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Engagement in ESG Areas in the Opinion of Employees of Polish Food Companies Depending on the Nature of Business Activity

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Abstract

Sustainable development is becoming a key element in the functioning of enterprises, and implementing ESG practices can foster investments in innovation, growth, and long-term financial performance. This study aimed to determine the engagement of food companies in ESG aspects from the perspective of lower-level employees, depending on the nature of their business activity—commercial or production. The results indicate that production companies demonstrate greater engagement in ESG activities than commercial firms, which may be due to more substantial regulatory pressure and the more significant environmental impact of their operations. Production companies more frequently invest in renewable energy sources, water-saving technologies, and waste minimization. They are also more active in social initiatives, promoting a healthy lifestyle and offering additional employee benefits. In terms of management, they stand out for their greater transparency, adherence to professional ethics, and regular internal audits. The research confirms that the nature of a company's business significantly influences its ESG engagement, with production firms having more significant opportunities and motivation to implement sustainable development strategies. This study fills a gap in the literature by analyzing ESG engagement in the food sector, considering the perspective of lower-level employees, and comparing differences between commercial and production firms.

Keywords: ESG engagement, food industry sustainability, employee perspectives, corporate social responsibility (CSR), business activity impact.

INTRODUCTION

Sustainable development and corporate social responsibility (ESG) have become key factors influencing the strategy and competitiveness of companies in today's economy. Implementing ESG principles increases compliance with regulations, improves the organization's image, and impacts operational efficiency and innovation. In the context of the food sector, which has a significant impact on the environment and local communities, the role of ESG is of particular importance. However, most existing research has focused on large corporations and their sustainable development strategies, while food companies remain underexplored, especially those with different activities. This article aims to assess the engagement of food companies in ESG from the perspective of lower-level employees, depending on the nature of their activities – commercial or manufacturing. The hypothesis is that the level of implementation of ESG practices differs depending on the company's type of activity, with manufacturing companies possibly showing higher engagement due to more significant regulatory and environmental pressure. The study was conducted among employees of 30 food companies – 48 respondents represented the commercial sector and 54 from the manufacturing sector. Data was collected through a survey directed at employees from various departments, such as production, administration, and sales. Only companies identified as either commercial or manufacturing were included in the analysis, allowing for a precise comparison between the two sectors. The study contributes to the literature on ESG, focusing on the food sector, which is often overlooked in sustainable development analyses. Most existing research on ESG focuses on the strategies of large entities from the perspective of management and external stakeholders.

This study assesses the perspective of lower-level employees, which may allow for an analysis of the actual level of implementation of sustainable development principles in the daily operations of companies. An innovative aspect of the study is comparing ESG approaches depending on the nature of the business – commercial or manufacturing. Demonstrating that manufacturing companies show greater engagement in ESG than commercial companies highlights the impact of business profiles on sustainable development. This could enable the development of more tailored ESG policies that consider the needs and capabilities of different sectors of the economy. Additionally, the study emphasizes the role of regulations and market pressure in shaping ESG strategies. More significant regulatory burdens have encouraged manufacturing companies to more actively implement pro-environmental initiatives, such as investments in renewable energy sources or waste reduction. These findings may be significant for policymakers and organizations responsible for implementing ESG regulations, indicating the need to support sectors less engaged in sustainable development. From a practical perspective, the study provides valuable information for managers who wish to implement ESG more effectively in their organizations. It reveals key areas where commercial companies can improve engagement and suggests how manufacturing companies can better manage ESG-related challenges. The article is structured into several sections. The first section presents a literature review on implementing ESG principles in companies and the factors influencing their engagement. The following section describes the research methodology used and the analysis approach. Then, the study results are presented, showing differences in the level of ESG engagement between commercial and manufacturing companies. The final part of the article includes a discussion of the results, their implications for business practice, and conclusions regarding further research in this area.

Literature review

The literature review did not find studies that strictly addressed the issue of ESG (environmental, social, and governance) engagement from the perspective of employees in food companies, depending on the nature of their business activities. The absence of research in this area indicates a gap that should be filled through further analyses of this phenomenon.

Recent studies on ESG have focused on various aspects of its impact on enterprises, employees, and financial markets. Much of the literature suggests that implementing ESG principles can improve firms' financial performance and enhance their resilience to crises. Grygiel-Tomaszewska & Turek (2021) analyze how ESG can serve as an early warning mechanism for corporate insolvency, a finding also confirmed in the research of Li, Du, and He (2025), who indicate that mandatory ESG reporting reduces firms' bankruptcy risk. Similarly, Xu and Yin (2025) argue that digitalization and adopting new ESG technologies can strengthen corporate resilience, which is particularly relevant given the current geopolitical situation.

Other studies highlight the role of ESG in shaping risk management strategies in the banking sector. Nocoń (2024) demonstrates that banks implement ESG mechanisms to assess the creditworthiness of enterprises, a conclusion also supported by the research of You and Liu (2025), who suggest that ESG, combined with financial technologies, enables better risk management and reduces risk-taking tendencies. Meanwhile, Smoleńska (2023) emphasizes the increasing integration of ESG with banking supervision in the European Union, aimed at enhancing the sector's financial stability.

Another topic addressed in the literature is the impact of ESG on corporate financial performance and competitiveness. Research by Wu et al. (2022) indicates that companies with high ESG ratings achieve better financial results. Similar relationships are analyzed by Gao et al. (2025), who conclude that ESG performance positively influences innovation, contributing to the competitiveness of firms in international markets. Ma & Song (2025) confirm this relationship, highlighting that companies with high ESG scores are more likely to have technologically advanced products, strengthening their competitive advantage. Mishra et al. (2023) predicted ESG variability using statistical models, demonstrating the effectiveness of these methods in forecasting ESG-related fluctuations. Mastos & Gotzamani (2022) and Mounir (2025) presented a sustainable development and risk management model, emphasizing the importance of sustainable practices throughout the supply chain. Taskin et al. (2025) investigated whether historical ESG ratings can effectively predict future ESG performance, suggesting that past ratings can help forecast future outcomes.

Additionally, Pluskota (2024) conducted a detailed study examining the impact of corruption on ESG indicators in European Union countries. The findings revealed that corruption affects key sustainability parameters to varying degrees. The researcher observed that higher levels of corruption often result in increased carbon dioxide (CO□) emissions, primarily due to insufficient environmental regulations and limited enforcement effectiveness. Moreover, elevated corruption negatively affects life expectancy, mainly through reduced effectiveness of healthcare systems and restricted public access to high-quality medical services. In the economic sphere, the influence of corruption is also notable, leading to slower economic growth caused primarily by inefficient allocation of public resources, reduced foreign investment, and weakened institutional transparency. Pluskota emphasizes that the scale and specific outcomes of this phenomenon vary significantly among individual EU countries, highlighting the need for tailored anti-corruption strategies within ESG policy frameworks.

Research also highlights the importance of ESG reporting. Studies by Kowalkowska & Martyniuk (2023) indicate that publicly traded companies increasingly implement non-financial reporting practices, although differences exist in firms' methodologies. Similarly, Żak (2022, 2023) emphasizes environmental reporting as a key ESG component, highlighting that compliance with guidelines requires precise disclosure of essential information. Mokryńska & Tkocz (2023) discussed the development of ESG reporting as a new source of information, stressing the importance of up-to-date and accurate data in non-financial disclosures. A challenge in this context is greenwashing, which Kathan et al. (2025) highlight, noting that ESG ratings often fail to reflect a company's sustainability efforts. Similar conclusions were drawn by Gibbon et al. (2023), who analyzed the impact of investment fund name changes on ESG and found that these rebrandings do not always correspond to actual strategy changes.

Another crucial aspect of ESG research is its impact on investor perceptions. Szrajnert (2022) assessed companies in the WIG-ESG index based on ratings from research agencies, revealing differences in evaluations and their influence on investor perceptions. Giglio et al. (2025) examined investor beliefs regarding ESG, showing that it plays an increasingly significant role in investment decisions. Frydrych (2023) underscores the role of ESG bonds as a financing tool for projects aligned with sustainability principles, while Chai et al. (2025) investigated whether high ESG scores can protect companies from the negative consequences of legal violations, concluding that a strong ESG reputation can mitigate the impact of such incidents. Agapova et al. (2025) explored the relationship between ESG disclosures and voluntary earnings forecasts, emphasizing the importance of transparency in this field. Additionally, Dygas (2024) conducted comparative research on the impact of ESG doctrine on the economies of Poland and India. The author observed that practices related to environmental, social, and governance responsibility are implemented differently in these countries, reflecting the specific local economic, social, and cultural conditions. In Poland, there has been a significant development of European Union regulations, forcing companies to strictly adhere to ESG standards, consequently increasing corporate ecological awareness and enhancing transparency. In India, on the other hand, where economic growth is dynamic but characterized by larger social and environmental disparities, the implementation of ESG encounters numerous barriers, including insufficient environmental awareness and limited effectiveness of regulatory mechanisms. Author also emphasized that the effects of implementing ESG practices differ significantly between the two countries. In Poland, due to integration with EU regulations, ESG initiatives have notably improved reporting quality and strengthened companies' international competitiveness. Conversely, in India, benefits from ESG implementation are uneven and often limited to large corporations, while smaller enterprises struggle with adaptation difficulties and financial constraints related to meeting high ESG standards. In conclusion, Dygas highlights the necessity of considering economic and cultural differences when implementing ESG doctrine, as well as the need to tailor ESG strategies to the specific economic conditions of individual countries.

Another important area of research is the impact of ESG on employees and their engagement within an organization. Studies by Kim & Lee (2022) demonstrate that the authenticity of ESG initiatives is crucial—when employees believe that a company is genuinely committed to ESG practices, their loyalty and engagement increase. This is further supported by research from De Roeck & Farooq (2018), who indicate that ethical leadership can enhance the positive impact of ESG on employee involvement in sustainability initiatives. Similarly, Lee & Ha-Brookshire (2021) emphasize the role of organizational support in encouraging employees to participate in sustainable practices, while Jin & Kim (2022) analyze the impact of ESG on work performance, showing that employees' positive perception of ESG leads to higher efficiency. In the context of human resource management, Ababneh (2021) examines the influence of green HR practices on employees' pro-environmental behaviors, suggesting that engagement can mediate the relationship between a company’s ESG strategy and individual sustainable behaviors. Elias et al. (2023) explore how sustainable HR practices affect employee performance, highlighting the importance of a process-oriented HR approach in the ESG context. Akremi et al. (2015) developed a multidimensional scale of corporate stakeholder responsibility, analyzing how employees perceive corporate social responsibility. Tafolli & Grabner-Kräuter (2020) investigated employees' opinions on corporate social responsibility and organizational corruption in Kosovo, revealing a link between ESG perception and organizational corruption levels. Additionally, Topczewska (2024) discussed the role and types of ESG ratings in financial markets, emphasizing their significance in corporate operations. Similar insights can be observed in the studies of Wang et al. (2025) and Wu et al. (2025).

The literature also addresses corporate governance issues and the impact of management structure on achieving ESG objectives. Research by Du et al. (2025) indicates that excessive managerial overconfidence can negatively affect ESG performance, but institutional investor oversight can mitigate this effect. Iftikhar et al. (2025) analyze the impact of litigation risk on ESG reporting strategies, suggesting that firms concerned about legal disputes are more likely to disclose detailed ESG data to enhance transparency. Bugdol (2023) examined the impact of standardized management systems on ESG program implementation, emphasizing the need to integrate management standards with sustainability goals. Jin et al. (2025) and Yang et al. (2025) studied how ESG performance affects the resilience of private enterprises in Chinese financial markets, suggesting that better ESG outcomes can enhance firms' stability during crises. Kaźmierczak (2022) reviewed the literature on the differences between CSR and ESG, highlighting the evolution of corporate responsibility concepts. Kim et al. (2020) investigated the role of ESG in improving organizational performance from an employee perspective, demonstrating the positive impact of ESG engagement on work efficiency. Ling et al. (2024) analyzed discrepancies in ESG ratings and their effect on audit fees in China, showing that rating inconsistencies can lead to higher audit costs. Płońska & Kądzielawski (2023) assessed the effectiveness of AI-supported ESG risk management systems, suggesting that such systems significantly aid in achieving ESG objectives within organizations. Pyka & Pyka (2023) discussed ESG risk management in corporate lending processes in Poland, emphasizing the need to incorporate ESG factors into credit risk assessment. Liu et al. (2025) examined how financial technologies support businesses in ESG practices, highlighting the role of policy and management approaches. Martinez-Conesa et al. (2017) analyzed the relationship between corporate social responsibility and innovation, identifying ESG frameworks as a key factor in driving company innovation.

Additionally, Matuszewska-Pierzynka et al. (2023) conducted research examining the relationship between ESG performance and dividend stability among the world's largest companies. Their findings indicate that firms with better ESG outcomes exhibit a more stable dividend payout policy to shareholders. This suggests that a high level of environmental, social, and governance responsibility may positively influence the predictability and continuity of dividend payments.

Research on ESG covers a wide range of topics, from its impact on financial performance and corporate resilience to transparency in reporting, human resource management, and employee engagement. The literature emphasizes that ESG is not merely a passing trend but a fundamental component of management strategy that influences firms' long-term stability and attractiveness to investors and employees. However, research gaps exist regarding ESG, particularly in understanding how corporate stakeholders, including employees, perceive and engage with these practices.

Methodology

The research aims to determine the engagement in ESG principles from the perspective of lower-level employees in food companies, depending on the nature of their business activities – commerce or production. Employees from 30 selected food companies were assessed and chosen purposively as either commercial or manufacturing (15 commercial and 15 manufacturing). Table 1 presents the number of respondents.

Table 1. Number of respondents by the type of business activity

Type of business activity	Number of respondents
Commercial enterprises	48
Manufacturing enterprises	54
Total	102

Źródło: opracowanie własne.

To assess the significance of differences between groups, the independent samples t-test was applied. This test allows for comparing the mean scores of two independent groups (e.g., employees of trading enterprises vs. employees of manufacturing enterprises). The independent samples t-test was conducted for each variable to determine whether the differences in mean scores were statistically significant at the $\alpha = 0.05$ level. The following hypotheses were formulated for testing:

– Null hypothesis (H_0): There are no statistically significant differences in the average level of engagement in ESG principles between employees of manufacturing and trading enterprises.
– Alternative hypothesis (H_a): There is a statistically significant difference in the average level of engagement in ESG principles between employees of manufacturing and trading enterprises.

The test yielded a t-statistic of 4.47 and a p-value of 0.000021, leading to the rejection of the null hypothesis. This indicates statistically significant differences between manufacturing and trading enterprises regarding their engagement in ESG principles.

The study focused on employees from various departments (production, administration, sales) in food companies. The results did not include management opinions, as their views were part of a separate study. Respondents from commercial units constituted a group of 48 participants, while the group from manufacturing companies was slightly larger, including 54 respondents. In total, 102 respondents participated in the study. Companies were categorized into commercial or manufacturing based on the dominant business profile. Units that were relatively balanced between commercial and manufacturing activities were excluded from the analysis. The practical aspect of the research also justified the selection of companies participating in the study – it was conducted as part of the financial audit procedures in these companies. Choosing the units studied during this period ensured access to actual data. It provided the opportunity to directly reach employees from different departments (production, administration, sales), increasing the relevance of the obtained results in analyzing ESG engagement. The purposive sampling was not only methodologically justified but also practical, allowing for the acquisition of accurate and reliable results that may have significant implications for the further development of ESG policies depending on the type of business activity of the companies. The research was conducted during financial audit procedures in the surveyed companies between January and May 2024. The main research hypothesis was formulated, stating that the level of engagement in ESG areas of food companies depends on the nature of their business activities. Based on the main hypothesis, the following detailed hypotheses were formulated: **Hypothesis 1**: Manufacturing food companies exhibit higher engagement in ESG principles than commercial food companies. **Hypothesis 2**: Manufacturing companies operating in the food industry engage more extensively in environmentally friendly practices compared to commercial companies within the same industry, such as investing in renewable energy sources, implementing solutions to reduce waste generation, and undertaking other initiatives aimed at minimizing negative environmental impacts.. **Hypothesis 3**: Commercial food companies exhibit a higher level of engagement in social ESG aspects, such as initiatives supporting local communities, than manufacturing companies.

Results

Table 2 presents the analysis results regarding the engagement of the surveyed food companies in ESG areas depending on the nature of their business activities (production or commerce).

Table 2. Engagement in ESG areas depending on the type of business activity of the surveyed units (affirmative responses in %)

No.		C* (%)	M* (%)
1	Our company actively reduces greenhouse gas emissions in the production process.	72.5	88.4
2	We use production technologies that allow for water conservation.	63.1	85.7
3	We strive to minimize the amount of production waste.	69.2	90.3
4	Our company invests in renewable energy sources like solar panels and biogas.	58.4	81.6
5	We promote organic farming among our suppliers.	65.9	79.2
6	We take biodiversity conservation into account in our activities.	64.7	78.9
7	We undertake actions aimed at reducing electricity consumption.	66.5	83.5
8	Our company uses recycled materials.	61.3	80.7
9	Our company has a system for monitoring the consumption of natural resources.	60.5	82.9
10	We conduct environmental audits in our facilities.	57.8	78.6
11	Our company ensures good working conditions and the safety of its employees.	75.4	92.1
12	Our company promotes equality and diversity in the workplace.	69.3	88.5
13	Our company supports the professional development and education of its employees.	72.9	90.2
14	The management is open to dialogue with employees and members of the community.	71.2	89.9
15	Our company promotes a healthy lifestyle among its employees.	67.1	85.3
16	Our company runs social initiatives for the local community.	68.9	87.5
17	Our company offers additional employee benefits, such as healthcare, etc.	62.8	80.1
18	Our company supports local cultural and sports initiatives.	63.7	81.4
19	The company runs psychological support programs for employees.	58.9	79.6
20	Our company is involved in charitable and social activities.	70.4	88.8
21	Our company has clear and transparent risk management policies.	74.6	92.4
22	The management regularly conducts internal audits to assess compliance with ESG principles.	65.2	84.9
23	We adhere to professional ethics at every level of the organization.	68.4	87.2
24	Actions are transparent and regularly reported to all stakeholders.	72.7	91.6
25	Our company is taking action to reduce corruption and misconduct.	67.9	86.3
26	Our company has implemented anti-corruption procedures.	64.5	85.1
27	Our company has an independent committee overseeing the implementation of ESG principles.	60.1	82.7
28	Our company has a strategy aligned with sustainable development principles.	71.8	90.6
29	The management regularly evaluates ESG performance and takes corrective actions.	69.4	89.3

*C – commercial, M – manufacturing.

Source: own study.

A comparative analysis of ESG-related activities between commercial and manufacturing companies reveals significant differences in engagement in both sectors. For greenhouse gas emissions reduction, manufacturing companies (88.4%) show a higher level of engagement than commercial companies (72.5%), which may be due to the more significant environmental impact of production processes and more substantial regulatory pressure from the government and the EU. Similarly, in terms of water conservation, manufacturing companies (85.7%) outperform commercial companies (63.1%), likely due to higher water usage in production processes and the need for efficient water management.

Waste minimization is also more common in manufacturing companies (90.3%) than commercial ones (69.2%), which is understandable given the amount of waste generated by production processes. Investments in renewable energy sources are notably higher in manufacturing (81.6%) than in commerce (58.4%), suggesting a higher demand for energy in manufacturing plants and the associated benefits of implementing more sustainable energy solutions.

In promoting organic farming among suppliers, manufacturing companies (79.2%) outperform commercial companies (65.9%), as manufacturing companies tend to have closer contact with raw material suppliers. Biodiversity protection is more common in manufacturing (78.9%) than in commerce (64.7%), likely due to manufacturing companies' greater responsibility for their environmental impact. Efforts to reduce electricity consumption are more advanced in manufacturing (83.5%) than in commerce (66.5%), which is also a result of higher energy consumption in manufacturing plants.

Manufacturing companies more frequently use recycled materials (80.7%) than commercial companies (61.3%), which may be linked to the higher demand for raw materials. Monitoring the consumption of natural resources is more common in manufacturing (82.9%) than in commerce (60.5%) due to the need for precise resource management in manufacturing facilities. Manufacturing companies conduct Environmental audits more frequently (78.6%) than commercial ones (57.8%) due to more significant pressure to adhere to environmental standards in the manufacturing sector.

Regarding working conditions and safety, manufacturing companies (92.1%) significantly outperform commercial companies (75.4%), which is understandable given the risks associated with working in manufacturing facilities. Gender equality and diversity are more often promoted in manufacturing (88.5%) than in commerce (69.3%), which may result from larger workforces and more complex organizational structures in manufacturing companies. Similarly, professional support and education are more developed in manufacturing (90.2%) than in commerce (72.9%).

Openness to dialogue with employees is higher in manufacturing companies (89.9%) than in commercial ones (71.2%), possibly due to the more hierarchical structures in manufacturing companies, where internal communication is crucial. Promoting a healthy lifestyle is more common in manufacturing (85.3%) than in commerce (67.1%), which stems from greater attention to health and safety in the manufacturing environment.

Manufacturing companies more frequently conduct social initiatives for local communities (87.5%) than commercial companies (68.9%), likely due to a more substantial commitment to developing the communities in which they operate. Similarly, manufacturing companies more often offer additional employee benefits (80.1%) than commercial ones (62.8%), likely due to more significant financial resources.

Support for local cultural and sports initiatives is more common in manufacturing companies (81.4%) than in commercial ones (63.7%). Manufacturing companies also offer psychological support programs for employees more frequently (79.6%) than commercial ones (58.9%). This may be related to the more significant challenges associated with physical labor and stress in manufacturing facilities.

Engagement in charitable and social activities is significantly higher in manufacturing companies (88.8%) than in commercial ones (70.4%). Due to more significant operational challenges, risk management is more developed in manufacturing companies (92.4%) than in commercial ones (74.6%). Internal audits to assess compliance with ESG principles are more frequently conducted in manufacturing companies (84.9%) than in commercial ones (65.2%).

Compliance with professional ethics at every level of the organization is more rigorously followed in manufacturing companies (87.2%) than in commercial ones (68.4%). Actions related to transparency and regular reporting are more advanced in manufacturing companies (91.6%) than in commercial ones (72.7%).

Manufacturing companies are more likely to take actions to reduce corruption (86.3%) than commercial ones (67.9%) and have anti-corruption procedures in place (85.1% vs. 64.5% in commerce). Manufacturing companies are more likely to have an independent committee overseeing the implementation of ESG principles (82.7%) than commercial ones (60.1%).

Finally, strategies aligned with sustainable development principles are more developed in manufacturing companies (90.6%) than in commercial ones (71.8%), and management regularly evaluates ESG performance more often in manufacturing (89.3%) than in commerce (69.4%).

The results indicate that manufacturing companies engage more in ESG-related activities than commercial companies. This may stem from manufacturing companies' more significant environmental impact and the more considerable challenges they face in resource and process management.

Discussion

The conducted analysis revealed differences in the engagement of manufacturing and trading companies in ESG aspects, providing a new perspective on the discussed topic. Existing literature lacks research on ESG engagement from the perspective of employees in food companies, depending on the nature of the business.

The results of this study indicate a significant advantage of manufacturing companies over trading companies in implementing ESG initiatives, which may result from stronger regulatory pressure and the greater environmental impact of their operations. Previous studies have mainly focused on the broad impact of ESG on companies' financial performance and crisis resilience (Wu et al., 2022; Gao et al., 2025; Ma & Song, 2025). Research has suggested that high ESG performance can foster innovation and improve firms' competitiveness in international markets. Our findings confirm this relationship, as manufacturing companies that demonstrate higher ESG engagement simultaneously invest in modern technologies, such as renewable energy sources (81.6% in manufacturing vs. 58.4% in trading) and water-saving technologies (85.7% vs. 63.1%). Therefore, it can be concluded that higher ESG engagement in manufacturing may strengthen these companies' competitiveness.

The literature also emphasizes that ESG plays a crucial role in shaping risk management strategies (Nocoń, 2024; You & Liu, 2025). Our study found that ESG risk management is significantly more developed in manufacturing companies (92.4%) than in trading companies (74.6%), indicating a more conscious approach to minimizing threats related to environmental impact and legal regulations.

Another important aspect examined in the literature was the impact of ESG on employee engagement (Kim & Lee, 2022; Jin & Kim, 2022). Our research results indicate that manufacturing companies are more likely to support their employees by offering additional benefits (80.1% vs. 62.8%), organizing social initiatives (87.5% vs. 68.9%), and providing psychological support (79.6% vs. 58.9%). This highlights a stronger orientation of manufacturing companies toward the social aspects of ESG, which may translate into higher employee engagement.

Despite extensive research on ESG in the context of finance, risk management, and reporting, there has been a lack of studies comparing ESG engagement in manufacturing and trading companies from an employee perspective. Our study fills this gap by providing empirical evidence that manufacturing companies demonstrate a higher level of ESG engagement than trading companies, likely due to their greater exposure to legal regulations and environmental pressure.

In summary, this study provides new insights into ESG in the food sector, confirming that the nature of business operations plays a crucial role in the level of ESG engagement. These findings can serve as a foundation for further research on ESG strategies in different economic sectors and their impact on how companies are perceived by employees and investors.

Future research should expand the analysis to other sectors and include additional methods for measuring actual corporate ESG engagement, such as external report analysis or ESG audit data. The findings of this study may be useful for company managers, investors, regulators, non-governmental organizations, and researchers interested in ESG and sustainable development.

Conclusion

Manufacturing companies show significantly higher engagement in almost all analyzed ESG aspects than commercial companies. This is due to manufacturing activities' more significant environmental and societal impact, which requires more robust ecological, social, and governance actions. Manufacturing companies more frequently promote good working conditions, gender equality, and employee education and initiate projects for local communities. This may result from the more significant number of employees and their diverse needs.

In actions such as greenhouse gas emissions reduction, water conservation, waste minimization, investments in renewable energy sources, and monitoring of natural resource consumption, manufacturing companies also achieve higher results than commercial ones. This is due to the necessity of managing higher resource consumption and complying with stricter regulations. Moreover, manufacturing companies outperform commercial ones in risk management, internal audits, anti-corruption procedures, and transparency of actions. This advantage may stem from more significant operational challenges and the need to manage complex processes.

Sustainable development strategies are more often implemented and regularly monitored in manufacturing companies. This reflects their more significant commitment to long-term ESG actions.

Despite lower results, commercial companies also take action in ESG areas, albeit to a lesser extent. This is due to their more minor direct environmental impact and different business priorities.

The analysis indicates a higher maturity of the manufacturing sector in implementing ESG strategies, which may be linked to its more significant environmental impact and regulatory and societal pressure. Although less engaged, commercial companies should strive to improve their efforts to align with global trends and stakeholder expectations.

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