THE TRANSFORMATION OF POLISH ENTERPRISES TOWARDS SUSTAINABLE DEVELOPMENT

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A company can be considered sustainable when it pursues its goals while maintaining ecological balance, and employee and community well-being. This perception of enterprise activities results from the spread of the concept of sustainable development, according to which enterprises should not only achieve their own goals, but also address the needs of a wide range of stakeholders. The transformation of enterprises towards sustainability is a difficult and multidimensional process. It requires changes in operation of an enterprise, e.g., including environmental, social and governance (ESG) factors into its business model. This article aims to show the process of transformation of Polish enterprises towards sustainability. The article analyzes ESG activities of companies from industries with different impact on the environment (chemical and banking) in 2021-2022. The results show that companies are aware of the need to include ESG factors in their business model. The scope and nature of the activities depend on the financial situation of the enterprise and its needs. In industries with a strong impact on the environment, environmental investments are more important. The activities of the enterprises over the analyzed years did not change significantly, suggesting determination in implementing the adopted strategy consistent with the sustainable development.

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1 Introduction

The popularization of the concept of sustainable development, the growing awareness of the impact of human activities on the environment, and the growing dynamics of changes in the modern economy are just some of the factors that encourage economic participants to verify their goals. One of the greatest global challenges in recent years is the implementation of economic, social and environmental goals simultaneously (including the transition to a low, and ultimately, zero-emission economy). This is an extremely difficult task for enterprises, but as research by Mondal et al. showed (2022), green entrepreneurs play an essential role in driving long-term economic growth and creating new businesses through sustainable innovation and green production methods.

The aim of the article is to discuss the process of transforming enterprises towards sustainable development. The article also seeks answers to the questions:

- 1. What does a sustainable company mean?
- 2. Does the scope and nature of activities undertaken by enterprises in the process of transformation towards sustainable development differ depending on the industry in which they operate?
- 3. Has the scope and nature of activities undertaken by enterprises in the process of transformation towards sustainable development changed over the years.

In order to achieve the research objectives, a critical analysis of the literature on the subject was used, employing the method of description, analysis and synthesis. The research part was carried out based on a case study of four companies, i.e., two operating in the chemical industry and two from the banking sector. Information on activities conducted in individual enterprises comes from the non-financial statements of these enterprises for 2021-2022.

2 Sustainable enterprise as an element of the implementation of the concept of sustainable development

The issue of a sustainable enterprise is inextricably linked to the concept of sustainability and sustainable development. Although the terms sustainability and sustainable development are often used interchangeably, despite many similarities,

there are some differences between them. Undoubtedly, both concepts refer to the principle of intergenerational solidarity (Law, 2019) and are an expression of the approach according to which current resources should be used effectively enough to ensure their availability to the extent that they meet the needs of today and future generations (Mohieldin, 2017; Hariram et al. 2023). Both sustainability and sustainable development are based on three pillars: "economic sustainability", "social sustainability" and "environmental sustainability" and focus on maintaining a balance between them (Mensah, 2019). The concept of sustainability defines the principles that coordinate all aspects of development to make it sustainable. Sustainable development is a goal or goals (forming Sustainable Development Goals) that can be achieved by functioning in accordance with sustainability (Ruggerio, 2021; Ozili, 2022).

One of the key challenges in the field of sustainability is the transformation of traditional enterprises into sustainable organizations (Pabian, 2017). The term sustainable enterprise does not have a single, universal definition in the literature on the subject, which is due to the fact that this issue is still relatively new and is constantly evolving and modified. The complexity and multi-level nature of the concept itself also means that it is described by scientists from different points of view. For the purposes of this study, only selected definitions of a sustainable enterprise will be presented to show the diversity but also convergence of approaches to the discussed issue.

A review of the definitions allows us to distinguish the features of a sustainable company. First of all, the method and scope of the organization's activities are consistent with the concept of sustainable development. A sustainable enterprise is an enterprise that contributes to sustainable development (Van Zanten and van Tulder, 2021) delivering economic, social and environmental benefits, in line with the three pillars of sustainability (Anbarasan and Sushil, 2018, Sargani et al. 2021).

Author	Definition	
Salzmann et al. (2005)	a strategic and profit-oriented response to the ecological and social issues of the organization's core and auxiliary activities	
Potocan and Mulej (2007)	in the most general sense, strives to achieve synergy in the economic, ecological, social and ethical aspects of its activities	
Gao (2008)	is the way of operation of companies that achieve their financial, social and ecological results in a sustainable and lasting way	
Vermeulen and Witjes (2016)	implementation of the strategy by individual enterprises in order to achieve balanced and lasting development	
Jabłoński (2013)	is a business carried out with the simultaneous use, in a systemic way, of the concept of enterprise value management and its social responsibility that provides value for a wide range of stakeholders	
Zu (2013)	is an organization that can anticipate and meet the needs of current and future generations of customers and stakeholders by creating and implementing innovations in new strategies A sustainable company incorporates the principles of sustainable development in each of its business decisions, providing environmentally friendly products or services	
Andriate and Fink (2017)	an organization that implements activities in a way that ensures its ability to achieve corporate goals and at the same time increases long- term shareholder value by incorporating economic, environmental and social factors into its strategies	

Table 1: Definitions of a sustainable enterprise according to selected authors

Source: own elaboration

Referring this to the company's goals, it should be noted that this is a departure from the traditionally formulated goals of the company, which were to maximize profit and increase its value for shareholders, towards meeting the needs of a wide range of stakeholders, which include, in addition to the owners mentioned above, also employees, financial institutions, business partners, and local communities (Pfajfar et al. 2022). A sustainable enterprise creates value for its stakeholders (Runaya, 2023). Stakeholder engagement can help implement sustainability strategies and create value for the company (Whelan and Ehiemere, 2023). In turn, the study by Bello-Pintado et al. (2023) shows that different stakeholders play different roles in companies' adoption to sustainability and implementation of sustainable practices. At this point, in the context of stakeholder influence, it is worth mentioning the phenomenon of greenwashing, which has become a significant problem in recent years. Greenwashing occurs when, in response to stakeholder expectations, a company creates a positive, environmentally friendly image of itself and its products/services without actually taking any real actions in this direction (Siano et al. 2017, Santos et al. 2023).

Transforming an enterprise towards sustainability requires changing its business model to a sustainable business model in order to create sustainable value. This value is also called "integrated value" or "sustainable value proposition", i.e., value that is a balanced combination of financial and non-financial (social and environmental) value (Moratis, 2017).

As defined by Geissdoerfer (2016), a sustainable business model creates, delivers, captures and exchanges permanent value for a wide range of stakeholders through a simplified description of the interdependencies between the individual elements of the enterprise and the interactions with its stakeholders (Geissdoerfer et al., 2016). At this point, it is worth repeating after Mignon and Bankel (2023) that there is no one universal pattern of a sustainable business model, therefore the transformation of each enterprise is an individual process. Such process takes into account enterprise's needs, but also the material and financial resources owned by the enterprise and/or resources to which it has access. In practice, the transformation of a business model most often involves the implementation of environmental, social and governance (ESG) factors into the company's operating strategy and taking into account these aspects in the business decision-making process. The transformation process often requires switching to ecological technologies and production methods that are friendly to the environment but also to society, especially employees. This position is confirmed by the results of the study by Kajtazi et al. (2023), which shows that technological innovations have a direct, positive impact on the sustainable development of the company, as do employee training and managerial skills of the management staff. An important element of the sustainable enterprise management model is ensuring the transparency of its operations, especially limiting and counteracting corruption (Cardoni et al. 2020).

2 Transformation of Polish enterprises towards sustainable development

The process of transforming enterprises towards sustainable development will be shown on the example of four enterprises, two from the chemical industry and two from the banking sector. This selection of enterprises was intended to show similarities and differences in the process of transformation of enterprises that have a different impact on the environment, i.e., from the chemical industry (with a strong impact on the environment) and banking (with a minimal impact on the environment). The analyzed companies from the chemical industry are Grupa Azoty S.A. and the Orlen Group. The banks selected for the study were Bank Pekao S.A. and Getin Noble Bank S.A. The information was taken from ESG reports/non-financial statements that these entities are obliged to publish. The research period is 2021-2022, and the aim of the analysis is to determine the scope of ESG disclosures by individual companies and to compare the scopes between companies operating in the same industry and across industries. The aim of the study was also to determine the variability of the scope and nature of disclosures made to individual companies in subsequent years.

The synthetic results of the analysis are presented in Tables 2–5.

	2021	2022
Description of the business model	The business model takes into account social values, ethics, organizational governance, risks and opportunities. The harmonious development of the company is based on innovation, knowledge and responsibility. The model assumes building company value through safe and useful chemicals and assumes the implementation of modern and comprehensive solutions in the chemical industry that meet the expectations of stakeholders.	Integrated business model as the key to success in the industry. Adjusting the production profile in a given period to the conditions dictated by the market. Skillful product flow management as a source of advantage. Correct placement of the received volume on the markets, thanks to knowledge of the markets and established trade policy. Flexible adaptation to a very dynamic market situation as a guarantee of success in the industry.
Description of activities implemented by the entity in the field of ESG	 Natural environment area Reducing energy consumption through actions to improve the energy efficiency of technological processes Compliance with applicable legal standards in the field of atmosphere protection and constant adaptation of installations to emission standards Reducing the carbon footprint Waste treatment policy Employee area Applying clear employment and promotion rules and striving to ensure gender diversity 	 Natural environment area Reducing energy consumption through actions to improve the energy efficiency of technological processes Compliance with applicable legal standards in the field of atmosphere protection and constant adaptation of installations to emission standards Reducing the carbon footprint Waste treatment policy Employee area Applying clear employment and promotion rules and striving to ensure gender diversity

Table 2: Information content of the statement on non-financial information of Grupa Azoty S.A. for 2021-2022

	2021	2022
	 Additional benefits for employees Application of the highest health and safety standards Social area Investments for the local community, in the field of local initiatives Area of ethics and anti-corruption Following the "Grupa Azoty Code of Ethical Conduct" defining the values applicable to all companies of the GA Capital Group: economy, professionalism, cooperation, respect.transporency 	 Additional benefits for employees Application of the highest health and safety standards Social area Investments for the local community, in the field of local initiatives Area of ethics and anti-corruption Development of the "Grupa Azoty Code of Ethical Conduct" defining the values applicable to all companies of the GA Capital Group: economy, professionalism, cooperation, respect transparency
Identification of significant risks related to the entity's ESG activities	 respect, transparency Environmental risks Risk of serious industrial accidents affecting the environment The risk is related to the processing, production, storage and transport of chemical substances that are hazardous materials Risk related to failure to meet water and sewage management requirements Risk of land contamination and related costs Risks related to failure to meet waste management requirements Risk related to failure to meet substances Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements 	 respect, transparency Environmental risks Risk of increased exposure to failures and interruptions in the continuity of operation of production installations and technological limitations, including those resulting from the physical consequences of climate change Risk related to the production and storage of hazardous materials Risk related to the transport of hazardous materials Risk related to the transport of hazardous materials and the risk of changing regulations and/or the right to transport without ADR, RID Risk related to failure to meet water and sewage management requirements Risk related to the use of radioactive substances Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to failure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to chailure to meet waste management requirements Risk related to chailure to meet waste management requirements

2021	2022
 Social risks Risk related to the lack or limitation of supervision over corporate regulations Risk related to non-compliance with good corporate governance practices and capital market regulations Risk of violating national or international law regarding compliance management 	 2022 effects of climate change on the Company Risk related to the management of CO₂ emission allowances Regulatory risk related to tightening environmental protection requirements Regulatory risk related to tightening environmental protection requirements Regulatory risk related to tightening environmental protection requirements Risk of negative impact on biodiversity and wild natural habitats Social risks Risk of loss of social acceptance due to violations of Human Rights by the Company's employees or business partners The risk of not meeting social expectations Risk of personal data breach Risk of personal data breach Risk of accidents at work, and collective negotiations Risk of losing employees with important competences for the Company due to high employee turnover
 Governance risks Risk related to the lack or limitation of supervision over corporate regulations Risk related to non-compliance with good corporate governance practices and capital market regulations Risk of violating national or international law regarding compliance management 	 Governance risks Risk related to the lack or limitation of supervision over corporate regulations Risk of violation of ethical principles and standards Risk related to investor relations and compliance with information obligations Image risk related to ineffective communication of social activities and initiatives related to sustainable development Risk of violating legal provisions in the field of compliance management

2021	2022
	 Risk of negative impact on the Company's brand

Source: own study based on statements about non-financial information of Grupa Azoty S.A. for 2021-2022

Table 3: Information content of the statement on non-financial information of PKN Orlen for2021-2022

Description of the business modelThe business model assumes strengthening the position in the area of core operations, as well as further development, including coordination of the activities of the ORLEN Group companies. The aim of the undertaken activities is to increase the value of PKN ORLEN and the ORLEN Group, strengthen the position on home markets, and product and geographical expansion. To ensure efficient management, PKN ORLEN has implemented segment management principles aimed at achieving the common strategic goals of the ORLEN Group's parent company.The business model assumes strengthening the position in the area development, including coordination of the activities is to increase the value of PKN ORLEN and the ORLEN Group, strengthen the position on home markets, and product and geographical expansion. To ensure efficient management, PKN ORLEN has implemented segment management principles aimed at achieving the common strategic goals of the ORLEN Group set by PKN ORLEN as the Group's parent company.The business model assumes strengthening the position in the area development, including coordination of the activities related to quality assurance, limiting the impact on the environment, compliance with occupational health and safety and information security.The business model assumes strengthening the position in the area of the ORLEN food safety policyDescription of activities implemented by the entity in the field of ESGNatural environment, information security.Natural environment, information security.Natural environment, compliance with occupational health and safety and information securityActivities aimed at improving the company's energy performance- </th <th></th> <th>2021</th> <th>2022</th>		2021	2022
 Activities related to quality assurance, limiting the impact on the environment, introducing a procedure for monitoring the company's impact on the environment, compliance with occupational health and safety and information security. Activities aimed at improving the company's energy performance Activities aimed at improving the company's energy performance PKN ORLEN food safety policy Implementation of a system for monitoring and reporting carbon dioxide emissions Waste management procedure Implements for installations Implements for installations Implementation of a system for monitoring and reporting carbon dioxide emissions Implements for installations Implements for installations 	the business	strengthening the position in the area of core operations, as well as further development, including coordination of the activities of the ORLEN Group companies. The aim of the undertaken activities is to increase the value of PKN ORLEN and the ORLEN Group, strengthen the position on home markets, and product and geographical expansion. To ensure efficient management, PKN ORLEN has implemented segment management principles aimed at achieving the common strategic goals of the ORLEN Group set by PKN ORLEN as the Group's	strengthening the position in the area of core operations, as well as further development, including coordination of the activities of the ORLEN Group companies. The aim of the undertaken activities is to increase the value of PKN ORLEN and the ORLEN Group, strengthen the position on home markets, and product and geographical expansion. To ensure efficient management, PKN ORLEN has implemented segment management principles aimed at achieving the common strategic goals of the ORLEN Group set by PKN ORLEN as the Group's
 Introduction of the PKN ORLEN Code of Ethics ORLEN Code of Ethics 	activities implemented by the entity in the	 Natural environment area Activities related to quality assurance, limiting the impact on the environment, introducing a procedure for monitoring the company's impact on the environment, compliance with occupational health and safety and information security. Activities aimed at improving the company's energy performance PKN ORLEN food safety policy Implementation of a system for monitoring and reporting carbon dioxide emissions Waste management procedure Integrated permits for installations 	 Activities related to quality assurance, limiting the impact on the environment, introducing a procedure for monitoring the company's impact on the environment, compliance with occupational health and safety and information security. Activities aimed at improving the company's energy performance PKN ORLEN food safety policy Implementation of a system for monitoring and reporting carbon dioxide emissions Waste management procedure Integrated permits for installations Employee area Introduction of the PKN

2021	2022
 Developing a policy for managing the potential of ORLEN Group employees, maintaining continuity and efficiency of business processes by preventing competence gaps and securing knowledge transfer Policy defining the working conditions and rules of disabled people Well-being policy Remuneration policy for members of the management and supervisory boards of ORLEN Group companies Expert politics 	 Developing a policy for managing the potential of ORLEN Group employees, maintaining continuity and efficiency of business processes by preventing competence gaps and securing knowledge transfer Policy defining the working conditions and rules of disabled people Well-being policy Remuneration policy for members of the management and supervisory boards of ORLEN Group companies Expert politics
	- Expert politics
 Social area Introduction of a code of ethics regarding the company's relations with the external environment, including customers, shareholders, local community, business partners and competitors CSR strategy – sets directions for activities in the field of social responsibility PKN ORLEN's rules of conduct in relations with local communities Purchasing Policy of the ORLEN Capital Group - a document defining the mission, vision and goal of the purchasing policy 	 Social area ORLEN Group's CSR strategy until 2022 – sets the directions of activities in the field of social responsibility PKN ORLEN's rules of conduct in relations with local communities Purchasing Policy of the ORLEN Capital Group - a document defining the mission, vision and goal of the purchasing policy
Area of ethics and anti-corruption	Area of ethics and anti-corruption
 Introduction of a document describing the standards of ethical conduct of employees Enterprise Risk Management Policy and Procedure 	 Code of ethics Enterprise Risk Management Policy and Procedure Rules for conducting inspections and verification
 Rules for conducting inspections and verification proceedings Rules and instructions for 	 proceedings Rules and instructions for counteracting money laundering and terrorism financing
 counteracting money laundering and terrorism financing Anti-corruption policy in the ORLEN Capital Group 	 Anti-corruption policy in the ORLEN Capital Group Policy for detecting and managing Conflicts of Interest

-Regulations related to environmental protection (including new or more stringent requirements)-Convorte regulations regard environmental issues-Pollution of the soil and water environment-The effectiveness of internal corporate regulations regard environmental issues-Management of CO2 and other gas emission allowances-Monitoring and reporting of companies' environmental impact-Management of CO2 and other gas emission allowances-Companies' perceptions of t environmental impact-Social risks-Corporate social responsibility Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibility Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Availability of employees and subcontractors-Allocation and development of human resources-Accidents at work and other-		2021	2022
-Climate change-Regulations related to environmental protection)-New trends (market/society expectations regarding investments in environmental protection)-Regulations related to environmental protection (including new or more stringent requirements)-Regulations related to environmental protection (including new or more stringent requirements)-New trends (market/society environmental protection)-Regulations related to environmental gas emission allowances-Nonitoring and reporting of companies' environmental impact-Management of CO2 and other gas emission allowances-Monitoring and reporting of companies' environmental impact-Social risks-Companies' environmental impact-Social risks-Companies' perceptions of t environmental impact-Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibili Coutsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor or concluding outsourcing agreements-Availability of employees and subcontractors-Availability of employees an subcontractors-Allocation and development of human resources-Allocation and development of human resources		Environmental risks	Environmental sister
Identification of significant risks related to the entivities-Management of CO2 and other gas emission allowances – Impact on the environment – Social risks-Companies' environmental impactIdentification of significant risks related to the entivy's ESG activities-Corporate social responsibility – Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibility – Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibility – Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibili – – Corporate social responsibility – Poutsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Availability of employees and subcontractors-Allocation and development of human resources – Accidents at work and other-Allocation and development human resources		 New trends (market/society expectations regarding investments in environmental protection) Regulations related to environmental protection (including new or more stringent requirements) Pollution of the soil and water 	 Regulations related to environmental protection (including new or more stringent requirements) Pollution of the soil and water environment The effectiveness of internal corporate regulations regarding environmental issues
Social risksSocial risks-Corporate social responsibility-Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Corporate social responsibility -Identification of significant risks related to the entity's ESG activities-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing 		 Management of CO₂ and other gas emission allowances Impact on the environment 	companies' environmental impact - Companies' perceptions of their
Identification of significant risks related to the entity's ESG activities-Reputation, brand and marketing management – using the brand in association with unfavorable, controversial activities-Reputation, brand and marketing management – using 		8 8	Social risks
Identification of significant risks related to the entity's ESG activitiesmarketing management – using the brand in association with unfavorable, controversial activitiesmarketing management – using the brand in association with unfavorable, controversial activities-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements-Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreementsEmployee risks Availability of employees and subcontractors-Availability of employees and subcontractors-Allocation and development of human resources-Allocation and development of human resources-Allocation and other-Accidents at work and other-Accidents at work and other-Accidents at work and other			
entity's ESG activities - Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements - Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements - Outsourcing and subcontractor risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing agreements Employee risks - Availability of employees and subcontractors - Availability of employees and subcontractors - Allocation and development of human resources - Allocation and development of human resources - - Accidents at work and other - Accidents at work and other -	significant risks	marketing management – using the brand in association with unfavorable, controversial	marketing management – using the brand in association with unfavorable, controversial
Employee risks Employee risks – Availability of employees and subcontractors – Availability of employees and subcontractors – Allocation and development of human resources – Allocation and development human resources – Accidents at work and other – Accidents at work and other		risk - limitation of the ORLEN Group's control resulting from the activities of subcontractors or concluding outsourcing	8 8
subcontractors subcontractors - Allocation and development of human resources - - Accidents at work and other -	-	Employee risks	Employee risks
 Allocation and development of human resources Accidents at work and other Accidents at work and other 			 Availability of employees and subcontractors
		human resources	
hazardshazards-Actions of employees and-Actions of employees and-		hazards	hazards
subcontractors subcontractors		1 7	
Governance risks Governance risks	1	Governance risks	Governance risks
 Embezzlement and other abuses Embezzlement and other abuses 			
		- Employee actions leading to	- Employee actions leading to
 Abuse of customers and employees Abuse of customers and employees Abuse of customers and employees 		 Abuse of customers and 	 Abuse of customers and

Source: own study based on statements about non-financial information of PKN Orlen for 2021-2022

	2021	2022
Description of the business model	The Bank's business model is based on customer segmentation separating the following areas: Retail Banking, Private Banking, Small and Medium Enterprise Banking, Corporate and Investment Banking Natural environment area	The Bank's business model is based on customer segmentation separating the following areas: Retail Banking and Private Banking, Corporate Banking, Corporate and Investment Banking Natural environment area
Description of activities implemented by the entity in the field of ESG	 Policy on optimizing energy consumption Employee area Gender equality and diversity policy Policy for selecting candidates for the position of Management Board member and key function and assessing the suitability of proposed and appointed members of the Management Board, Supervisory Board and persons performing key functions in Bank PKO S.A. Anti-mobbing policy Policy of training and improving professional qualifications Remuneration policy Social area Compliance with the principles of the Polish Bank Association and the Canon of Good Financial Market Practices adopted by the Polish Financial Supervision Authority Responsible marketing Regulations on managing conflicts of interest at Bank Pekao S.A. Rules for granting donations and sponsorship by Bank Polska Kasa Opieki S.A 	 Policy on optimizing energy consumption Employee area Gender equality and diversity policy Policy for selecting candidates for the position of Management Board member and key function and assessing the suitability of proposed and appointed members of the Management Board, Supervisory Board and persons performing key functions in Bank PKO S.A. Anti-mobbing policy Policy of training and improving professional qualifications Remuneration policy Social area Compliance with the principles of the Code of Banking Ethics of the Polish Bank Association and the Canon of Good Financial Market Practices adopted by the Polish Financial Supervision Authority Social and sponsoring policy Charity policy Regulations on managing conflicts of interest at Bank Pekao S.A. Rules for granting donations and sponsorship by Bank Polska Kasa Opieki S.A.

Table 4: Information content of the statement on non-financial information of Bank Pekao for 2021-2022

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	2021	2022
	 Area of ethics and anti-corruption Anti-corruption policy in the Bank Pekao S.A. Group. Violations Reporting Policy Purchasing policy 	 Area of ethics and anti- corruption Anti-corruption policy in the Bank Pekao S.A. Group. Violations Reporting Policy Purchasing policy
Identification of significant risks related to the entity's ESG activities	 Reputation risk Credit risk Operational risk Risk of non-compliance Market risk 	 Reputation risk Credit risk Operational risk Risk of non-compliance Market risk

Source: own study based on statements on non-financial information of PKO S.A. for 2021-2022

Table 5: Information content of the statement on non-financial information of Bank Getin Noble Bank S.A. for 2021-2022

	2021	2022
Description of the business model	Getin Noble Bank S.A. offer includes products in the field of daily banking, financing, saving and investing, as well as other banking services. One of the elements of the business model of Getin Noble Bank S.A. is to focus on the quality of service in relationships with customers. The model defined in this way is based on a detailed analysis of customers' financial needs and tailoring the offer to their preferences	Getin Noble Bank S.A. offer includes products in the field of daily banking, financing, saving and investing, as well as other banking services. One of the elements of the business model of Getin Noble Bank S.A. is to focus on the quality of service in relationships with customers. The model defined in this way is based on a detailed analysis of customers' financial needs and tailoring the offer to their preferences
Description of activities	 Natural environment area Implementation of activities aimed at: Improving energy efficiency Elimination of plastic Reducing water consumption Modernization of the car fleet 	 Natural environment area Implementation of activities aimed at: Improving energy efficiency Elimination of plastic Reducing water consumption Modernization of the car fleet
implemented by the entity in the field of ESG	 Employee area Code of ethics Remuneration policy for Members of the Management Board and Members of the Supervisory Board of Getin Noble Bank S.A Policy for assessing the suitability of persons 	 Employee area Code of ethics Remuneration policy for Members of the Management Board and Members of the Supervisory Board of Getin Noble Bank S.A Policy for assessing the suitability of persons

	2021	2022
	performing key functions in Getin Noble Bank S.A.	 performing key functions in Getin Noble Bank S.A. Anti-mobbing procedure Principles of professional development of employees at Getin Noble Bank S.A.
	Social area - Code of Good Practices of Companies of the Getin Noble Bank S.A. Capital Group. (specifies, among others, the principles common to the Group for making decisions on granting donations)	 Social area Code of Good Practices of Companies of the Getin Noble Bank S.A. Capital Group. (specifies, among others, the principles common to the Group for making decisions on granting donations) Area of ethics and anti- corruption
	 Area of ethics and anti- corruption Policy for managing violations of ethical standards and conflicts of interest in the Getin Noble Bank S.A. Capital Group. Getin Noble Bank S.A. Code of Ethics Whistleblowing procedure Policy on accepting and transferring benefits at Getin Noble Bank S.A. Policy for managing conflicts of interest at the Bank Policy for managing conflicts of interest in the area of bancassurance Conflict and Ethics Policy and Gift Policy Policy of accepting and giving gifts at Getin Noble 	 Policy for managing violations of ethical standards and conflicts of interest in the Getin Noble Bank S.A. Capital Group. Getin Noble Bank S.A. Code of Ethics Whistleblowing procedure Policy on accepting and transferring benefits at Getin Noble Bank S.A. Policy for managing conflicts of interest at the Bank Policy for managing conflicts of interest in the area of bancassurance Policy for managing conflicts of interest of persons performing management functions at Getin Noble Bank S.A Conflict and Ethics Policy and Gift Policy Policy of accepting and giving gifts at Getin Noble
Identification of significant risks related to the entity's ESG activities	 Operational risk (may have a significant negative impact on social and employee issues) Risk of non-compliance (may have a significant negative impact on social, labor, 	 Operational risk (may have a significant negative impact on social, employee and anti-corruption issues) Risk of non-compliance (may have a significant negative impact on social, labor,

	2021	2022
	human rights, anti-corruption and environmental issues). – Credit risk (may have a	human rights, anti-corruption, environmental issues)Anti-corruption and
	significant negative impact on social and anti-corruption issues) – Risk of loss of liquidity	 environmental Credit risk (may have a significant negative impact on social issues)
	 Market risk Risk related to derivative financial instruments 	 Risk of loss of liquidity (may have a significant negative impact on social and employee issues) Market risk (may have a
		 significant negative impact on social and labor issues) Risk related to derivative financial instruments of compliance (may have a significant negative impact on social and labor issues)

Source: own study based on statements on non-financial information of Bank Getin Noble Bank S.A. for 2021-2022

3 Results and conclusion

The study shows that all enterprises took actions aimed at transformation towards sustainable development. When comparing the scope and nature of activities in the analyzed companies, it should be noted that activities were implemented in all areas, i.e., environmental, social and governance. The companies have analyzed their activities in terms of consistency with the concept of sustainable development and identified the risks to which they are subject. They monitor these risks and work on ways to reduce them. The list of risks and activities in the environmental aspect is broader in the case of companies operating in the chemical industry and this should be positively assessed. Comparing the activities undertaken by individual enterprises in the consecutive two years, i.e., 2021 and 2022, it can be seen that they do not change significantly, and in some cases they are identical. This may indicate consistent implementation of the selected strategy or confirm the thesis that published statements on non-financial information are a set of company declarations in selected areas, which are not followed by real actions. The expanded obligation to report in the field of ESG means that, on the one hand, enterprises are stimulated to take actions to ensure sustainable development of the company, but on the other hand, they are exposed to the temptation of greenwashing. According to the

RepRisk report, greenwashing has become increasingly common in recent years. For banks and financial service providers, subject to disclosure obligations under EU directives (NonFinancial Reporting Directive, Sustainable Finance Disclosure Regulation, EU Taxonomy), there has been a 70% surge in the quantity of greenwashing cases over the twelve months (RepRisk, 2023). This is a phenomenon that cannot be ignored, and which requires a healthy level of skepticism when analyzing individual companies' ESG disclosures. Especially because although companies are obliged by legal regulations to create non-financial statements, it has not been specified who should verify the correctness of their preparation and who is responsible for any errors they contain. Currently, an auditor who examines a company's financial statements notes whether they have been prepared but does not verify their content. The provisions constructed in this way, in the author's opinion, not only do not limit the phenomenon of greenwashing, but may even strengthen it.

Currently, non-financial information increasingly affects the financial results of enterprises, e.g., loss of reputation, customer or investor trust translates into lower sales revenues and more difficult and more costly obtaining financing (Pimonenko et al., 2020). For this reason, the question whether the implementation of the concept of sustainable development is a necessary condition for enterprises that want to achieve market success becomes extremely relevant. We can go one step further and ask the research question whether sustainable development of an enterprise is a source of competitive advantage for modern enterprises. The questions posed in this way determine the future direction of research.

The conducted research has certain limitations. The largest of them is the small size of the research sample. In future studies, it is planned to expand the research sample both in terms of the number of companies representing a given industry and the number of industries examined.

References

- Anbarasan, P., & Sushil. (2018). Stakeholder engagement in sustainable enterprise: Evolving a conceptual framework, and a case study of ITC. *Business Strategy and the Environment*, 27(3), 282-299.
- Bello-Pintado, A., Machuca, J. A., & Danese, P. (2023). Stakeholder pressures and sustainability practices in manufacturing: Consideration of the economic development context. Business Strategy and the Environment, 32(7), 4084-4102.

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- Cardoni, A., Kiseleva, E., & Lombardi, R. (2020). A sustainable governance model to prevent corporate corruption: Integrating anticorruption practices, corporate strategy and business processes. Business Strategy and the Environment, 29(3), 1173-1185.
- Cardoni, A., Kiseleva, E., & Lombardi, R. (2020). A sustainable governance model to prevent corporate corruption: Integrating anticorruption practices, corporate strategy and business processes. Business Strategy and the Environment, 29(3), 1173-1185.
- Gao, J. (2008). The evolution of business sustainability: Historical trajectory and structural relationships (Doctoral dissertation, Faculty of Graduate Studies, University of Western Ontario).
- Geissdoerfer, M., Morioka, S. N., de Carvalho, M. M., & Evans, S. (2018). Business models and supply chains for the circular economy. Journal of cleaner production, 190, 712-721.
- Hariram, N. P., Mekha, K. B., Suganthan, V., & Sudhakar, K. (2023). Sustainalism: An integrated socio-economic-environmental model to address sustainable development and sustainability. Sustainability, 15(13), 10682.
- Jabłoński A., 2013, Modele zrównoważonego biznesu w budowie długoterminowej wartości przedsiębiorstw z uwzględnieniem ich społecznej odpowiedzialności, DIFIN, Warszawa
- Kajtazi, K., Rexhepi, G., Sharif, A., & Ozturk, I. (2023). Business model innovation and its impact on corporate sustainability. Journal of Business Research, 166, 114082.
- Law, V. T. (2019). Intergenerational and sustainable development. Encyclopedia of Sustainability in Higher Education, 1006-1013.
- Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. Cogent social sciences, 5(1), 1653531.
- Mignon, I., & Bankel, A. (2023). Sustainable business models and innovation strategies to realize them: A review of 87 empirical cases. Business Strategy and the Environment, 32(4), 1357-1372
- Mohieldin, M. (2017). The sustainable development goals and private sector opportunities. World Bank Group.
- Mondal, S., Singh, S., & Gupta, H. (2022). A meta-analysis of green and sustainable business models: A comprehensive approach. Journal of Cleaner Production, 371, 133623.
- Moratis, L. (2017). Challenging business as usual–conceiving and creating sustainability value through hybrid business models.
- Ozili, P. K. (2022). Sustainability and sustainable development research around the world. Managing Global Transitions.
- Pabian, A. (2017). Zrównoważone przedsiębiorstwo jako rezultat zmian organizacyjnych. Przegląd Organizacji, (8), 11-16.
- Pfajfar, G., Shoham, A., Małecka, A., & Zalaznik, M. (2022). Value of corporate social responsibility for multiple stakeholders and social impact–Relationship marketing perspective. Journal of business research, 143, 46-61.
- Pimonenko, T., Bilan, Y., Horák, J., Starchenko, L., & Gajda, W. (2020). Green brand of companies and greenwashing under sustainable development goals. Sustainability, 12(4), 1679.
- Potocan, V., & Mulej, M. (2007). Ethics of a Sustainable Enterprise—and the Need for it. Systemic practice and action research, 20(2), 127-140.
- RepRisk data shows increase in greenwashing with one in three greenwashing public companies also linked to social washing, https://www.reprisk.com/news-research/news-and-mediacoverage/reprisk-data-shows-increase-in-greenwashing-with-one-in-three-greenwashingpublic-companies-also-linked-to-social-washing, access: 28.04.2024
- Ruggerio, C. A. (2021). Sustainability and sustainable development: A review of principles and definitions. Science of the Total Environment, 786, 147481.
- Runaya, How true sustainability can benefit all stakeholders, https://www.linkedin.com/pulse/how-true-sustainability-can-benefit-all-stakeholders-runaya, access: 27.04.2024
- Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability: literature review and research options. European management journal, 23(1), 27-36.

- Santos, C., Coelho, A., & Marques, A. (2023). A systematic literature review on greenwashing and its relationship to stakeholders: state of art and future research agenda. Management Review Quarterly, 1-25
- Sargani, G. R., Jiang, Y., Zhou, D., Chandio, A. A., Hussain, M., & Khan, N. (2021). Endorsing sustainable enterprises among promising entrepreneurs: A comparative study of factor-driven economy and efficiency-driven economy. Frontiers in psychology, 12, 735127.
- Siano, A., Vollero, A., Conte, F., & Amabile, S. (2017). "More than words": Expanding the taxonomy of greenwashing after the Volkswagen scandal. Journal of Business Research, 71, 27-37
- Van Zanten, J. A., & van Tulder, R. (2021). Improving companies' impacts on sustainable development: A nexus approach to the SDGS. Business Strategy and the Environment, 30(8), 3703-3720.
- Vermeulen, W. J., & Witjes, S. (2016). On addressing the dual and embedded nature of business and the route towards corporate sustainability. Journal of Cleaner Production, 112, 2822-2832.
- Whelan T and Ehiemere C., Engaging stakeholders can help deliver sustainability strategy, create value for the company, https://www.greenbiz.com/article/engaging-stakeholders-can-help-deliver-sustainability-strategy-create-value-company, access: 27.04.2024
- Zu, L. (2013). Sustainable Enterprise Development. In: Idowu, S.O., Capaldi, N., Zu, L., Gupta, A.D. (eds) Encyclopedia of Corporate Social Responsibility. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_253