, corporate governance, and environmental management. Therefore, the shift in the terminology coincides with the transformation of academic discussion from CSR to ESG.

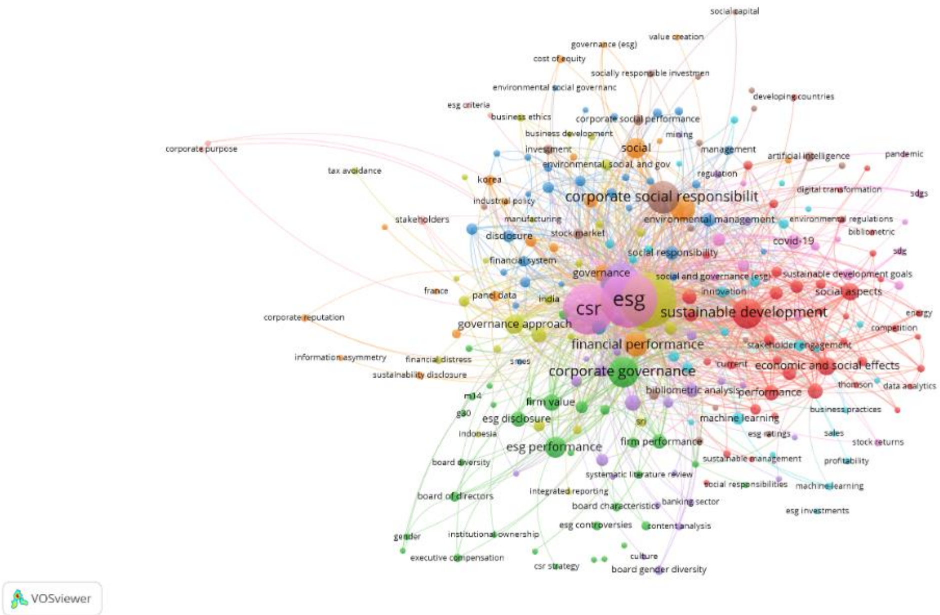

Fig. 1. Co-occurrence all keywords in ESG and CSR area.

Source: own study

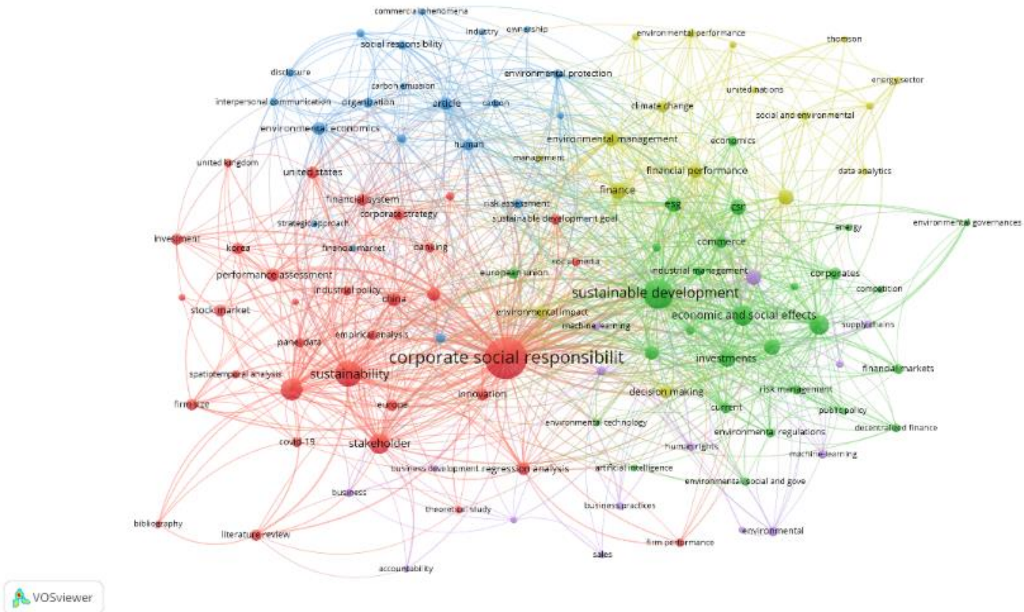

Fig. 2. Co-occurrence index keywords in ESG and CSR area.

Source: own study

3. THE TRANSITION FROM CSR TO ESG

CSR and ESG differ significantly in the scope within which they operate, as well as in the regulatory bases and the means of their credibility. Moreover, the limitations of the informal and instrumental principles of CSR, such as voluntary and narrative-based mechanisms of accountability, as well as the lack of measurement and evaluation metrics, have been criticized by both academia and business (Norberg 2020; Smith 2025; Jansen et al. 2024). As several studies have observed, the voluntary nature of CSR made it highly susceptible to greenwashing, which entails making the actions of a firm appear significantly cleaner or more virtuous and responsible than they really are (Isac et al. 2025; Can & Turker 2025; Zervoudi, Moschos & Christopoulos 2025; Yang & Zha 2025). As a result, numerous CSR initiatives have become the instruments of organizational culture and reputation but failed to drive the necessary change (Pollach, Thomsen & Nielsen 2024).

In response to these shortcomings, the ESG framework has emerged as a more systematic and auditable approach to corporate responsibility (Prencipe 2025). Unlike CSR, ESG requires the integration of environmental, social, and governance factors into decision-making processes and mandates reporting under standardized frameworks such as the CSRD and ESRS. This transition reflects a shift from the logic of “doing good” to that of “proving impact,” where transparency, data comparability, and external verification become key elements of credibility and accountability. Table 1 presents a comparative overview of CSR and ESG across conceptual, regulatory, and managerial dimensions. The comparison demonstrates that ESG, by addressing the weaknesses of CSR and reducing the risk of greenwashing, represents a new standard of corporate responsibility and organizational reliability within the context of sustainable management (Can & Turker 2025; Isac et al. 2025; Zervoudi, Moschos & Christopoulos 2025; Yang & Zha 2025).

Table 1
ESG and CSR differences

Criteria	CSR	ESG
Nature of the concept	CSR is based on business ethics and stakeholder theory but is a voluntary initiative oriented to prove companies’ sensitivity to social and environmental issues. CSR is a reaction to increasing societal expectations from business but has been developed mostly out of the strategic management mainstream.	ESG originates directly from the financial community, where there has been a need for a measurable, comparable, and objective assessment of the corporate impact. Still, it includes social and financial dimensions of the company’s activity, integrates them into risk analysis and business investment decision-making, and therefore, represents a component of strategic management, rather than just a declaration of ethical conviction.
Scope and purpose	CSR is mostly a reputational and philanthropic activities-	ESG is focused on the integration of corporate

	related concept, driven by the desire to show that the company does something, not just earnings. Still, CSR activities are usually miscellaneous and do not affect companies' core business activities.	responsibility with making a profit from a long-term perspective. ESG includes both policies and measurable results, presented in a comparable, auditable format to provide reliability and transparency.
Nature of activities	CSR activities are voluntary and often oriented ad hoc: companies select fields for participation themselves, sponsorship, volunteering, and environmental projects, among others, leading to ultimate inconsistency and comparability. For this reason, CSR is often criticized for being insufficient and place some companies at risk of greenwashing.	ESG has a regulated and strategic character. It requires the disclosure of quantitative and qualitative data according to recognized standards (e.g., ESRS, GRI, SASB). Actions are based on materiality analysis and linked to financial performance. ESG reports are subject to external verification, increasing their credibility and comparability.
Legal basis and reporting obligations	Previously, the CSR reporting was of voluntary character. In Poland, it was mainly practiced by large listed businesses or companies recognized as sustainability leaders. The lack of unified standards made difficult comparison and further assessment of data quality.	ESG is maintained and regulated by the legal framework of the Corporate Sustainability Reporting Directive and European Sustainability Reporting Standards. The number of enterprises to which the reporting obligation applies is several thousands in the European Union, and reporting is subject to external verification and independent assessment of data quality. It drastically improves transparency and trust in the eyes of stakeholders.
Relationship with investors and financial markets	CSR hardly affected the process of making investor decisions. After all, to a greater extent, CSR was directly focused on the company's reputation or was an element of corporate charity, lacking reliable data on risk assessment and corporate valuation.	ESG has become the main language for interacting with investors, as well as with financial institutions. Simultaneously, ESG factors began to be taken into account during the preparation of risk analyzes or in assessing companies or corporate borrowers. Firms with high ESG ratings

		receive more significant market trust and more favorable access to capital.
Transparency	CSR did not have one unified system of metrics, and the results of efforts were not easy to prove. The reports had an impressionistic nature, were most often partial; thus, their credibility and correctness of the audit were low.	ESG uses metrics based on quantitative and qualitative checked data, the accuracy of which can be evaluated and cross-checked. Therefore, business based on increased transparency can use data when performing all types of financial analysis, principle and audit firms on the market, and the process of risk assessment in due diligence.
Credibility and external assurance	Stakeholder confidence in CSR reports and the quality of corporate communication played a critical role in the credibility of non-financial reports, which does not imply formal verification of data reliability.	With ESG, assurance of quality and compliance with internationally recognized standards is external. Independent confirmation of this type raises confidence and reduces the risk of distortion of reality in non-financial reporting.
Role in corporate strategy	CSR was mainly as a reputation-building instrument, often operating outside strategic decision-making core. Those PR or communication departments carried out most of the CSR initiatives with relatively low strategic influence.	ESG is an integral component of corporate strategy and governance. It is included in the investment policy, risk management, and strategic planning of the company. The incorporation of ESG into decision-making structures can be considered a historical transition from declarative ethics to managerial ethics based on data, accountability, and auditability.

Source: (Saivinod & Sivakumar 2025b; Santos et al. 2025; Tripathy, Verma & Misra 2025; Xue et al. 2025)

The table 1 highlights the advantages of CSR, including its moral basis and adaptability, as well as weaknesses such as voluntariness and sensitiveness to greenwashing; while ESG is presented as a quantifiable (externally verified) and regulation-aligned construct that bolsters credibility and integrates corporate responsibility with investment decisions and sustainable value creation support (Dahlsrud 2008; Norberg 2020; Gillan, Koch & Starks 2021; Isac et al. 2025; Tripathy, Verma & Misra 2025).

3. CONCLUSION

The results of the analysis presented in the manuscript confirmed that the modern dimension of corporate responsibility has significantly evolved from the classical concept of Corporate Social Responsibility linked to partially voluntary activities and narrative reporting to the systemic ESG model of measurable and auditable activity (Gillan, Koch & Starks 2021; Alqudah, Sierra-García & Garcia-Benau 2025). CSR was one of the processes that reflected on the morality aspect of doing business and building the corporate cultures based on ethical value (Dahlsrud 2008; Nugroho et al. 2024; Rosak-Szyrocka et al. 2022). At the same time, it did not directly influence the real practices, as well as, it was not fully verified, which related it to greenwashing practices. The conceptual relationship between CSR, ESG, and SD is represented in Figure 3.

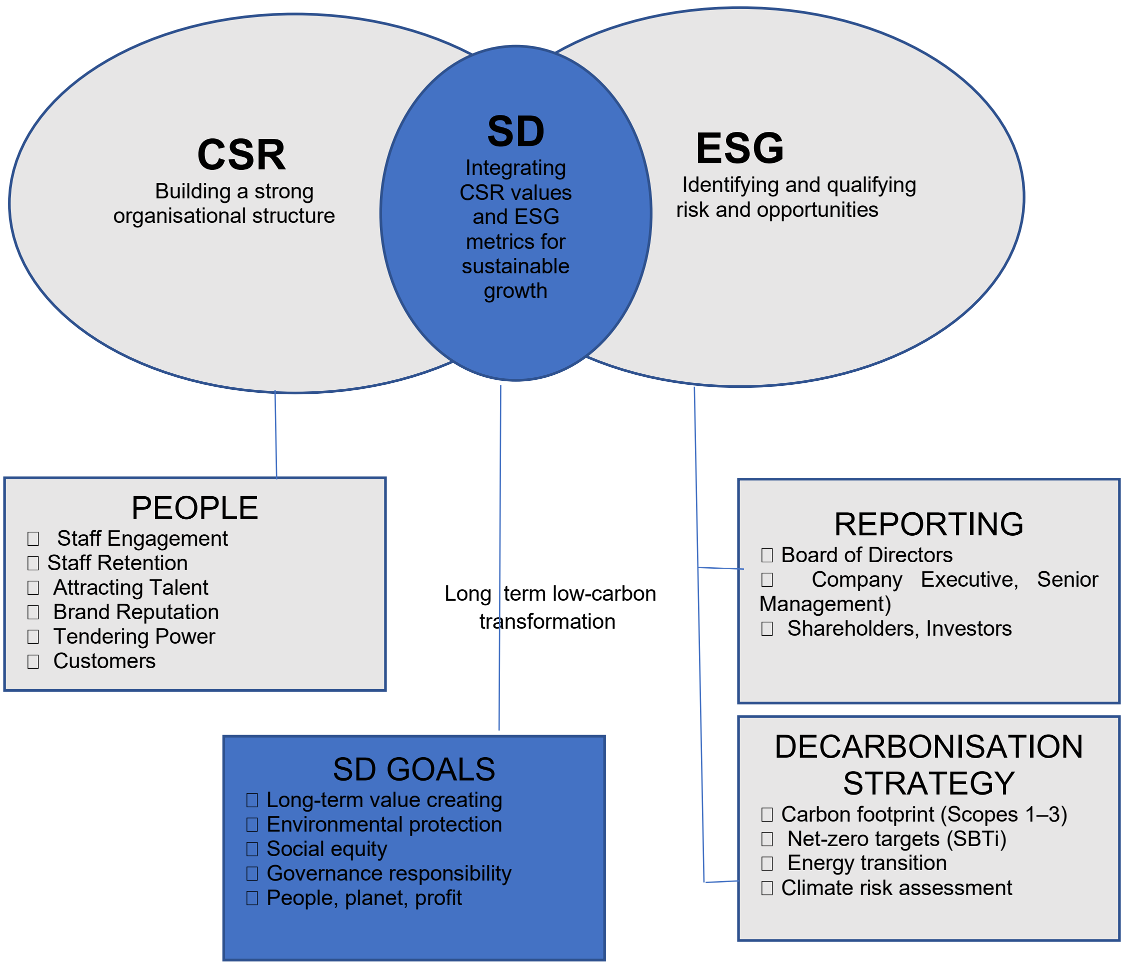

Figure 3. The conceptual model of the relationship between CSR, ESG, and SD
Source: own study

The conceptual model in Fig. 3 can be employed in medium and large sized companies that are bound by the CSRD/ESRS mandate, especially in industries with high environmental and social exposure. Its practices have a logical progression in the manner it is put into practice: CSR lays down the value-based fundament, ESG introduces measurable and auditable management processes, while SD integrates elements to form long-term strategic framework. The model suggests that companies do not have to

combine CSR and ESG but it shows an evolutionary pathway – from declarative responsibility to data-based strategic sustainability management.
According to the CSR–ESG–SD model a structured process for integrating the SD model in an enterprise can be developed. This process corresponds to the evolutionary order of corporate responsibility – from CSR's axiological base through ESG's measurable and auditable activities to SD benefits that are strategically integrated. May evolve to follow four interrelated stages:

1. Values and culture level (CSR): stakeholders identification, definition of organisational values, social responsibility principles as the basement of corporate culture.
2. Risk management and measurability stage (ESG): perform double materiality analysis, building systems for non-financial data collect ion, specifying quantifiable environmental, social and governance indicators, conducting external assurance of ESG reports.
3. Strategic convergence stage (ESG → SD): connection between ESG relevant topics and risk management, investment policy and strategic planning with decarbonisation strategy or climate-transition strategy.
4. Sustainable development stage (SD): achieving long-term goals (people–planet–profit), monitoring the progress in pursuing them, reporting consistent with CSRD/ESRS and continual alignment of CSR values with ESG indicators in the context of a sustainable-oriented growth strategy.

CSR relates to corporate values and social mission, ESG assures measurability, reporting, and control, whereas SD combines the previous two and highlights the long-term aspect. This model shows the logical succession of the stages of promotion of corporate responsibility: first, voluntary CSR declarations, and then, a statutory and verifiable ESG base on the basis of the principles of sustainable development. ESG takes on a managerial and strategic dimension, and the environmental, social and governance factors are regularly included in the analyses of risks, investment decisions, and non-financial reporting systems. ESG-based reporting ceases to be an image tool to become an obligatory part of the strategic governance processes. In the analysis of academic sources and global reports, it also becomes clear that ESG has become a communication and appraisal tool. Essentially, companies implementing ESG policies with a high level of maturity develop a trust material with the investors, get better access to capital and competitive advantages in global markets. Thus, the transformation from CSR to ESG reflects the broad transformation of the company's function in the contemporary context of society, from a moral declaration to a responsible operational model (Ongan, Gocer & Işık 2025b; Clément, Robinot & Trespeuch 2025; Santos et al. 2025).
The novelty of the model is to combine CSR, ESG and SD with real corporate governance devices – e.g. decarbonisation strategy or Board of Directors – that are missing in previous models as those converge usually only on thematic links rather than institutional incentives (Gillan, Koch & Starks 2021; Santos et al. 2025). Therefore, the model not only explains the shift from one stage to another according to a sequence of these concepts but also interprets on an institutional and operational level, under which the real practice and strategic transformation can be realized in terms of up-to-date regulatory environment (e.g., CSRD and ESRS) (Xue et al. 2025; Tripathy, Verma & Misra 2025).
The outlined evolution is visualized in the proposed model that reflects all of the above through the transformation of CSR's axiological dimension into a strategic, measurable

ESG approach with the key dimensions of transparent reporting processes and decarbonization strategies. Indeed, by adding the dimensions of emission reduction and climate-risk management, ESG proves that it has ceased to be just a framework for responsibility assessment but is also a relevant instrument for energy transit and creation of value in the long term in the context of sustainable development. ESG is the high form of corporate responsibility, integrating the ethics and effectiveness, and the economic and social aspects are increasingly becoming functionally integrated from the point of view of strategic value management. The ESG framework thus does not alternative CSR but rather expands and strengthens its essence, turning it into a mechanism of operational and strategic character expected by contemporary stakeholders based on the principles of sustainable development.

The results from this research are complementary to findings among companies operating on the Polish market, according to which the shift from declarative CSR towards measurable and regulatory ESG has become considerably faster after CSRD and ESRS have been initiated. Leading case studies (e.g., PKN Orlen, KGHM, PKO BP and others) have demonstrated that philanthropic and reputation driven CSR activities are replaced by a systematic approach to impact management – as materiality analysis, non-financial data reporting or external assurance of the quality of information provided (Karwowski & Raulinajtys-Grzybek 2021; Dmuchowski et al. 2023; Baran et al. 2022). Consistent with the literature (Gillan, Koch & Starks 2021; Alqudah, Sierra-García & Garcia-Benau 2025; Tripathy, Verma & Misra 2025), in Poland ESG is becoming more and more a model of corporate responsibility, not an extension of CSR, but rather as a separate, strategic corporate responsibility approach that is data-driven and that drives investor decisions making and risk evaluations. This is evidence to the transitions that have been presented in this manuscript -from normative CSR to kind of CRC until there of ESG measurable studying–along the proposed conceptual analysis framework (CSR-ESG-SD).

REFERENCES

Alqudah, M. Z., Sierra-García, L., & Garcia-Benau, M. A., 2025. ESG and emerging technologies: A cluster-based literature review analysis. *Sustainable Futures, 10*, 101285.

Bloomberg Intelligence., 2024. *European ESG data trends survey 2024*. Bloomberg L.P. https://www.bloomberg.com/professional/

Can, O., & Turker, D., 2025. Institutional pressures and greenwashing in social responsibility: Reversing the link with hybridization capability. *Management Decision, 63*(1), 187–216.

Clément, A., Robinot, É., & Trespeuch, L., 2025. The use of ESG scores in academic literature: A systematic literature review. *Journal of Enterprising Communities, 19*(1), 92–110. DOI: 10.1108/jec-10-2022-0147/full/html

Corporate social responsibility (CSR) versus environmental social governance (ESG)., 2022. *Management for Professionals*, F361, 117–141.

Corporate social responsibility: The centerpiece of competing and complementary frameworks., 2015. https://psycnet.apa.org/record/2015-24325-005

Dahlsrud, A., 2008. How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management, 15*(1), 1–13.

Gillan, S. L., Koch, A., & Starks, L. T., 2021. Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance, 66*, 101889.

Global ESG assets predicted to hit $40 trillion by 2030, despite challenging environment, forecasts Bloomberg Intelligence., 2024).

Isac, N., Javed, A., Radulescu, M., Cismasu, I. D. L., Yousaf, Z., & Serbu, R. S., 2025. Is greenwashing impacting on green brand trust and purchase intentions? *Environment, Development and Sustainability, 27*(9), 21329–21346. DOI: 10.1007/s10668-023-04352-0

Jansen, L., Cunningham, P., Diehl, S., & Terlutter, R., 2024. Corporate social responsibility in controversial industries: A literature review and research agenda. *Corporate Social Responsibility and Environmental Management, 31*(5), 4398–4427.

Karwowski, M., & Raulinajtys-Grzybek, M., 2021. The application of corporate social responsibility (CSR) actions for mitigation of environmental, social, corporate governance (ESG) and reputational risk in integrated reports. *Corporate Social Responsibility and Environmental Management, 28*(4), 1270–1284.

KPMG International., 2024. *Global ESG due diligence study 2024*. https://home.kpmg/

Kvasničková Stanislavská, L., Pilař, L., Vogli, X., Hlavsa, T., Kuralová, K., Feenstra, A., Pilařová, L., Hartman, R., & Rosak-Szyrocka, J., 2023. Global analysis of Twitter communication in corporate social responsibility area. *PeerJ Computer Science, 9*, e1390.

Kuzior, A., Lobanova, A., & Bondar, O. 2025. Sustainable consumption and production systems during wartime: Needs, challenges, and adaptation strategies. Production Engineering Archives, 31(2), 212–221. DOI: 10.30657/pea.2025.31.21

Li, T.-T., Wang, K., Sueyoshi, T., & Wang, D. D., 2021. ESG: Research progress and future prospects. *Sustainability, 13*(21), 11663. https://www.mdpi.com/2071-1050/13/21/11663

Norberg, P., 2020. CSR politics of non-recognition: Justification fallacies marginalising criticism, society, and environment. *Business Ethics: A European Review, 29*(4), 694–705.

Nugroho, D. P. D., Hsu, Y., Hartauer, C., & Hartauer, A., 2024. Investigating the interconnection between ESG and CSR strategies: An examination of the influence on consumer behavior. *Sustainability, 16*(2), 614. https://www.mdpi.com/2071-1050/16/2/614

OECD., 2023. *Corporate responsibility outlook 2023: Strengthening business integrity and sustainability*. OECD Publishing. https://www.oecd.org

Ongan, S., Gocer, I., & Işık, C., 2025. Introducing the new ESG-based sustainability uncertainty index (ESGUI. *Sustainable Development, 33*(3), 4457–4467.

Pollach, I., Thomsen, C., & Nielsen, A. E., 2024. In search of change: Organizational role expectancies of CSR professionals. *Business Ethics, the Environment & Responsibility, 33*(2), 201–216.

Porter, M. E., & Kramer, M. R., 2019. Creating shared value. In *Managing Sustainable Business* (pp. 323–346). Springer. https://link.springer.com/chapter/10.1007/978-94-024-1144-7_16

Prencipe, A., 2025. Accountability between compliance and legitimacy: Rethinking governance for corporate sustainability. *Sustainability, 17*(20), 9305. https://www.mdpi.com/2071-1050/17/20/9305

PwC., 2024. *Purpose-driven business: How companies are creating long-term value through ESG integration*. PricewaterhouseCoopers International Limited. https://www.pwc.com

Rosak-Szyrocka, J., Żywiołek, J., Shengelia, N., Stverkova, H., Santo, P. E., & Pilař, L., 2022. Employee perception of CSR and its effects on the company's image. *Production Engineering Archives, 28*(3), 210–216.

Saivinod, M. S., & Sivakumar, N., 2025. The relationship between ESG and CSR – achieving synergy through the golden triangle framework. *International Journal of Organizational Analysis*. https://www.emerald.com/insight/content/doi/10.1108/ijoa-10-2024-4935/full/html

Santos, A. C. d., Ravedutti, M. M., Marinello, R. M., Moraes, G. F., Moraes, R. N., & Denes-Santos, D., 2025. Is ESG the new corporate social responsibility? *Revista de Gestão Social e Ambiental, 19*(3), e011255.

Sarpong, S., 2021. Why have we forgotten 'government social responsibility'? In *Current Global Practices of CSR* (pp. 803–820). Springer. https://link.springer.com/chapter/10.1007/978-3-030-68386-3_37

Sitinjak, C., & Ober, J., 2025. Examining the impact of service quality and product innovation on willingness to buy electric vehicles: The mediating role of customer satisfaction. Production Engineering Archives, 31(2), 163–172. DOI: 10.30657/pea.2025.31.16

Sheta, M., Osman, M. N., & Elamer, A. A., 2025. Sustainability champions: The transformative role of internal auditors in ESG assurance – A systematic review and future directions. *Journal of Accounting Literature*, 1–41.

Smith, D. C., 2025. The intellectual history of Milton Friedman's criticism of corporate social responsibility. *Modern Intellectual History, 22*, 184–210.

Subhani, B. H., Zunhuan, S., & Khan, M. A., 2025. Finance for a greener future: Evolving the financial sector for ESG and sustainable corporate debt management. *Borsa Istanbul Review, 25*(2), 337–349.

Tripathy, U., Verma, M., & Misra, A. K., 2025. ESG performance and corporate metrics: Mapping research trends and setting future research agenda. *Global Knowledge, Memory and Communication*. https://www.emerald.com/insight/content/doi/10.1108/gkmc-03-2024-0143/full/html

Usman, M., Ali, A., Rosak-Szyrocka, J., Pilař, L., Baig, S. A., Akram, R., & Wudil, A. H., 2023. Climate change and livestock herders' wellbeing in Pakistan. *Heliyon, 9*(6), e16983.

Wieland, J., 2017. Shared value – Theoretical implications, practical challenges. In *Creating Shared Value – Concepts, Experience, Criticism* (Vol. 52, pp. 9–26). Springer. https://link.springer.com/chapter/10.1007/978-3-319-48802-8_2

Xue, Y., Zhang, C., Mentel, G., Mohammed, K. S., Rosak-Szyrocka, J., & Zhao, X., 2025. Impact of ESG rating divergence on corporate resilience: Insights from China's A-share market. *Environment, Development and Sustainability*, 1–26. DOI: 10.1007/s10668-025-06799-9

Yang, Z., & Zha, X., 2025. How environmental regulation and media pressure influence greenwashing behaviors in Chinese manufacturing enterprises. *Sustainability, 17*(11), 5066. https://www.mdpi.com/2071-1050/17/11/5066

Zervoudi, E. K., Moschos, N., & Christopoulos, A. G., 2025. From CSR and ESG criteria to the greenwashing phenomenon. *Sustainability, 17*(5), 2222. https://www.mdpi.com/2071-1050/17/5/2222