

## THE POWER OF ESG: CHALLENGES AND OPPORTUNITIES FOR ENTERPRISES IN POLAND

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**Purpose:** The purpose of this manuscript is to track the increasing importance of the ESG approach among Polish companies. It presents the primary challenges and opportunities of ESG integration in light of present legal standards, changing market demands, and corporate sustainability goals. It combines legal developments (CSRD, ESRS), corporate cases studies and bibliometric ESG research trends.

**Design/methodology/approach:** The present study represents a three-dimensional research structure: a review of law and policy on ESG reporting in Poland and the European Union, multiple case study of three companies consistently implementing ESG approaches and a bibliometric study with VOSviewer of Web of Science data (2012-2025), investigating leading keywords, co-occurrence networks and international research patterns on ESG and sustainability.

**Findings:** The results indicate that ESG in Poland is becoming both a regulatory pressure and strategic tool. ESG is becoming more embedded into larger companies and their operations, but the SME sector isn't quite as prepared. Despite barriers to implementation – including being short on expertise and scarce funding, ESG is recognised as increasingly being a source of competitive advantage, better access to sustainable financing options and further enhancing the credibility of corporations in the market.

**Research limitations/implications:** The downside of the article is its lack of anchor in primary empirical research (e.g., interviews or surveys with company representatives). The study is based on secondary data, at official reports of big companies and in case towards some real cases selected among large corporates that may not fully represent the whole market especially at micro and small enterprises level. In addition, the rapidly changing regulatory landscape could also limit the long term applicability of some observations.

**Practical implications:** The manuscript contributes with practical implications and recommendations for business leaders, regulators, and CSR/ESG practitioners in relation to concrete reporting requirements (CSRD, ESRS), as well as on best practices of ESG implementation. It also points to areas in need of institutional, educational, and technological support to help especially SMEs adopt and comply with ESG.

**Originality/value:** The manuscript's originality is in the integrated approach towards ESG in Poland, i.e., legal, practical and bibliometric analysis. It is uncommon to find above mentioned study that on one hand reveals context of ESG implementation practice in UE and references ongoing international research. This is why it is a contribution to the interdisciplinary debate on sustainable management and responsible business conduct in Central and Eastern Europe. Additionally, the paper introduces an original conceptual framework – the ESG CIRCLE–

POWER Model – which integrates the internal and external dimensions of ESG performance. The model provides a novel perspective on how credibility, innovation, resilience, competitiveness, leadership, and environmental awareness (CIRCLE) generate purpose, openness, worth, ethics, and resilience (POWER), thereby explaining the transformative potential of ESG within organizational strategy and culture.

**Keywords:** ESG, sustainable development, CSR, NFRD, CSRD compliance, Wosviewer analysis.

**Category of the paper:** Research paper.

## 1. Introduction

Over the last few years ESG (Environment, Social and Governance) has become one of the most important topics in Poland's academic, economic and regulatory discussions (Baran et al., 2022; Celary, Piwowarczyk, 2025; Petelczyc, 2022a; Tylec, 2022). The rising significance of ESG in Poland is an effect of the growing regulation pressure from the European Union and a change in public awareness on the social and environmental responsibility of companies as well as on sustainable business (Wolf Theiss, 2022; Accace, 2024 (Waldau, 2024; Wang et al., 2023). The application of ESG framework is especially significant in the light of Corporate Sustainability Reporting Directive (CSRD) that imposes a series of new and more far-reaching non-financial reporting obligations on companies active in Europe (European Commission, 2022).

In the case of Poland, around 3500 companies will be covered by CSRD directive, among which a large number of medium-sized enterprises (PARP, 2024). This is one aspect of the larger series of structural and technological changes being implemented as a result of the European Green Deal and the move towards a low carbon economy (Sahu et al., 2025; Li et al., 2024; Gidage, Bhide, 2025). It's an indication not just of regulatory evolution but also a rising social tide around transparency, ethical governance and value creation that has levels to rise further (Oluwakemi, Mishelle, 2025; Prasek, 2024; Diego, Montes-Sancho, 2025; Chong, Loh, 2023).

Many industry sources report that Polish companies' readiness for the introduction of ESG is varied and often inadequate (Koralun-Bereźnicka, Orcholski, 2025; Tylec, 2022). Research by Crowe & Envirly (2023) showed that as few as 14% of Polish companies are well-prepared for ESG reporting according to CSRD needs. The level of preparedness illustrates the obstacles companies are encountering in complying with new sustainability requirements — from poor understanding or inadequate environmental data management systems, to financial and organizational barriers. Besides, it has been noted that failure of (ESG) compliance might have other significant implications ranging from fines and punishments to such threats as loss of international competitiveness and harm on the reputation (Crowe, Envirly, 2023).

This evidence, while raising significant challenges, also suggests some opportunities. It can also improve managerial effectiveness, stimulating innovation and building stakeholder confidence. Polish companies increasingly see ESG not only as a compliance burden but also as a means to create long-term competitive advantage and sustainable business models (Crowe, Envirly, 2023).

The relevance of ESG in Poland can also be seen at the level of corporate strategies and capital market regulations. In 2023, the Warsaw Stock Exchange (GPW) issued revised Environmental Social Governance ESG Reporting Guidelines to assist listed companies in standardizing and improving transparency regarding non-financial information provided by them on a voluntary basis (GPW, 2023). Likewise, data from KPMG Poland (2023) suggests that over 80% of large companies in Poland disclose ESG indicators at some level; but the quality and specificity of reporting as well as strategic approach to integrating ESG issues into corporate strategy differs significantly.

Nevertheless, the speed and extent of ESG integration differ significantly by industry, size of company, and the level at which ESG is integrated into practices in Poland. However, as stated by the Polish Agency for Enterprise Development (PARP, 2024), only approximately 30% of Polish small and medium-sized enterprises (SMEs) have started to take measures related to ESG. These small and medium-sized enterprises are generally resource poor, inexperienced and low in advisory support; all of which hamper their ability to comply with reporting and sustainability requirements. As SMEs constitute more than 90% of all companies in Poland, engaging them in the process of transforming towards ESG is necessary to reach national sustainability targets (Dmuchowski et al., 2023; Prasek, 2024; Kulej-Dudek, Dudek, 2024).

A second significant development is the growing involvement of the financial industry in advancing sustainable investment. More and more banks and financial institutions are including ESG factors in their lending, risk management, underwriting and investment analysis (PwC Poland, 2024). Similarly, the study by Sustainalytics and SEC Newgate (2023) argues that investors in Poland are increasingly identifying ESG issues as more than just legal requirements and instead as a key factor in creating long-term value (Rosak-Szyrocka, Żywiołek, Shahbaz, 2023, 2024).

The introduction of ESG standards in Poland is thus a challenge and an opportunity for enterprises. On the one hand, companies encounter regulatory and organizational/financial hurdles; on the other hand, ESG provides new avenues for innovation, efficiency and sustainable growth. It is important to comprehend this two-sidedness of constraints and opportunities in the age of sustainability transformation when developing proper strategies.

Beyond its regulatory implications, the rise of ESG also demonstrates a sea change in how companies are measured — not just by their fulfillment of regulations, but increasingly by the legitimacy of their values and practices.

This paper aims to present an overview of the challenges and opportunities that are faced by Polish companies when attempting ESG and sustainable development implementation in light of new trends that affect those processes and explicate how ESG transforms from a complex regulatory requirement into a strategic and cultural change accelerator in an organization based on a conceptual framework represented by six organizational dimensions as proposed in the study—the ESG–CIRCLE–POWER Model.

The novelty of the manuscript in its three-dimensional ESG approach to Poland (EU regulatory analysis, comparative firm-level case studies a subsequently bibliometric mapping of global research trends) supported by the original ESG-CIRCLE-POWER conceptual framework.

Despite the rising relevance of ESG in EU policies framework, as well as global corporate strategies, Polish academic literature is still missing synthesizing papers which would link approach to ESG implementation from legal-political one with managerial and sectoral scopes. The majority of extant literature provides either theoretical considerations or empiricisms on the effects of regulatory changes (Petelczyc, 2022b; Celary, Piwowarczyk, 2025; Baran et al., 2022), and does not offer solid analyses of how ESG frameworks work in practice in Polish enterprises.

Furthermore, in the Polish academic environment are not available holistic case study-driven analyses of ESG adoption at a company level in a cross-sectional manner across their plethora sectors (e.g.: finance, e-commerce or food servicing), either. There is, however, a surprising dearth of bibliometric studies that chart the development of ESG-related issues in Polish academic discourse in comparison to global trends. This contribution addresses this lack by providing a tri-dimensional:

- an update on the current and upcoming ESG regulations (CSRD, ESRS, EU Taxonomy),
- a study of chosen corporate case studies on the Polish market (McDonald's Poland, Allegro, Santander Bank Poland),
- bibliometric mapping through VOSviewer software, to visualize thematic clusters, knowledge gaps and the trends related to ESG research in global perspective and in Poland.

Through incorporation of these elements, this research makes a methodological contribution to the literature by establishing an empirically grounded interdisciplinary understanding of how ESG is reshaping firm behaviour and regulatory compliance in a post-transition economy.

Based on the above considerations, this paper seeks to answer the following research questions:

- RQ1: What are the key challenges and opportunities in relation to implementation of ESG in Polish enterprises, following new regulations such as CSRD or ESRS?
- RQ2: How does ESG work as a strategic instrument of corporate governance for adding long-term value to companies?

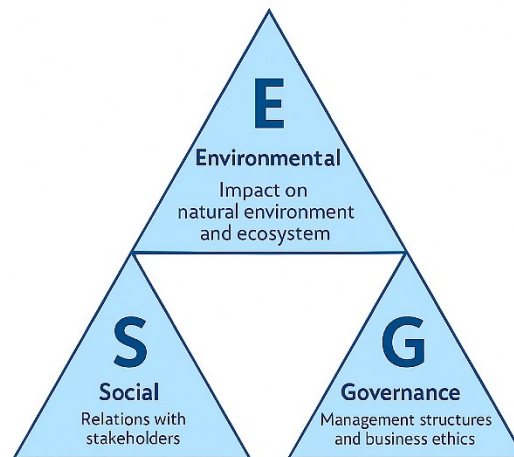
RQ3: Which research hotspots and frontiers exist in the global ESG and sustainable development studies according to bibliometric analysis?

RQ4: How the ESG–CIRCLE–POWER model justifies relationship between internal organizational values and external effects from ESG sustenance?

## 2. Literature review

### 2.1. ESG – current regulatory framework in Poland

The ESG concept covers three corporate responsibility dimensions: environmental, social and corporate governance (Kandpal et al., 2024; Arduino, Buchetti, Harasheh, 2024; Almadadha, 2024a). Given the changing expectations of society, the threat posed by climate change, and the increase in systemic risks, ESG is an essential element of evaluating the organization's potential to function in the long term and its credibility (Fig. 1) (Al Amosh, 2025; Oncioiu et al., 2020).



**Figure 1.** ESG elements.

Source: own study.

While they were generally recommended entities and not required to implement them ten years ago, now, their mandatory nature is inscribed in more and more formal acts, both at the level of the European Union and individual countries. The international origins of non-financial reporting include such standards as the Global Reporting Initiative and the Task Force on Climate-related Financial Disclosures. The development of ESG practices was stimulated by, inter alia, the adoption of the United Nations Sustainable Development Goals and the European Union European Green Deal, which enshrines ambitious EU climate goals. In response to the growing demand for standardization and the obligation to submit reports on sustainability, the European Parliament in 2022 passed the Corporate Sustainability Reporting Directive. The directive extends the scope of reporting entities and obliges EU member states to apply

European standards. The planned schedule for introducing the ESG reporting obligation in Poland according to the European Commission looks as follows:

- From 2024 – large listed companies so far covered by the NFRD directive.
- From 2025 – all large companies meeting at least two of the following three criteria: 250+ employees, revenue €40 million or total assets €20 million.
- From 2026 – listed small and medium-size enterprises, with the possibility of voluntary deferral until 2028.

In the following years – indirectly, other small, and medium-size enterprises whose suppliers are large companies or whose financing is subject to ESG criteria. The subjects of reporting on ESG are obliged to present a wide range of data, including: the competent authorities supervising compliance with ESG in Poland are the Polish Financial Supervision Authority, and the Warsaw Stock Exchange, which in 2021 modified the Best Practice for GPW Listed Companies document for the first time to include the principles of sustainable development and make reference to them. In practice, despite the growing interest, the readiness of an enterprise – especially an SME – to fulfill these new obligations is different. According to market research, entities indicate a lack of qualified personnel, insufficient expertise, high implementation costs, and problems with interpreting requirements. Thus, there is an urgent need for support from the state and an advisory system, the involvement of educational institutions, and the creation of digital solutions facilitating ESG. The regulation of the ESG system is, therefore, a new stage in the activity of Polish enterprises, in which the key word is transparency, comprehensive risk management, and business continuity. ESG is not a marketing element but a key to financing, investor-relation mechanisms, and future market positioning in a country in which, according to the concept, sustainable economy is to be built.

ESG rests on the basic legal act, the Corporate Sustainability Reporting Directive (CSRD), which was transposed into Polish law by means of an amendment to the Accounting Act enacted in December 2024. The revised Act prescribes detailed rules for the creation and publication of sustainability related information, as well as for ESG reports audit (assurance). It requires companies not already covered by financial reporting to report data on environmental, social and governance issues in the management report based on consistent European Sustainability Reporting Standards (ESRS).

The Polish Accounting Act sets out a phased timetable for the introduction of the new reporting requirements: from 2024 on large public-interest entities, from 2025 on other large companies, and from 2026 on listed SMEs (with an optional postponement until 2028). We also need that sustainability reports are prepared in structured electronic format, tagged (XBRL) for the transparency, and comparability of ESG data (Seele, 2016; Faccia, Manni, Capitanio, 2021).

The CSR Directive supplanted its predecessor, the Non-Financial Reporting Directive (NFRD), and broadens the range of companies that are obliged to report non-financial information. It also introduces the double materiality principle, which requires companies to

report on how their operations are affected by sustainability issues as well as how their operations affect people and the environment (Almadadha, 2024b; Saam, Rosenstein, 2024).

Other EU legal acts additionally reinforce this regulatory architecture: the Sustainable Finance Disclosure Regulation (SFDR) for financial institutions; the EU Taxonomy Regulation (2020/852) that defines environmentally sustainable economic activities; and the Corporate Sustainability Due Diligence Directive (CSDDD), introducing due diligence obligations along corporate value chains.

In the legal sphere it follows that ESG is no more a set of voluntary guidelines, but a system of compulsory norms and procedures which determines how businesses behave. Compliance of ESG with the regulations is currently not only a formal obligation, but also a strategic precondition to access to financing, market competition and credibility, which means a new stage in the process of integrating sustainable development into corporate governance in Poland (Ingaldi, Ulewicz 2025).

### **3. Methodology**

The research is characterised by a qualitative, multi-method orientation which seeks for a holistic perspective towards ESG implementation in the activities of companies operating on the Polish market. The case studies were purposively selected, considering criteria such as company size and prominence in the market, representativeness of a variety of economic sectors, showing a high level of ESG maturity characterized by routine non-financial reporting according to internationally recognized standards, and advanced preparedness for complying with the CSRD and ESRS. According to these indications, McDonald's Poland, Allegro and Santander Bank Poland were chosen for analysis. The research is based on secondary data which has been accessed through open sources. The empirical material is composed by ESG and non financial reports, sustainability reports, corporate documents (ESG strategies, Codes of Ethics) and industry reports released by regulatory, advisory and market entities. The author did not collect any primary data such as interviews or surveys. The case study analysis was descriptive and comparative in nature, focusing primarily on the overview of corporate ESG actions within each of the three dimensions (environmental, social, governance) with a specific reference to the extent ESG was integrated into strategic management process and the degree of formalisation of ESG related policies/procedures/governance mechanisms.

In order to select the most relevant studies in the ESG field, bibliometric analysis was used, with the principal source of scientific manuscripts selected being the academic platform Web of Science. The content of 1027 research manuscripts has been taken into consideration from 2012 and 2025 years. The search documents related to "ESG" and "sustainable development" issue in title, abstract and keywords. In order to highlight the structure of the scientific field



The conceptual structure is conceptually centered on 'ESG' (the central node in the map). Its strong linkages to concepts such as “sustainable development”, “performance”, “corporate social responsibility” and “governance” attest to ESG’s role in providing the integrating framework through which various dimensions of Sustainable Development are brought together. And around this nucleus are several subthemes interconnecting reporting, corporate ethics, sustainable finance and the effects of ESG practices on company performance. The visualization shows a few related and separate clusters of themes.

The yellow cluster revolves around corporate social responsibility and governance (corporate social responsibility, governance, disclosure, diversity, ethics, stakeholders); it mirrors an increasing interest in management transparency and accountability towards society trust.

The green cluster is made of Keywords that deal with environmental performance and sustainability reporting (environmental performance, sustainable reporting, CSR systems, stakeholders), which stress the role played by integrated environmental management.

The blue cluster focuses on economic rationality and firm performance (firm value, corporate ESG performance, Economic performance, efficiency, costs) which illustrate a growing concentration on the financial consequences of ESG activities and their value realization.

The red cluster, at the left side of the map, connects terms related to technological innovation and digital transformation (digital transformation, artificial intelligence, machine learning, sustainable finance, energy transition and industry 5.0).

The appearance of such terms clearly indicates the growing linkage between ESG and new technology, highlighting digital transformation’s shift toward being a source of sustainability (Rosak-Szyrocka, Knop, 2024; Xue et al., 2025). The spatial layout of the network demonstrates that sustainable development and ESG are in the most central positions, which represent high-level concepts that integrate all thematic areas into a coherent knowledge map. The closely-packed linkage among nodes indicates the subject interdisciplinarily research field, wherein financial and environmental concerns need to be interconnected with social and technology viewpoints. The fact that the terms innovation, digital transformation are so close to sustainable development also suggests that they deem innovation as an important facilitator of ESG adoption and sustainability transitions.

The key co-occurrence map has confirmed that the research in this area is increasing toward a holistic approach in which, innovation, digitalization and responsible management started to be revealed as important elements of strategies for sustainable development of countries during economic transformation and technology development. Figure 3 presents co-occurrence author key words.





collaboration. The prominence of China confirms its status as one of the world's leading science producers, and an axis for Asia, Europe and North America. The map shows different clusters of international collaborative patterns, which indicates the regional and thematic research groups.

The green cluster consists of China, India, Malaysia, Saudi Arabia, South Korea, Turkey and the United Arab Emirates demonstrating a strong regional network in Asia and Middle East. This cluster has been particularly active on the research and policy fronts in respect of energy transition, sustainable finance, and new technologies that promote ESG implementation.

The second cluster in red includes Russia, Ukraine, the Czech Republic, Hungary and Portugal and represents the relation with CEE countries to one another and also how they relate with Asian research institutions (in which China / Taiwan show particularly strong links to European scientific output).

The blue cluster comprises advanced economies with strong academic traditions, the United States, Germany, Spain and Poland alongside Australia, Canada, Netherlands and Italy representing a dense network of cooperation addressing applied research-technological innovation-finance reporting (ESG reporting) in corporate settings.

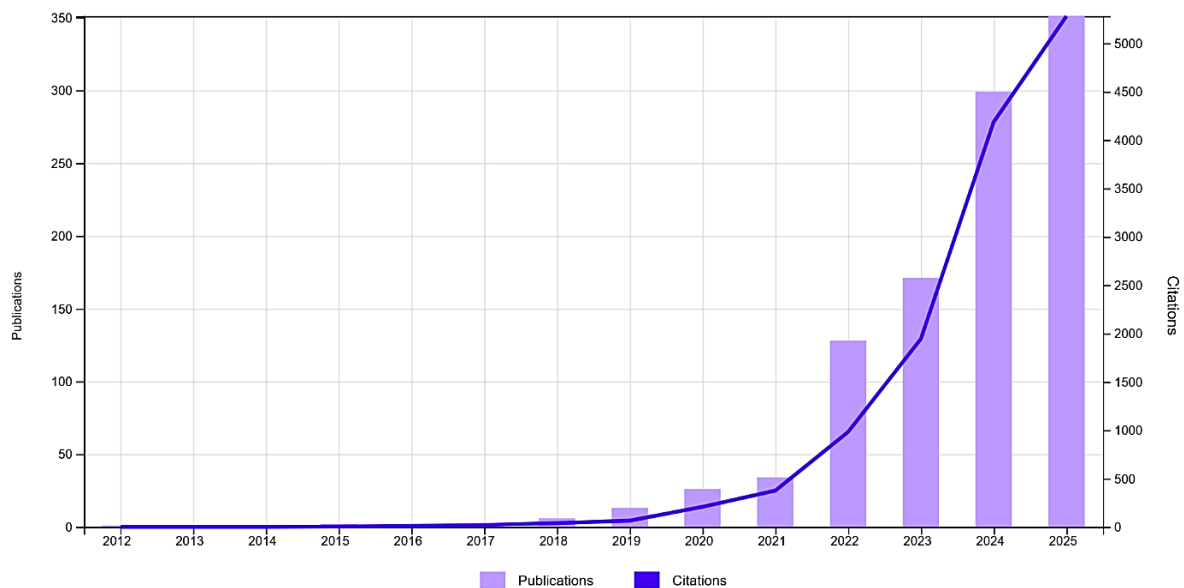
The yellow one is composed of countries such as England, France, Japan, Vietnam Taiwan and New Zealand which show collaboration between Western Europe and Asia-Pacific region with regard to sustainability'corporate governance'social responsibility.

The spatial network structure identifies that collaboration between the Asian and European countries prevail describing Asia—especially, China—as the main driving region of the research agenda in this field. The large number of links with Western countries (notably the USA, UK and Germany) also highlights that sustainability and ESG-based research has implications beyond simply China, reinforcing the apparent trend towards internationalisation of research. The participation of such emerging countries as Saudi Arabia, Malaysia, India and the United Arab Emirates offers a clear picture of how new non-Western actors continue to become actively involved in international scientific communication about sustainable development.

The co-authorship network indicates that ESG and sustainable development research has become increasingly global in nature, with growing international collaboration. China is at the center of this system and plays an integrative role as a scientific engine, which brings together scholars from diverse continents. Simultaneously, the map reveals the emergence of new regional research centres in Asia and Middle-East; indicating a re-orientation of the geography of science production and the growing importance of emerging economies to direct future research on global sustainability.

Figure 4 shows the corresponding partnerships map in ESG and sustainable development research. The network of countries participating in the scientific co-operation is clearly visible with the visualization, where line thickness indicates level of collaboration and node size represents number of publications. We find that research on ESG is clearly internationalized,

but with Western European North American and East Asian countries in a dominant position. These geographical clusters create strong co-operation networks that account for most of the globally cited publications on ESG reporting, sustainable finance and governance systems. The core position of the United States, the United Kingdom, Germany and China in the network demonstrates their leading roles in academic output and worldwide influence. In this international division of work, Poland occupies the position in terms of scientific output core-periphery emerging. The number of publications of Polish authors is growing, while Polish scientists are now taking part in European research programs focused on sustainable development and responsible management. The most intense links are to Germany, Spain, Italy and the UK. Yet, given the relatively small network density around Poland, we may consider that Polish international collaboration might be increased to increase the visibility and impact of its research in the field. Enhancing collaboration at international level would help to disseminate best practices in ESG among other things, improving diversity of methods and bringing Polish research more into alignment with the European community research agenda on sustainability. Figure shows 5 number of citations and publications on ESG and Sustainable Development in 2012-2025.



**Figure 5.** Number of citations and publications on ESG and Sustainable Development (2012-2025).

Source: own study.

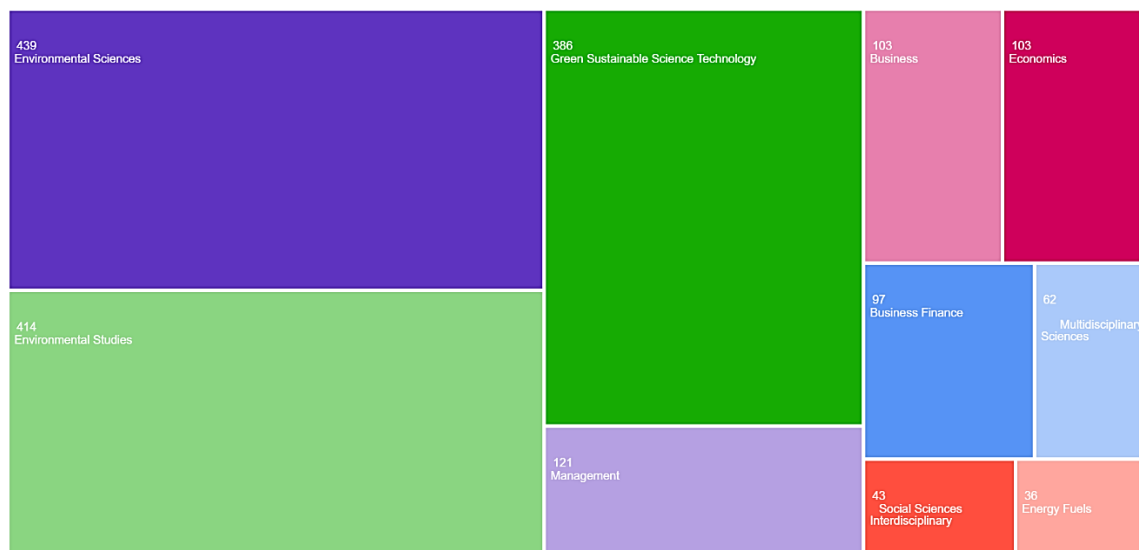
According to the statistics, there is a steady increasing trend in publications and its citation number, especially since 2020. This trend reflects the growing and recognized academic and practical relevance of ESG-related studies in the continuing studies into sustainability.

Also, during the early phase of the sample period (2012-17), there had been low publication numbers showing this nascent process of ESG research development as an emerging academic discipline. At that point, researches continued to concentrates on the broad issues related to sustainable development and corporate social responsibility. The trend towards higher numbers of papers started around 2018, when the global debate on responsible investment and corporate

transparency was moving to a new level with respect to the implementation of sustainable governance frameworks.

The turning point was obvious after 2020, as the growth in publications accelerated quickly. This dramatic surge can be attributed to a combination of factors, including greater use of ESG reporting frameworks by finance institutions and businesses, the increased relevance of the United Nations' Sustainable Development Goals (SDGs), and advances in digital technologies that are enabling greater analysis and dissemination of ESG data. More specifically, the trajectory of increase from 2022 through to 2025 is particularly steep indicating that ESG has increasingly been directed at as a significant echoing theme among various disciplines including economics, management, finance, environmental science and public policy.

The trend of citations is consistent with that of publications; however, its growth appears to be expansive after 2021, which indicates studies on ESG have become more influential and visible in the worldwide academia. The sharp increase in the citations reveals that research in this field is growing not only in numbers but also in scholarly attention and conceptual development. Figure 6 presents a treemap visualizing the primary research categories of ESG and sustainable development.



**Figure 6.** Treemap chart for categories.

Source: own study.

The visualization presents a clear picture of the thematic architecture of the field, and demonstrates that modern research challenges in this domain are characterized by disciplinary diversity and interdisciplinarity. Each rectangle represents a main research category; its size indicates how many publications in the analyzed dataset are indexed under that category and thus indicates the relative importance of each field to the body of literature considered.

The biggest blocks on the treemap are Environmental Sciences (439 publications) and Environmental Studies (414 publications), which account as a pair for the core literature in ESG and sustainability research. The next largest category, Green and Sustainable Science & Technology (386 publications) reflects the growing influence of technology on meeting goals of sustainability. This is a testimony of the increasing hybridization which characterizes environmental and technological research including renewable energy, sustainable materials, circular economy and environmental engineering among others. This cluster is a testament to the fact that sustainable technologies have assumed a leadership role in academic research as well as policy development.

A substantial part of literature as well as in the environmental and technological areas, is contribution from Management (121), Business (103), Economics (103) and Business Finance (97). These categories are useful for identifying the proliferation of ESG research into economic and managerial context featuring corporate sustainability strategies, ESG performance measurement, green finance as well as sustainability and financial performance. Such a diversification of research fields demonstrates that ESG is no longer confined to issues in environmental sciences but has truly been incorporated into management, business ethics, and corporate governance scholarship.

Smaller but still prominent fields such as Multidisciplinary Sciences (62), Social Sciences, Interdisciplinary (43) and Energy & Fuels (36) point to ESG's cross-sectoral relevance. These fields are helping to connect knowledge across disciplines by drawing on social sciences, energy policy and systems research. Their participation illustrates the growing awareness that solving sustainability problems calls for larger, inclusive cross-sectoral strategies that consider environmental, social and economic parts.

## **5. Good practices of ESG implementation in Poland**

Businesses based in Poland increasingly wish to align their business plans with ESG standards as sustainable reporting expectations change across the European Union. Despite barriers around preparedness, scale and sectoral constraints – especially for small and medium-sized enterprises (SMEs) – there already exist a number of large companies that provide examples of more integrated, tangible ESG action. The Polish cases of multinational companies and leading domestic firms exemplify how ESG can be incorporated into long-term strategy, organizational culture and operational practice.

Two cases from different industries of the Polish economy will be used as illustrations: McDonald's Poland (food service and hospitality) and Allegro (the CEE region's largest e-commerce platform). Though working in different industries, both businesses have shown commitments to structured, transparent and data-based strategies on ESG aligned with global

standards such as the GRI (Global Reporting Initiative), the SDGs (Sustainable Development Goals), the EU Taxonomy, and upcoming requirements due with the CSRD (Corporate Sustainability Reporting Directive).

The section offers a lens through which readers can review ways in which corporates operating in Poland are putting ESG principles into practice — ranging from decarbonisation programmes and circular economy approaches to inclusive employment practices, ethical supply chains and governance structures based on measurable responsibility. These practices also cater to compliance purposes and offer transferable learnings on building sector ESG frameworks among the wider Polish business environment.

### **Case Study 1: ESG Implementation by McDonald's Poland**

An illustrative example of ESG practice in the Polish market is given by McDonald's Poland. Embedded in a worldwide corporate structure, the company offers region specific and verifiable sustainability measures. Its Sustainability Report 2022-2023 offers a complete overview of environmental, social and governance-related activities according to international references such as GRI, SDGs or the EU Taxonomy, and captures continuous preparations for CSRD fulfilment.

In the area of environment, McDonald's Poland activities are aimed at minimizing greenhouse gas emissions and increasing resource efficacy. Six restaurants had become climate neutral by 2023 using heat pumps, solar panels and carbon off-set projects. New stores are fitted with energy efficient features like LED lighting and heat-recovery mechanisms on kitchen equipment. These initiatives are consistent with SDG 13 and GRI 305 reporting.

Another important environmental approach is the circular economy. By 2023, all paper-based packaging in Polish restaurants would come from recycled or renewable sources. The company disposed of all plastic straws and lids, imposed selective waste collection systems in its entire network, managing to separate more than 3400 tons for recycling or energy production.

Socially, McDonald's Poland has more than 31,000 employees and works to promote diversity and equal opportunities. It has introduced programs to recruit people aged over 50 and young workers who are new to the job market. Internally, the company does diversity and anti-discrimination training. Outwardly, it conducts educational initiatives for customers such as encourages appropriate sort of waste and sustainable consumption behaviors. On governance, the company adopts GRI reporting and describes both remedial measures from the past as well as strategic objectives for the future. It sends the clear signal that this company operates as a system with all of its resources leaning in to create sustainable continuous improvement.

The supply chain meets strict environmental and ethical assessment models, with over 80% of its products sourced from Polish suppliers, supporting local development and reducing transport emissions (McDonald's Poland, 2023).

## Case Study 2: ESG Implementation by Allegro Poland

Allegro, the biggest e-commerce platform in Central and Eastern Europe and also a market leader in Poland, is a great example of company that incorporates sustainability into its business that's been doing so as part of strategic planning for eight consecutive years. The company is listed on the Warsaw Stock Exchange and publishes non-financial reports in line with international standards (GRI, SASB), as it pursues full compliance with the Corporate Sustainability Reporting Directive (CSRD). In 2022, Allegro has refreshed its ESG strategy which revolves around five key pillars: Sustainable commerce Low – emission operations Social responsibly Ethical partnerships Transparent governance.

Allegro has launched a number of environmental initiatives to decarbonize its business and lower its logistics footprint. The company's 2022 ESG report also listed greenhouse gas emissions by scope: Scope 1 emissions of 1311 tCO<sub>2</sub>e; scope 2 (market-based) at 2298 tCO<sub>2</sub>e, and scope 3—namely parcel delivery and supplier activity—of more than 144,000 tonnes of CO<sub>2</sub>e. As a result of these findings, Allegro ramped up its climate activities. All power used in its offices and logistics centers in 2022 came from renewable energy. The company also initiated tests of reusable packaging in certain collaborations with merchants, as well as expanded its “Eco Delivery” offering, which gives customers the option to choose lower-carbon delivery ways like parcel locker pickup. Furthermore, Allegro performed 68% better in terms of marketing materials plastics than it did the previous year.

On social side, Allegro is extremely focused on supporting small and medium businesses, which are the core base for sellers. By 2022, the service had more than 135,000 active merchants, many of which were SMEs. Almost 15,000 companies took advantage of free courses and online training sessions offered by Allegro Biznes to improve their digital sales skills and learn how to use data analytics tools. In addition, the company funded charity, giving over PLN 1.8 million to aid war in Ukraine. Within its walls, Allegro implemented some diversity policies. Women made up 52% of the company's workforce in 2022, and held 33% of its managerial roles. And it initiated the “Allegro Inclusive” policy along with DEI (diversity, equity, inclusion) training programs.

Allegro's governance of the ESG strategy is very integrated across the organization. ESG is managed at the executive level with quarterly reporting against targets. The Company has introduced a Code of Ethics for all employees and business partners. Over 80 percent of Allegro's top suppliers went through ESG compliance screening in 2022, and the company introduced risk assessment tools designed to assess non-financial risks in its supply chain. Taken together, they signal systematic integration of ESG at strategic and operational levels (Allegro.eu, 2023).

### **Case Study 3: ESG Implementation by Santander Bank Poland**

Santander Bank Poland is one of the largest financial players in the country that demonstrates a mature and comprehensive approach to ESG issues. The bank's sustainable development strategy is not a forced response to regulatory pressure but represents a long-term vision of transforming its business model. The assessment of Malos says that Santander is working conscientiously in this direction and is one of the few Polish institutions that report not only based on domestic standards but also according to global indicators such as the Global Reporting Initiative and the Task Force on Climate-Related Financial Disclosures.

At the same time, the bank's promises of sustainable development are confirmed not by general phrases or intentions but by specific, calculated, and measured actions that fundamentally change its relationship with the environment and society. In terms of environmental indicators, Santander provides financing for the energy transition of its clients. In 2022, the bank financed renewable energy projects worth in total more than PLN 1.7 billion. Over 50 percent of its new investments went to solar and wind energy. In terms of its own carbon footprint, the bank also sees improvement: 100 percent of the electricity used in its premises was from renewable sources, resulting in a 34 percent decrease in CO<sub>2</sub> emissions compared to the year base.

The bank promotes green financial products on favourable terms, including eco-loans for individual and corporate clients. On the social front, Santander's flagship is accessibility. Over seven million individual customers use bank services, but the institution also carries out many educational and outreach activities. In 2022, almost 90 thousand people participated in financial education programs implemented by the Santander Foundation, from seniors through youth to primary school students.

Internally, gender policy is also consistent: among the bank's 3,393 employees, 58 percent were women, and in management, they accounted for almost 40 percent; Santander is one of Poland's leading financial institutions in terms of gender diversity governance. Governance at Santander Bank Poland is also a clear line of responsibility for ESG. The ESG Risk Committee, a body at the executive level. The bank presents periodic monitoring reports on the achievement of its climate, social, and governance goals. In the reporting year, it analysed 95 percent of key suppliers for non-financial risk. The bank expanded its control systems over the achievement of sustainability throughout its value chain. Ethics obviously is also part of the corporate culture; all employees are obliged to complete annual anti-corruption and ethical conduct training.

While the above case studies revolve around large corporations already under obligatory ESG reporting today, it is important to mention that Poland's SME sector is also gradually gearing up for upcoming sustainability obligations. Although up to now SMEs are largely not directly subject to the Corporate Sustainability Reporting Directive (CSRD), many operate in the supply chains of larger companies or they apply for financing that increasingly requires

ESG compliance. Hence, their involvement in ESG actions appears to be a source of competitive advantage and adaptation imperativeness.

A good example is ML System S.A., a Polish SME which is active in the field of clean technology and especially on building – integrated photovoltaics. It adopts different environmental practices (energy efficiency and waste minimisation) but also engages with governance and social responsible tools (transparent reporting, diversity policies). Listed on the national ESG list, ML System engages in public consultations on sustainable development strategies and illustrates a proactive approach of SMEs to environmental and social responsibility (PARP, 2024).

More generally, 18% of Polish SMEs know what ESG is, and around 9% have implemented some type of action already—so far mainly environmental one (PARP, 2024). Although these numbers are currently small, they point to an upward trajectory and indicate the increasing significance of specialist advisory services, education and digital applications in supporting ESG adoption among SMEs.

## 6. Discussion and Conclusion

This manuscript is consistent with previous research on the growing incorporation of ESG in the strategic management process (Eccles, Ioannou, Serafeim 2014; Kotsantonis, Serafeim, 2019). Prior research has also highlighted the increasing significance of regulatory regimes and non-financial reporting in both corporate governance mechanisms as well as long-term value creation (Friede, Busch, Bassen, 2015).

Based on the analysis structured in this manuscript, one may conclude that ESG in the Polish context is qualitatively different from the previous forms of involvement in the economy. It is no longer an issue of CSR but a legally and strategically prescribed arrangement. Through the CSRD and ESRS, the authorities have ensured that ESG becomes a formal requirement for a wider pool of companies. Simultaneously, it changes the logic of risk management, governance, relations with stakeholders, and long-term value generation (Rosak-Szyrocka et al., 2022).

It is important to note that ESG is not primarily a question of compliance. Rather, it is a powerful trend that stimulates innovation, transparency, integration of E, S, and G aspects at the heart of corporate strategy. This is demonstrated by the experience of several leading companies – Allegro, Poland's McDonald's, Santander Bank Poland – which developed a comprehensive ESG approach working within global standards: GRI, SDGs, EU Taxonomy. Their approaches set an example for the more comprehensive implementation of ESG and show substantial advantages that such compliance generates for the business and the economy in general.

Nonetheless, there is a substantial gap in execution, as the analysis above demonstrates. There is also a convergence opportunity: the consumer demand for responsible production and investment provides additional business value to the ESG strategies. Given the fragmentation of governance across sectors, the pervasive underestimation of ESG relevance by the existing businesses, and the financial limitations in the small and medium companies, this system can only work if supported by purpose-specific advisory and digital tools. Table 1 presents challenges and opportunities for enterprises in Poland.

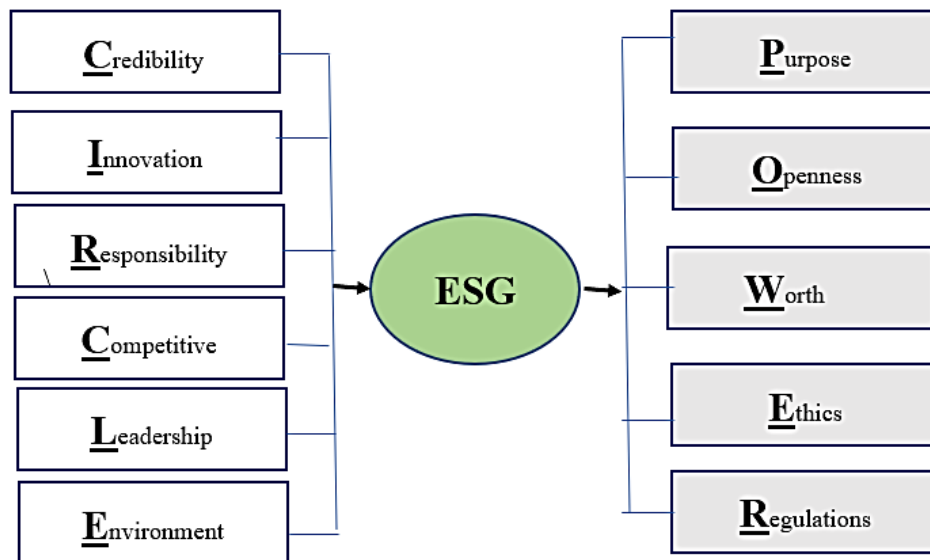
**Table 1.**  
*Challenges and Opportunities for Enterprises in Poland*

<b>Challenges</b>	<b>Opportunities</b>
Cumbersome and changing legal regulations (CSRD, EU Taxonomy etc.)	Better position in sustainable and innovative markets
SMEs' limited capacity for reporting on ESG	Access to ESG-aligned financing and green investment instruments
ESG illiteracy and knowledge at management level	Improved risk management and long-term business resilience
Cost of compliance and adjusting to new norms is high	Strengthened brand reputation and stakeholder trust
Non-financial dimensions of data availability and quality	Strategic alignment with EU climate and sustainability goals
Pressure from invested interests and global supply chains	Market differentiation through transparency and ethics

Source: own study.

The progression of ESG expectations, as evident in the table, corroborates these complexities while indicating on the other side the enormous potential for value generation, resilience, and competitive edge within both domestic and global marketplaces. In summative terms, ESG in Poland is ceasing to remain merely profile-driven or tokens – it is rapidly evolving into a central pillar of governance strategy and legitimacy. As governance bodies intensify the pressure through regulations and stakeholder expectations soar, firms that embody ESG principles today will find themselves in a better position for capital access, systemic risk experience, and systematic relevance for the long-term.

The study contained in this manuscript has demonstrated that the ESG concept in Poland has transformed from voluntary corporate social responsibility activities to a fundamentally based and strategically driven system of management. ESG is now about much more than compliance; it is a tool for changing corporates in the right direction toward sustainability, transparency and long-run resilience. The consideration of ESG in business strategy puts new demands on leadership, risk management and stakeholder dialogue. To better demonstrate this multidimensional attribute of ESG, the author also develops a novel conceptual model – the ESG–CIRCLE–POWER Model (Fig. 7).



**Figure 7.** The ESG–CIRCLE–POWER Model.

Source: own study.

The model encompasses the internal mechanisms that feed the ESG culture and external results triggered by its efficient execution. CIRCLE are the core DNA and organizational culture of ESG -based on Credibility, Innovation, Responsibility, Competitiveness, Leadership, Environment. These dimensions constitute the inner base of coherence, ethics and trust for sustained growth. CIRCLE in the conceptual model does not only stands for the 6 internal main dimensions of ESG, but also represents a closed-loop system of value circulation of an enterprise. It represents the notion of circular economy in which good conduct, innovation and environmental stewardship act as force amplifiers to reinforce and renew each other generating internal consistency, trust and organizational resilience.

This reading also fits nicely into the circular economy and sustainable development logic, where resources (and values or relations) are not used up but regenerated and substained for further usage. In this definition the acronym of internal values becomes an iterative cycle that makes a revolution in continuous ethical improvement and sustainability transformation.

POWER in turn represents the outside results of ESG application— described as Purpose, Openness, Worth, Ethics and Regulations. These dimensions illustrate how ESG creates tangible value through transparency, ethicalness, as well as a purpose-focused strategy.

According to the CIRCLE–POWER Model, the enabling mechanism of ESG is not its external appearance but rather an internal authenticity and consistency of values (CIRCLE) that flows through organizational practices and manifests in external trust, competitiveness and regulations (POWER). From this standpoint, ESG will be seen as a strategic arrangement for value creating, trustworthiness and sustainable governance.

Based on the analysis, the author concludes that **the power of ESG lies not in external reporting but in the authenticity of internal values that create trust, transparency, and competitive strength within the company.**

However, the manuscript aiming to provide a comprehensive scope of the ESG history in the Polish business environment combined with the critical evaluation of both the achievements and barriers is still constrained by several limitations. The first and foremost is the sources used for the analysis. The research is mostly based on the vast number of books, academic manuscripts, and industry reports, added to three selected case studies: McDonald's Poland, Allegro and Santander Bank Poland. Despite the selection of companies representing various industries, the chosen corporations do not cover the vast diversity of the Polish market. In particular, being the backbone of the country's economy, micro, small and medium-sized enterprises are not presented. Secondly, the manuscript does not involve primary data, such as interviews, surveys, or comparative field research. The lack of empirical research prevents from evaluating the actual organizational readiness and barriers, especially in connection to the recent legal frameworks, CSRD and ESRS. Finally, the rapidly changing regulatory agenda and the growing importance of non-financial performance measurement mean that some of the data and findings included in the manuscript can be outdated rather quickly. Therefore, continuous research and data update are required to evaluate the effectiveness of ESG strategies from the businesses' side and the actual value influence, stakeholder motivation, and business model robustness.

In future work focusing on ESG, in the context of Polish and Central European capital markets, we should investigate in more detail the practical effects of such regulatory shifts as introduced by CSRD and ESRS. When Polish companies start to adjust to these new rules, longitudinal research would yield insight into how forcing companies to integrate ESG factors may influence firm performance, innovation and competitiveness over time.

Furthermore, there is an increasing demand for comparative studies of large corporations and SMEs in relation to their preparedness, resourcing and digitalisation capacity that backs ESG reporting. Such interdisciplinary research in law, management and data science would enable the construction of more holistic models for ESG compliance and impact measurement.

One other logical direction would be to validate empirically and elaborate additional of the ESG-CIRCLE-POWER Model put forth in this paper. Research in the future could challenge the application of (CIRCLE-POWER) interrelation in different sectors and regions, examine the association between internal values (CIRCLE) and external output (POWER), employ it as a diagnostic matrix to measure ESG maturity.

Thirdly, subsequent research should also unravel the changing influence of digital technology (including AI-based analytics and stakeholder engagement tools) in promoting ESG transparency and authenticity. This research has the potential to help close the divide between compliance-oriented practices and authentic sustainability-driven change inside organizations.

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