Preprints.org

Article

Not peer-reviewed version

# ESG Reporting of Commercial Banks in Poland the Aspect of the New Requirements of the Directive on Corporate Reporting in the Field of Sustainable Development (CSRD)

Alina Matuszak-Flejszman , Sebastian Łukaszewski , Joanna Katarzyna Banach *

Posted Date: 6 September 2024

doi: 10.20944/preprints202409.0486.v1

Keywords: commercial banks; ESG; CSRD directive; non-financial reporting; banks' challenges; green financing

Preprints.org is a free multidiscipline platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

*Article*

# ESG Reporting of Commercial Banks in Poland in the Aspect of the New Requirements of the Directive on Corporate Reporting in the Field of Sustainable Development (CSRD)

**Alina Matuszak-Flejszman [1], Sebastian Łukaszewski [2] and Joanna Katarzyna Banach [3,*]**

[1] Poznań University of Economics and Business, Poznań, Poland
[2] University of Applied Sciences in Konin, Poland
[3] University of Warmia and Mazury in Olsztyn, Olsztyn, Poland
* Correspondence: katarzyna.banach@uwm.edu.pl

**Abstract:** For several years, commercial banks in Poland have been reporting activities related to the impact on the environment, society, and corporate governance (ESG). However, only new guidelines, mandatory for many entities, including banks, will allow for comparing these reports, which will be of great importance mainly for investors. The forms of these reports were and still are different, difficult to compare in individual years, and difficult to compare between banks. The article aims to present the banks' preparation for the new reporting rules based on the latest ESG reports. The research was conducted in 4 groups of commercial banks operating in Poland, which are the largest companies listed in the WIG Banks sub-index of the Warsaw Stock Exchange. Gaps in the preparation of these banks for non-financial reporting were identified. The non-financial reports of the banks studied have significant information potential that can be used by various stakeholder groups, including investors, customers, employees, regulators, and local communities. However, the comparability of ESG reports is one of the key challenges faced by both reporting banks and users of these reports. The research results can be used both in scientific works and by bank representatives to improve non-financial reports.

**Keywords:** commercial banks; ESG; CSRD directive; non-financial reporting; banks' challenges; green financing

## 1. Introduction

Although banks have never been perceived as particularly harmful or dangerous to the environment, environmental, social, and governance (ESG) activities have been reported by commercial banks for several years. The links between sustainability and banking activities date back to the 1990s [1] when banks began to increasingly include environmental requirements directly in their operational activities and indirectly through the products and services they offer [2]. However, before the financial crisis in 2008, banks were not widely involved in corporate social responsibility or in disclosing their sustainability performance. However, after the financial crisis, banks had to adjust product prices to new market challenges, reduce costs, and move away from low-margin products and unprofitable business segments. Some are also involved in socially responsible and sustainable activities and their promotion [3]. The extension of the scope of information disclosed and made available by modern financial institutions is a necessity resulting from both the post-crisis situation and the disturbances in trust and reputation, but also from the change in the type and scope of the impact that market entities have on stakeholders and the broadly understood environment. The relatively high percentage of banks disclosing non-financial information may result from the increasing pressure for transparency, especially after the financial crisis in 2007-2009. Banks tend to disclose more detailed information concerning the social aspect than other aspects [4].

For several years, commercial banks in Poland have reported activities related to the impact on the environment, society, and corporate governance (ESG). ESG refers to how corporations and

© 2024 by the author(s). Distributed under a Creative Commons CC BY license.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



investors integrate environmental, social, and governance issues into their business, meaning that ESG explicitly includes problems related to an organization's governance [5]. Reporting this data is an element of investor decisions that will become even more important in light of significant legislative changes in 2024. Unfortunately, the scope of this information was not always adequately reported.

Some studies focus on the importance of disclosing sustainability reporting in its three dimensions: environmental, social, and corporate governance (ESG). Sobhani et al. [6] found that the disclosure of the social dimension is higher than the economic and environmental dimensions. All listed banks widely neglect environmental disclosure. A similar analysis was conducted by Nobanee and Ellili [7]. They measured corporate sustainability disclosure using annual data for banks in the UAE financial markets [8–11]. The results show that the overall sustainability disclosure based on sustainability reporting for banks in the UAE is low. In particular, the results reveal insignificant differences between Islamic and conventional banks' overall sustainability, economic, and environmental disclosures.

In contrast, social disclosures are significantly higher in conventional banks' annual reports [8]. The practices of Polish banks in disclosing information on their sustainability performance were also analyzed [12,13]. It highlighted the relatively low alignment of the materiality issue with the Sustainable Development Goals regarding environmental matters and several managerial implications regarding strategic planning and communication on sustainability [14].

Some commercial banks operating in Poland published integrated reports for 2016 and previously presented selected social activities in corporate social responsibility (CSR) reports. Bank management has increasingly included ESG issues in their policies in recent years. Environmental pressure, investor expectations, and growing social awareness systematically expand this trend. Many banks consciously implement and report these activities. Still, only new guidelines, mandatory for many entities, including banks, will allow for comparing these reports, which will be of great importance mainly for investors. However, the forms of these reports were and still are different, difficult to compare in individual years, and challenging to compare between banks. A significant evolution can be observed in non-financial reporting in recent years.

The EU Taxonomy and the Sustainable Finance Disclosure Regulation (SFDR) introduced a significant change in non-financial reporting. In turn, the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS) have contributed decisively to streamlining the scope of reporting. These changes also result in a systematic increase in reporting entities, and banks must adapt to the new reporting rules as early as 2024.

To date, studies have been on the level of sustainability reporting and the performance of banks and financial services. It has been found that ESG reporting by banks has a significant positive impact on performance and economic benefits for shareholders [15,16]. However, the relationship between ESG disclosures in banks varies individually. In contrast to most published studies, the authors found that social performance plays a negative role in determining the profitability and value of the bank. However, these studies focus on countries in the Middle East and North Africa (MENA) region and Turkey [15,17]. The researchers also examined the relationship between the level of sustainability reporting and the performance of banks and financial services (operational, financial, and market) in seven different regions (Asia, Europe, MENA, Africa, North and South America). They also analyzed bank-specific, macroeconomic, and corporate governance effects.

The research results indicated a negative relationship between ESG on the one hand and operational results (ROA), financial results (ROE) and market results (TQ) on the other hand [17]. A study was also conducted on the impact of ESG reporting on the financial stability of banks based on the content analysis method of non-financial reports in Ghana [18]. Based on the analysis of banks in Southeast Asia, it was tried to investigate whether sustainability practices contribute to the financial performance of banks [19]. Evidence showed that environmental reporting (ERI) had an inverse and significant effect on banks' NIM and ROA, while corporate governance reporting had a positive but insignificant relationship with NIM and ROA. Studies were also conducted to analyze the relationship between sustainability and financial performance in the geographical context of

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



Indonesian banking firms [19]. In Bangladesh, researchers investigated whether sustainability reporting leads to better performance and creates value for investors in emerging markets [20]. This study's results show a significant corporate social responsibility (CSR) and a negative relationship between environmental, social, and governance (ESG) performance and the performance of Bangladeshi banks. Unfortunately, this study also shows that there is no relationship between environmental disclosure, corporate governance (ECG), and bank performance (ROE) [20]. There have been many studies on CSR reporting and implementing sustainable development goals in Indonesian banks [20–26]. Studies have also been conducted on the relationship between CSR disclosures and financial results, using the example of banks [27] and the implementation of CSR activities in the banking sector [28,29]. Studies also show the relationship between environmental performance and bank efficiency [30–32]. Research was also conducted on the conditions of non-financial reporting resulting from the regulations and recognition of the GRI standard as an acceptable form of reporting [33–35]. Based on the research, the information potential of non-financial reports and their comparability were determined [36].

However, the literature needs more information on how the banks report information on sustainable development, particularly in Environment, Society, and Government, and how the reported non-financial information changes over time. Moreover, research has yet to be conducted on whether the data of the sustainability reports are comparable and how they relate to the EU requirements in this area. The lack of research in this area constitutes a research gap.

The purpose of this article is to present the current reporting rules of selected groups of commercial banks operating in Poland, which are the most prominent companies listed in the WIG Banks subindex of the Warsaw Stock Exchange, which include both banks with State Treasury participation and private banks required to report non-financial information. In addition, the article aims to present these groups of banks' preparation for the new non-financial reporting requirements based on the latest sustainable development reports and to indicate whether and in which areas related to the environment, society and corporate governance individual banks can be compared.

The following research questions were asked:

**RQ1:** What principles are followed by the management of banks operating in Poland when issuing non-financial reports?

**RQ2:** To what extent are the banks surveyed prepared for the requirements contained in the new EU directives?

**RQ3:** What non-financial information is not reported by banks operating in Poland?

**RQ4:** What is the information potential of non-financial reports, and are they comparable? Is it possible to compare banks based on the information contained in these reports?

The article provides recommendations for improving the content of non-financial reports by EU directives. The research results can be used in academic papers and by bank representatives to improve non-financial reports.

The results of this study may be of interest to a wide range of stakeholders. Investors could benefit from this study by making more accurate investment decisions based on information that accurately reflects banks' future value-creation capabilities. Customers could benefit from better knowledge of banks' ethical behaviour regarding disclosure to make decisions about their fund allocation. Policymakers and regulatory stakeholders could better understand whether integrated reports published by banks are a credible way of communicating ESG performance.

## 2. Research Methodology

The nature of the study is descriptive and is based solely on information from secondary data sources of banking companies. Therefore, the case study method is applied to selected banks and a specific period. From the perspective of the research process, it is a qualitative method. The study was based on data available in non-financial reports for 2023 and earlier.

A case study is an empirical study investigating a phenomenon in a real-world context [37]. This method is derived from grounded theory, which aims to construct new theoretical concepts to explain emerging phenomena. In qualitative research, grounded theory is gaining importance as an approach

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



to developing theories from data [38]. According to Rashid et al. [39], using different data sources, a case study helps investigate a phenomenon in a given topic area. Case studies can be divided according to their content and ultimate purpose (exploratory, explanatory, descriptive, or by a certain number of cases) [40]. A common trend in all types of case studies is an attempt to explain why a particular decision or several decisions were made, how these decisions were implemented, and the effect of implementing these decisions [37].

This study took the following steps: the research topic was defined, and the literature on sustainable development regulations in the banking sector was reviewed. Then, key banks operating in Poland were selected, data were collected, analysis was performed, and conclusions were formulated (Figure 1).

**Figure 1.** Research process flowchart**.**

*Source: Own Work*

The study aimed to analyze the actions that banks have implemented and plan to implement in environmental, social, and corporate governance. By analyzing these reports, the study provides insight into banks' specific actions. The study also conducted a preliminary analysis of data contained in non-financial reports, comparing them with CSRD requirements. The aim was to assess banks' readiness for the new reporting standards.

## 3. The situation of the Polish Banking Sector in 2023 and Sustainable Finance Reporting

The banking sector in Poland plays a dominant role in the financial system, accounting for about 70% of the financial sector's assets [41]. Several banks in Poland have State Treasury shares (31% share in assets, excluding BGK's 16.5%), although most are privately owned (foreign capital accounts for 43.6% and Polish private capital for 8.8%) [42].

Among foreign investors, Spanish, German, Dutch, and French capital has played the most critical role for years. The Polish banking sector was the largest among the ten countries that joined the EU (EU 10) in 2004. At the end of 2022, it consisted of 30 commercial banks, 34 branches of credit institutions, and 496 cooperative banks. The structure of the banking sector remained relatively the same in the last year. However, the forced restructuring of Getin Noble Bank and the transfer of part of its operations to a joint bank of BFG and the Commercial Bank Protection System (VeloBank) is worth mentioning. The banking sector's assets at the end of 2023 amounted to PLN 2,994 billion and increased by PLN 278.9 billion during the year [43].

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



The stability of the banking system, which accounts for two-thirds of the Polish financial system's assets, is crucial to the stability of the financial system. Banks are essential for financing the economy and settling payments. The vast majority of institutions achieved positive economic results.

The banking sector's net financial result in 2022 was PLN 12,127.7 million, PLN 6,150.3 million higher than in 2021.

At the end of 2022, the banking sector's net result amounted to PLN 12,127.7 million, PLN 6,150.3 million higher than in the same period in 2021.

Another year, 2022, the banking network was reduced. The main reasons for this phenomenon are the development of electronic and mobile distribution channels, the pursuit of improving profitability through cost reduction and changing customer habits after the lockdowns accompanying the subsequent waves of the pandemic.

Banking sector assets increased to PLN 160.5 billion, an increase of 6.2% compared to 2021. The European Banking Authority (EBA) stress tests showed that Polish banks would resist a theoretical macroeconomic shock.

The banking sector's capital situation remained stable in 2022. The value of the sector's funds at the end of 2022 was PLN 221.5 billion (+1.0% y/y).

The State Treasury owns several banks, but the sector is privately owned (around 52.4%, including 43.6% of foreign capital). According to the Polish Financial Supervision Authority (UKNF), 30 commercial banks were operating in the country in 2022 - down from 50 in the past five years, which indicates intensive consolidation in the sector. There are many cooperative banks (496), but they have a relatively small market share [42]. The research will, therefore, focus on the most prominent companies listed in the WIG Banks sub-index of the Warsaw Stock Exchange, which includes both banks with State Treasury participation and private banks that are required to report non-financial information. These banks are among the top six banks in Poland regarding the balance sheet total and among the top seven banks regarding the number of customers. The total value of the balance sheet total of all the banks examined in this publication is PLN 1.053 trillion, which is approximately 35% of the balance sheet total of the entire financial sector in Poland [44].

Many requirements have emerged in non-financial reporting in Society, Environment, and Corporate Governance. These include NFRD [45], CSRD [46], ESRS [47], EU Taxonomy [48], and SFDR [49].

The NFRD Directive 2014 defined the direction of non-financial reporting, which also covered banks. In 2019, it was supplemented by the SFRD Regulation concerning the disclosure of non-financial information on the scope of sustainable investments. However, the CSRD Directive, dictated by the achievement of energy neutrality by 2050, is essential for sustainable financing. This directive regulates the commencement and scope of reporting on ESG activities. By defining the standards of this reporting and introducing the ESRS in 2023, it will be possible to compare results, and their mandatory audit will confirm the credibility of the published data. Considering that sustainable development reports will become part of the business report, this will mean an increase in the responsibility of the company's bodies for this reporting area. The transparency of financial and non-financial information in the ESG area will allow investors to analyze better the situation of banks listed on the stock exchange and make comparisons between individual banks. Banks that perform better in the ESG area are expected to gain both in value creation and stock valuation. The shares of these banks may be more willingly purchased by existing and new investors [50].

The new regulations on non-financial reporting are very demanding. They will be a challenge for every company, regardless of the standards the company previously used to prepare its non-financial report and whether it was audited. To ensure an efficient information system for reporting according to the ESRS, depending on its current state, companies will have to review and update or develop from scratch tools for collecting and processing non-financial data [51].

One of the main reasons for the trend in ESG legislation is that EU companies operate in a complex environment and rely on global value chains, particularly the larger ones [52].

Given the large number of their suppliers in the Union and third countries and the overall complexity of value chains, EU companies, including large companies, may need help identifying

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



and mitigating human rights or environmental risks in their value chains. Identifying such adverse impacts in value chains will become easier if more companies exercise due diligence, translating into more available data on adverse impacts on human rights and the environment. This justifies the proposal for a Directive on business due diligence for sustainable development and amending Directive 2019/1937 [53].

The management of most banks took the activities related to the implementation of these regulations seriously after their publication, which was examined for this publication based on the example of the analysis of the annual reports of four Polish commercial banks.

## 4. Scope and Changes of ESG Reporting in Selected Commercial Banks in Poland

### *4.1. ESG Reporting at BNP Paribas Bank Polska*

BNP Paribas Bank Polska has published CSR Reports since 2011 and integrated annual reports online since 2019 [54]. They contain essential information on the bank's strategy, management, results, and prospects. The Management Board's report on the capital group's activities in 2023 [55] presents a comprehensive picture of the activities, integrating financial and business results with aspects related to environmental, social, and governance (ESG) impact. The report refers to national and international guidelines relevant to business in the field of reporting non-financial information: Global Reporting Initiative (GRI) – international non-financial reporting standard GRI Standards 2021, Integrated Reporting Framework guidelines of the IFRS Foundation, Task Force on Climate-related Financial Disclosures (TCFD) Recommendations in the field of climate risk reporting.

In this report, previously reported information and indicators have been pre-marked following their possible assignment to the Sustainable Development Reporting Standards (ESRS).

As a result of changes in the approach to calculating indicators and maintaining comparability between reporting periods, information and reporting data on greenhouse gas emissions in the Bank and the Group and the classification of employees in 2022 required corrections; as a result of the correction, the value of total greenhouse gas emissions for the previous reporting period was slightly increased (+1%) and as a result of the change, the calculations for 2022 were revised for indicators regarding diversity and remuneration, e.g. the classification of the number of employees as a result of the change in the presentation of the structure divided into Management Board, Top management (B1 + B2), Lower management and Other employees. Such corrections are also made in other banks examined to compare results with future ones.

The Report [55] contains information on the Bank's strategy, management, results, and prospects. It is presented considering the economic, social, and environmental context. In the process of determining the material reporting topics and the manner of their presentation in the report, the perspective of double materiality was taken into account, i.e. actual and potential ESG risks and opportunities that may affect the Bank's functioning and financial results, as well as the Bank's impact on sustainable development issues. By the GRI Standards guidelines, the process of determining the material reporting topics was carried out in three stages: identification, prioritization, and validation.

At the identification stage, critical issues regarding the Bank's economic, environmental, and social responsibility were identified. The opinions of the Bank's stakeholders, guidelines for the financial sector, and trends in the financial industry were also analyzed.

During the preparation for the reporting process, potentially significant sustainable development topics were analyzed according to GRI standards, and a benchmark of the most critical ESG issues in the reports and strategies of Polish and foreign banks was defined. To review the key issues, a survey was conducted among internal stakeholders (672 responses were obtained) and external stakeholders (39 participants).

The prioritization of issues for the report also took place during a dialogue session with external stakeholders. As a result of the completed materiality analysis process, important sustainable development topics were identified, such as offering products and services that respond to social and environmental challenges, reducing the negative impact of operational activities on the natural environment, reducing the emission of the credit portfolio, the Bank's strategic commitments and their implementation in the field of combating climate change, employee education and

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



development, a friendly workplace, responsible employment management, digitization of banking services and products, offering innovative banking services and products, simple and transparent communication, charitable and philanthropic activities, ethics in internal and external relations, respect for human rights in business, responsible sale of products and services and self-regulation in this area, monitoring and management of ESG risks.

A survey was conducted among the Bank's internal stakeholders to review key issues. The report issues were prioritized during a dialogue session with external stakeholders. BNP Paribas Bank Polska is well prepared to adapt ESG reporting to future rules. This is indicated by:

- previous experience in ESG reporting (reporting since 2011, and since 2019, they have been integrated with annual reports),
- the integrated report on the Capital Group's activities in 2023 integrates financial and business results with aspects of environmental, social, and governance (ESG) impact, presenting a comprehensive picture of the bank's activities,
- compliance with international standards, through which the Bank refers to national and international guidelines on non-financial reporting, such as GRI Standards 2021, the IFRS Foundation Integrated Reporting Framework, and TCFD recommendations on climate risk reporting,
- adaptation to new regulations by initially assigning reported information and indicators by the European Sustainability Reporting Standards (ESRS),
- correction for 2022 and verification of data to maintain comparability of data between reporting periods, which demonstrates the care for the accuracy and reliability of reporting,
- the process of identifying significant reporting topics (created by the Sustainability Council, consisting of 20 representatives of the Bank, and cooperating with it Sustainability Officers, consisting of 250 people selected in internal recruitment, who, in addition to their daily duties, have taken on the role of supporting the implementation of ESG initiatives in the Group) including the identification, prioritization, and validation of critical issues in the area of the bank's economic, environmental and social responsibility,
- surveys and dialogue sessions were conducted among internal and external stakeholders and dialogue sessions, which helped to prioritize significant topics for reporting,
- conducting an analysis of potentially significant sustainable development topics in line with GRI guidelines and benchmarking the most critical ESG issues in reports and strategies of other banks.

In summary, BNP Paribas Bank Polska demonstrates a high level of preparation for ESG reporting through an integrated approach, compliance with international standards, adaptation to future regulations, precise data corrections and stakeholder involvement in the reporting process.

### *4.2. ESG Reporting at ING Bank Śląski*

ING Bank Śląski published its first integrated report for 2016. Global standards prepared the current report: the international guidelines for reporting non-financial data Global Reporting Initiative – GRI Standards 2021 and the guidelines for integrated reporting International <IR> Framework in the version updated in 2021 [56]. The Bank also published the ESG Strategy for 2022-2024, in which it included its priorities, including striving for climate neutrality, creating a friendly, diverse and development-stimulating work environment, incorporating ESG into the organizational culture and processes, supporting clients in their environmental transformation, financial health and being entrepreneurial, building client awareness in the area of ESG, supporting innovation and local activities for the environment and climate, supporting local activities for the benefit of society, sharing knowledge and cooperation in the area of ESG.

It divided them into its activities, activities supporting its clients and society, specifying in each of them the elements of the environment, entrepreneurship, equal opportunities and ethics, and compliance with regulations [57].

The understanding of ESG issues is constantly deepening, including the approach to monitoring indicators and responding to regulatory requirements in this area. In 2024, the methodology for calculating indicators related to retaining employees after returning from parental leave (GRI 404-3)

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



was updated, as well as the pay gap indicators, which the bank reports according to two methodologies: GRI and EBA guidelines. Emission calculations were prepared following the Greenhouse Gas Protocol [58]. The calculations cover the bank and its subsidiaries. For Scope I and II emissions, 2019 was assumed as the base year. In addition to the above, it was decided to recalculate the previously reported greenhouse gas emission values and data on our economy for 2021-2022. The reduction of Scope II emissions in 2023 compared to the base year was 32.2%. This change is caused by lower emissions from purchased district heating, resulting in a reduced number and area of our locations over the years. This is mainly due to the reduced office space used, but the bank emphasizes that numerous actions that reduce energy consumption also have effects.

The report has been subject to independent external assurance (by KPMG Audyt sp. z o.o. sp.k., The assurance service report was published in the ESPI system as part of the annual report package) in terms of:

- compliance with GRI Standards of all presented GRI indicators,
- compliance with qualitative and quantitative disclosures resulting from Regulation 2021/2178 together with delegated acts (taxonomic disclosure) with the requirements of Regulation 2021/2178,
- compliance with qualitative and quantitative disclosures resulting from Regulation 2019/2088 and Delegated Regulation 2022/1288 to fundamental PAI indicators (SFDR disclosure) with the requirements of these regulations.

The Bank intends to include the most critical topics to its stakeholders in its annual report and reflect the impact on environmental, social, and governance issues. In this regard, a comprehensive materiality assessment process engaged its stakeholders.

Part of the work was carried out in cooperation with an independent consulting company. The Bank emphasizes that the conclusions from the conducted materiality study serve not only to fulfil the GRI requirements in this Management Report but are also a source of feedback on commitment to sustainable development and inspiration for planning further activities. The materiality study aimed to identify critical areas of impact on aspects of sustainable development and, based on them, to update the list of material topics. The scope of the analysed regions of impact was defined with the issues indicated in the ESRS standards (European Sustainability Reporting Standards) and extended to include issues resulting from last year's materiality analysis. The previous year's list of material topics remained the same. As a result of this year's materiality study, some issues were extended to include additional aspects, and some were combined.

Climate issues, including greenhouse gas emissions in all three areas and their reduction, sustainable finance, and environmental education are still essential topics in the environmental area.

This year, an additional aspect is the impact on the energy transformation of the bank's customers. In the social area, the issue of human rights has once again been included among the essential topics. The growing importance of respecting human rights is reflected in regulations and international guidelines. Working conditions, well-being, diversity, and remuneration policy at all levels of the organization and employee development remain essential topics for employees. Responsible sales and accessible banking are still significant in customers' activities. Last year's topic of financial education was expanded to include the economic health of customers as a broader dimension of the bank's influence. Responsibility in relations with suppliers remains an important topic. This year, commitment to the community and innovation have been included in one topic.

Corporate governance topics, including integrated business strategy, business ethics, anti-corruption, cybersecurity and data security, risk management, and ESG risks, resonate again.

ING Bank Śląski is taking action to meet future (by the CSRD Directive) requirements for ESG reporting. The bank applies international reporting standards, such as GRI Standards 2021 and the International Framework, demonstrating its advanced approach to transparent and comprehensive reporting of non-financial data. Additionally, the bank regularly updates the methodology for calculating ESG indicators by the latest GRI and EBA guidelines [59].

ING Bank Śląski's ESG reporting activities, including regular methodology updates, comprehensive materiality studies, and compliance with international standards and EU regulations, demonstrate the bank's preparedness to meet future ESG reporting requirements.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



*4.3. ESG Reporting at Santander Bank Polska*

The ESG Report for 2023 of the Santander Bank Polska Capital Group contains data and a description of the practices used within the Group, with a separate Santander Bank Polska S.A. as the parent company [60]. TCFD disclosures apply only to Santander Bank Polska S.A. In the previous year, the ESG report applied only to Santander Bank Polska S.A. [61], so the comparability of indicators is sometimes limited to the Bank. The report is based on the updated version of the international Global Reporting Initiative (GRI) standard. The "GRI Table" table indicates where individual information (by the GRI standard) regarding the Santander Bank Polska Group was disclosed. In this table, the Bank also shows the places in the report that already refer to the issues listed in the sustainability reporting standards of the EU Delegated Regulation 2023/2772 (so-called ESRS – European Sustainability Reporting Standards).

The report refers to important international guidelines and objectives from the perspective of organizations and the financial sector. These are the European Commission guidelines on disclosing non-financial information related to climate impact and the UNEP FI principles for responsible banking. Additionally, the publication includes selected assumptions and indicators defined by the "ESG Reporting Guidelines - A Guide for Companies" [62].

The Bank presented the impact of its operational activities on the environment in previous reports. Here, the Bank's energy consumption and energy efficiency are presented. Energy consumption hurts the environment, so the impact was assessed as unfavourable. Therefore, the assessment of the scale of the effects included all the Bank's activities aimed at, among others, increasing the share of renewable energy. Energy consumption and energy efficiency may cause short- and medium-term risks of an increase in the costs of renting office space or energy consumption. Information on the possibility of using cloud solutions and a monitoring system to optimize and reduce energy storage consumption can also be observed. This data appears in the report of Santander Bank Polska and other banks. However, a decrease in the number of bank branches is noticeable globally. This results from other trends, such as developing electronic and mobile distribution channels and improving profitability by reducing costs. The acceleration of this trend in recent years is mainly due to changes in customer habits after the COVID-19 pandemic. Showing such trends forces the continuation and publication of results in future reports [63].

The current report also includes indicators (e.g., electricity from renewable sources, elimination of single-use plastics, number of activities beneficiaries) and specific performance indicators for the Bank. It also includes climate disclosures developed using the TCFD recommendations. In line with their assumptions, Santander Bank Polska integrates climate impact information with its sustainability disclosures. Material topics included in the report were developed using the materiality matrix developed in 2022 [61], which was conducted according to the Santander Group's new pilot methodology (at the global level). The materiality analysis consisted of three steps: developing a list of material ESG aspects based on the study of material ESG aspects identified by Santander Bank S.A. and Santander Group in 2020, internal documents of Santander Bank S.A., sustainable development issues relevant to the industry and ESG aspects considered key by Santander Bank S.A.'s direct competition. This resulted in a list of 21 key ESG aspects that were prioritized. Then, material ESG aspects were assessed (each aspect was evaluated on a scale of 1-5 in terms of the impact on the Bank and the Bank's impact through this issue on the environment). Then, the average scores the surveyed groups gave were assigned weights, with the opinions of external experts receiving the highest weight. As a result, a matrix of material ESG aspects was developed that has a significant social, environmental, and economic impact and affects the results of Santander Bank Polska. The President of the Bank's Management Board decides on the materiality of the identified topics.

Santander Bank Polska Group, as part of ensuring due diligence in reporting on issues related to sustainable development, voluntarily submits selected data from its disclosures to independent assurance (by PricewaterhouseCoopers Polska Audyt sp.k.). In connection with the upcoming regulatory requirements, the Group's auditor decided to verify the ESG Report for 2023. This is a step towards the ultimate reporting of ESG issues in close connection with financial reporting. The report emphasizes that ESG issues have already become a permanent part of the activities of financial

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



institutions and are becoming increasingly important for all stakeholders. Implementing the ESG strategy is a priority in everyday work and long-term planning.

In 2023, the ESRS guidelines for the CSRD directive conducted a dual materiality analysis to identify the most significant ESG topics for the Bank. This analysis comprehensively assesses the impact on the external environment (impact materiality) and external risks and opportunities affecting the Bank (financial materiality). The comparison of impact materiality and financial materiality allows for the identification of material topics, which the Bank then includes in its strategy and non-financial reporting. The dual materiality analysis process involved the Bank's internal and external stakeholders, employees, suppliers, business partners, NGO representatives, financial institutions, and regulators.

In 2023, the Bank established an internal expert panel that analyzes sustainable transactions and products regarding compliance with the Taxonomy and the internal classification system for sustainable finance SFCS. This system allows for precise determination of whether the bank's financing is genuinely sustainable. The Bank emphasizes that its analysis is based on the sustainability criteria of the Banco Santander Group, developed by international standards and regulations, including the EU Taxonomy [60].

Santander Bank Polska Capital Group seeks to meet future ESG reporting requirements, including those resulting from the CSRD Directive and ESRS standards. Several elements indicate this. One of them is the application of International Standards by relying on the updated version of the Global Reporting Initiative (GRI) international standard and considering the European Commission's guidelines on disclosing non-financial information related to climate impact and the UNEP FI responsible banking principles. Additionally, the report contains climate disclosures that align with the TCFD recommendations.

Adaptation to the new guidelines is achieved through changes in the methodology for examining material topics and adjustments to the ESRS guidelines. This makes the Bank's reporting up-to-date and compliant with the latest requirements.

To sum up, Santander Bank Polska Capital Group's activities indicate its readiness to meet future requirements for ESG reporting, thanks to the adoption and implementation of international standards, comprehensive materiality analyses, and independent data attestation.

### *4.4. ESG Reporting at PKO Bank Polski*

Since 2021, ESG risk has been included in the Bank's risk management strategy. ESG risk management issues are described and presented as the impact of climate factors on individual elements of the Bank's financial statements, including, in particular, the impact of climate risk on the measurement of expected credit losses and credit risk concentration. In the credit process for corporate segment clients and clients of companies and enterprises assessed using the rating method, the Bank assesses the impact of environmental, social, and management factors on the Client's creditworthiness each time. It identifies credit transactions with increased financial leverage. The Bank also examines the impact of credit transactions on ESG issues. It classifies them into four categories, starting from transactions with a positive impact on ESG issues and ending with those with a significantly negative impact. In assessing ESG factors, the Bank takes into account, among others, the risk of climate change and the impact on the client's business, the client's possible impact on climate change, factors related to human capital or health and safety, and factors related to management aspects (including the culture of the organization and internal supervision). To assess the monitoring of the impact of its activities on the environment, the Bank uses stakeholder opinion surveys, analysis of topics discussed at general meetings of shareholders, contacts with investors, communication with rating agencies, communication with the media and non-governmental organizations, opinions of sector analysts, customer, and employee opinion surveys, analysis of reports of irregularities, analysis of complaints, cooperation with subsidiaries and data analysis tools. In 2022, the Bank's Management Board adopted the "PKO Bank Polski Strategy for 2023-2025 – Prepared for Challenges, Focused on the Future"[64]. The Bank has set environmental, social, and management goals that focus on financing sustainable and transformational projects, achieving

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



climate neutrality, increasing the share of energy with green certificates, conducting the issue of the Bank's green bonds, and activities supporting digital transformation [65]. In 2023, there were no significant changes in the types of business conducted, business relations, and the manner of conducting operational activities. The list of significant stakeholders also did not change, which was also not noticed in the reports of other banks examined. As a result of the conducted analyses, 13 topics were identified in which the Bank's Capital Group significantly impacts the environment and stakeholders. Guided by the GRI standard, the criterion for selecting topics was the impact on the economy, environment, and people, including human rights. The list of topics did not change compared to the previous year. For each topic, the strength of the impact was assessed, and the topics were arranged in the order of the impact exerted.

Three groups of topics were distinguished according to the strength of their impact: critical issues that carry the risk of significant infringement of the interests of clients in a way that may threaten the possibility of conducting business in the future, topics that create severe risks for the environment but do not undermine the stability of the company, and topics that take into account the impact on stakeholders but are limited to a selected group. A review of existing policies and management principles was carried out for each topic. It was analyzed whether the activities conducted by the Bank and its subsidiaries, which are part of the Bank's Capital Group, could have a significant negative impact on each material topic. Where such a possibility was identified, a description of the potential mechanism of the impact of the actions taken by the Bank was added. The report states that the ESG strategic goals are included in Pillar 4 of the Bank's Strategy for 2023-2025 [64].

The new strategy also means a much stronger focus on implementing ESG goals related to sustainable financing, reducing emissions, the social aspect, and intra-organizational governance. PKO Bank Polski intends to implement unique solutions in financing energy transformation to support the competitiveness of Polish companies in the face of high energy prices and business and regulatory requirements. The Bank will continue to engage in pro-social activities and support diversity and equal treatment of employees, regardless of age, gender, and origin.

The Strategy Committee, which consists of members of the Bank's Management Board, supervises the implementation of the Strategy and the implementation of strategic goals in the Bank.

In 2023, the Bank increased financing of sustainable and transformation projects by SFDR. Such a trend is natural in commercial banks and is also observed in other banks.

One of the elements of environmental risk management is the strategic ESG risk tolerance limit. The measure of this risk tolerance is the ratio of the value of loans to customers from high-emission industries to the value of the gross loan portfolio for business entities. In 2022, the share of loans to customers from high-emission sectors amounted to 0.38%, with a tolerance limit for the Bank and the Capital Group of ≤0.8%. This limit is monitored quarterly and reported to the Bank's Management Board. The Bank is implementing an ESG risk integration plan into its risk management system and, by its assumptions, comprehensively defines ESG risk management processes, incorporating them into the existing risk management framework. Integration involves adapting existing methods for identifying, measuring, and controlling individual risks, considering the cause-effect relationships between these types of risk and ESG factors.

The Bank carries out risk management tasks to ensure compliance with the EU Taxonomy. The technical qualification criteria allow for determining whether an investment financed by the Bank or an economic activity conducted by an enterprise significantly contributes to implementing at least one of the six environmental objectives and does not cause significant damage to any of the other environmental objectives. The technical qualification criteria, therefore, specify the minimum requirements that a financed investment should meet to be considered environmentally sustainable. The tool supporting the assessment of compliance with the technical criteria of the EU Taxonomy are taxonomy surveys developed based on the abovementioned regulations delegated to the EU Taxonomy and implemented at the Bank, which are an integral part of the classification process of sustainable assets. The data obtained using taxonomy surveys constitute the basis for calculating the total green assets ratio (GAR).

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



The statement on non-financial information, which is part of the Report on the activities of the PKO Bank Polski Capital Group, includes detailed information on taxonomic disclosure.

The Bank conducts analyses of the credit portfolio to determine its exposure to transformation risk related to the transition to a low-emission and climate-resilient economy and the impact of long-term and rapid physical events associated with climate change.

As part of good market practice and growing regulatory requirements, the Bank has developed a methodology and tools for conducting climate stress tests, constituting an innovative approach to assessing enterprises' credit risk in banking. The Bank applies the principle of double materiality by considering the impact of ESG factors on the Bank's operations, financial results and development, and the effect of the Bank's operations on society and the environment [66].

Based on the analysis of the reports, it can be stated that PKO Bank Polski is striving to meet future ESG reporting requirements by the CSRD Directive. This is confirmed by the integration of ESG risk, where the Bank has included ESG risk in its risk management strategy since 2021. Climate risk is included in the financial statements, including in the measurement of expected credit losses and credit risk concentration. ESG assessment and classification processes have been included in the credit process for corporate clients and companies. Credit transactions are classified in terms of their impact on ESG issues. The Bank monitors the impact of its activities on the environment through various tools. An ESG risk tolerance limit has also been introduced, monitored quarterly and reported to the Bank's Management Board. The Bank performs tasks according to the EU Taxonomy, including presenting the green asset ratio (GAR). The Bank also conducts analyses of the credit portfolio in terms of the risk of transformation related to the transition to a low-emission economy and the impact of climate events. This was achieved using the PCAF (Partnership for Carbon Accounting Financials) methodology, which allows for assessing the amount of greenhouse gas emissions related to corporate loans, securities, mortgages, or car loans to determine greenhouse gas emissions and developing a methodology and tools for climate stress tests.

These activities indicate the Bank's systematic approach to managing and reporting ESG issues, which aligns with new regulatory requirements and market standards. PKO Bank Polski is prepared to report ESG according to the new rules.

## 5. Comparison of Selected Non-Financial Reporting Elements in the Surveyed Banks

Regarding social responsibility, BNP Paribas Bank Polska emphasizes sustainable development issues, implements strategies and actions to reduce the carbon footprint, supports renewable energy projects and promotes responsible investing [55]. ING Bank Śląski includes initiatives related to financial education, support for local communities and promotion of equal rights [59]. Santander Bank Polska supports various social projects, including education, culture and assistance for marginalized groups [60]. PKO Bank Polski emphasizes its involvement in social and cultural projects and actions for environmental protection, e.g. by financing green investments [65].

In its environmental policy, BNP Paribas Bank Polska conducts numerous initiatives aimed at reducing $CO_2$ emissions and promoting renewable energy. ING Bank Śląski focuses on innovative solutions supporting sustainable development, such as financing projects related to renewable energy sources and introducing ecological solutions in its operational activity [59]. Santander Bank Polska implements policies to protect the environment, including reducing energy consumption in branches and supporting green investments. PKO Bank Polski focuses on introducing ecological internal practices and promoting sustainable financial products [65].

BNP Paribas Bank Polska emphasises diversity and inclusion in its human resources management, promoting gender equality and supporting employee development [55]. ING Bank Śląski promotes an organizational culture based on diversity, inclusion and work-life balance [59]. Santander Bank Polska focuses on talent development by offering mentoring programs [60]. The bank also cares about the health and well-being of its employees. PKO Bank Polski supports employees' professional development through training and mentoring programs and promotes work-life balance [65].

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



In corporate governance reporting, BNP Paribas Bank Polska pursues a policy of transparency and responsibility in management [55]. The bank implements high standards of corporate governance, which aim to build trust among stakeholders. ING Bank Śląski focuses on transparency, business ethics, and responsibility [59]. Santander Bank Polska focuses on transparency of activities and responsible management [60]. PKO Bank Polski implements corporate governance principles using best market practices [65].

Each of the banks examined takes action to develop non-financial reporting, although their reporting priorities may differ. This does not make it easier to compare reports between different banks. To show the problem of differences, a study was undertaken on the example of several indicators, not all of which are intentionally important and key for banks from the point of view of their operations.

Tables 1-4 compare selected elements of non-financial reporting in the banks examined. A comparison was made of reporting on the ratio of women's to men's remuneration, employment of people with disabilities, and a comparison of reporting on greenhouse gas emissions and water and paper consumption. A selection was made to compare indicators in which different approaches were found in the banks examined. Among them are those that are important for stakeholders and those that are not important. In this way, the analysis will show differences and similarities in some issues and possible gaps in reporting.

One of the essential topics banks report is the reporting of women's and men's salaries and calculating the pay gap. Table 1 compares the presentation of the ratio of women's to men's wages.

**Table 1.** Comparison of the presentation of the ratio of women's to men's remuneration in the surveyed banks for 2023 and 2022.

| | BNP Paribas Bank Polska | ING Bank Śląski | Santander Bank Polska | PKO Bank Polski |
|---|---|---|---|---|
| **Calculating the pay gap for 2023** | Adjusted Gender Pay Gap Index, 2023 (GRI [405-2]) 6.24% | Ratio of total salaries of women to men 95% | Santander's own indicator - Equal Gender Pay Gap 1.17% | Wage gap calculated based on weighted average salary 2% |
| **Calculating the pay gap for 2022** | Adjusted Gender Pay Gap Index, 2023 (GRI [405-2]) 6.51% | Ratio of total salaries of women to men 94% | EPG indicator - Equal Pay Gap 2% | Wage gap calculated based on weighted average salary 4% |

Source: Own study based on the annual ESG reports of the surveyed banks *[55,59,60]*, [65].

At BNP Paribas Bank Polska, at the end of 2023, the pay gap, expressed in the adjusted pay gap (Gender Pay Gap indicator), amounted to 6.24%. This means men's salaries were 6.24% higher than women's in comparable positions. The indicator is a weighted average of the numbers of individual employee groups. Compared to 2022, the indicator dropped by 0.27 p.p. The Bank's strategic goal under the GObeyond strategy for 2022-2025 is to reduce the pay gap to below 4%.

ING Bank Śląski does not provide the Gender Pay Gap indicator), only the ratio of total salaries of women to men (95% in 2023 and 96% in 2022), which has been adjusted to the comparative table. The bank provides results to senior management, management, and other employees. The change in the pay gap from 96% in 2022 to 95% in 2023 was primarily influenced by changes in the employment structure, especially employee transfers between classification categories (promotions).

The Santander Bank Polska report provides the unadjusted pay gap and, additionally, Santander's indicator. For 2022, the EPG - Equal Pay Gap indicator was 2%, which means that, on average, women earned 2% less than men in the same positions. From 2023, the own indicator is calculated according to the Banco Santander Group Methodology - the indicator compares the remuneration of women and men in similar positions (employees are divided into "clusters"). The total EPG gap is a weighted average of the pay gaps in individual clusters calculated as the difference between the average remuneration of men, the average remuneration of women, and the average remuneration of men. The weights for the weighted average are the numbers of individual clusters. For 2023, the methodology was adapted for the first time to the requirements of the EBA (Directive

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



2013/36). These indicators are no longer fully comparable, although an improvement in this respect is visible, and the change results from adapting the calculation methodology to the Group.

At PKO Bank Polski, the global ratio of women's to men's pay calculated as the weighted average total remuneration of women to men (taking into account the remuneration of members of the Bank's Management Board paid in 2023) was 98% (+2 p.p. y/y). The pay gap between women and men calculated based on the weighted average remuneration was 2%, and the gender pay gap for the Bank based on the median was 1.6%.

In addition, the pay gap calculated using the methodology specified in the guidelines for the Best Practices of GPW Listed Companies 2021 amounted to 31.7% in the Bank. The Bank, therefore, reports a gap using many methodologies.

Worldwide, female workers are significantly underpaid compared to their male counterparts. Some governments are taking action to address issue. For example, in June 2017, Iceland became the first country to mandate a "Equal Pay Certificate" for employers, which requires proof of equal pay for men and women [67].

In the EU, in this respect, banks are subject to several regulations that require gender and pay balance. One of them is the EU Directive on improving the gender balance among directors of listed companies and related measures [68]. From 2026, the Directive on strengthening the application of the principle of equal pay for men and women for equal work or work of equal value through pay transparency and enforcement mechanisms [69] will also apply. This directive aims to combat pay discrimination and close the gender pay gap. One of the main assumptions of the directive is to require companies to provide justification when their pay gap exceeds 5%.

In Malta, a study was conducted on the gender pay gap in the financial and insurance sector. Employers value total commitment and long working hours, especially in management positions. Management positions are still associated with men, as mothers are more likely to take parental leave, have reduced, flexible working hours, and work remotely. This maintains vertical segregation and widens the Gender Pay Gap in the financial and insurance sectors [70]. In this situation, ESG reporting according to EU guidelines will lead to changes in these disproportions more quickly.

Directive to Strengthen the Application of the Principle of Equal Pay for Equal Work or Work of Equal Value between Men and Women through Pay Transparency and Enforcement Mechanisms, adopted in April 2023, requires companies to share information on salaries and take action if their gender pay gap exceeds a specific limit and includes provisions on compensation for victims of pay discrimination [71].

Banks present the ratio of women's to men's salaries differently, and the results are based on the banks' reporting approaches. Introducing changes will result in unification in this case, which will facilitate the comparison of these indicators between different banks and the comparison of changes over time. It should be emphasized that all banks provide statistics on the employment of women and men and divide job groups, which indicates a severe approach to this issue.

Another issue is reporting on employees with disabilities, an essential element of many banks' diversity and inclusion strategies. Below is a comparison of how the surveyed banks report and implement initiatives for employing and supporting people with disabilities.

ESG reporting is essential in employing people with disabilities, as it directly relates to the company's social responsibility.

Using cross-country interview data from Norway and the US was examined, why employers struggle to include disability as part of their active diversity approach. Organisations must go beyond mere legislative compliance and be more proactive towards disability as a distinct diversity category [72].

In Poland, the activities practices for people with disabilities were analyzed using the example of the largest commercial banks. The conclusions obtained from the conducted analysis prove that within the framework of activities for people with disabilities: employees, customers, members of local communities, the diversity policy is based mainly on compliance with legal regulations, which is a necessary but insufficient condition for managing diversity [73].

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



As part of ESG reporting, banks in Poland increasingly include information on the employment of people with disabilities, but quite often, there is a lack of accurate data.

Perhaps banks should be more proactive and go beyond just compliance and treat disability more actively. Such reporting could be part of a broader strategy for sustainable development and diversity, including promoting equality and inclusiveness in the workplace. Table 2 shows how detailed reporting of disabled employees looks in practice in the surveyed banks.

**Table 2.** Comparison of the representation of employees with disabilities in annual reports and ESG reports.

| | BNP Paribas Bank Polska | ING Bank Śląski | Santander Bank Polska | PKO Bank Polski |
|---|---|---|---|---|
| Number of employees with disabilities | 122 | 215 | no information | no information |
| Division into women and men | women 84<br>men 38 | women 158<br>men 57 | no information | no information |
| Division into degrees of disability | no information | no information | no information | no information |
| Showing the percentage of employment of people with disabilities | 1.5% | 2.6% | no information | 1.2% |
| Declaration regarding future employment of people with disabilities | General declaration (increase in employment of people with disabilities) | no declaration | no declaration | no declaration |

Source: Own study based on the annual ESG reports of the surveyed banks *[55,59,60]*, [65].

BNP Paribas Bank Polska emphasises diversity in its ESG reports, including support for people with disabilities. The Bank informs about support programs that integrate these employees within the organization. It informs about its initiatives promoting equal opportunities for people with disabilities: an educational campaign, e-learning for managers and employees with disabilities, supporting people with disabilities in obtaining a disability certificate, a series of interviews presenting conversations with employees who face the challenge of disability and want to share this experience with the banking community, and a one-time financial benefit for people with disabilities working at the Bank.

ING Bank Śląski, as part of its ESG strategy, reports on its activities for inclusiveness, which also includes support for employees with disabilities. The bank focuses on creating accessible and friendly workplaces and ensuring equal treatment. It informs about the support for people caring for loved ones with a moderate or significant degree of disability. It offers the possibility of using two additional days off to care for a spouse/partner, parents, parents-in-law or grandparents. When caring for a child with a certified degree of disability, the employee can use an additional five days of care. In caring for its employees with a certified mild degree of disability, it offers an extra three days off while maintaining the right to remuneration.

Santander Bank Polska also pays attention to diversity and integration issues, including the employment of people with disabilities, as part of its ESG reporting. The bank reports on initiatives to improve working conditions and adapt positions to the needs of people with disabilities. Still, detailed figures for employees with disabilities are not published in the ESG annual report. Despite the lack of detailed data, the bank reports on activities aimed at employees with disabilities. Benefits for people with disabilities include a financial allowance for health-related purposes, two days off for people with a mild degree of disability and complete remote work for these people (where the organization and type of work allow it).

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



In its ESG reports, PKO Bank Polski emphasizes its commitment to promoting diversity, including employing people with disabilities. The Bank's reports contain information on actions taken to adapt workplaces and support employees with disabilities. Still, figures regarding the employment of people with disabilities are not detailed in the annual and ESG reports. The Bank only provides the percentage of employees with disabilities in the total number of employees.

ESG reporting in Polish banks includes activities for diversity and support for employees with disabilities. However, data on the employment of such people is only sometimes published in detail in annual reports. Banks promote inclusiveness, adapt workplaces, and support equality in their organizations. For this reason alone, such data should be widely published. Then, banks' declarations regarding support for people with disabilities would be verifiable by the market.

Environmental factors are an essential element of reporting. They include, among others, the company's impact on climate change (through greenhouse gas emissions). Disclosures related to climate change are also subject to a materiality assessment, and it would be difficult for banks to prove that the risk and impact associated with climate change are not material to their business and thus marginalize it in ESG reporting. In this respect, a comparison of greenhouse gas emission reporting was made.

Greenhouse gas emissions should be divided into scope 1, 2 and 3 GHG emissions. Scope 1 emissions are direct emissions from owned or controlled sources, including stationary combustion (fuels and heating sources), mobile combustion (vehicles), and fugitive emissions (resulting from refrigeration or air conditioning leaks). Scope 2 emissions are indirect emissions from purchased or acquired electricity, heat or steam. Scope 3 emissions are other indirect emissions that occur in the value chain at both upstream and downstream levels [62]. A comparison of the reporting of GHG emissions is presented in Table 3.

**Table 3.** Comparison of the presentation of greenhouse gas emissions in ESG reports.

| | BNP Paribas Bank Polska | ING Bank Śląski | Santander Bank Polska | PKO Bank Polski |
|---|---|---|---|---|
| Have GHG emissions been presented: | | | | |
| - from scope 1 | Yes | Yes | Yes | Yes |
| - from scope 2 | Yes | Yes | Yes | Yes |
| - from scope 3 | No | Yes | Yes | Yes |
| Have GHG emission reduction actions been presented? | Yes | Yes | Yes | Yes |
| Has a specific GHG emission reduction target been set | Yes, 55% emissions reduction by 2025 | Yes, achieve scope 1 and 2 neutrality by 2030 | Yes, achieving net zero emissions by 2050 | Yes, reducing greenhouse gas emissions by 60% by 2025 |

Source: Own study based on the annual ESG reports of the surveyed banks *[55,59,60]*, [65].

All banks surveyed report Scope 1 and 2 emissions. Scope 3 emissions have yet to be reported by BNP Paribas Bank Polska. The bank shows Scope 1 and 2 GHG emissions from operational activities. It emphasizes that work is underway to develop a trajectory of financed emissions consistent with the Net-Zero Banking Alliance (a group created by the United Nations Environment Programme Finance Initiative) and to present the current exposure in the area of financed GHG emissions (Scope 3, category 15). This means that future reports will also present Scope 3 GHG emissions.

PKO Bank Polski's greenhouse gas emissions in scope 3 are expanded to include emissions from products and services purchased for the Bank, waste generated for the Bank and emissions from the use of products sold for the Bank.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



BNP Paribas Bank Polska undertakes operational activities to reduce greenhouse gas emissions through specific actions, such as purchasing energy from renewable sources, minimising energy consumption, using energy-saving solutions, replacing lighting with LEDs, installing flow-through water heaters, heat pumps, and photovoltaic panels, electrifying the car fleet, reducing business trips, and choosing the optimal means of transport. There are no concrete goals in many areas.

ING Bank Śląski, due to further development of its investment emission estimation methodology (category 15 of scope 3, which primarily concerns customer receivables), has decided to recalculate emissions for 2021-2022. This updated calculation category is responsible for the entire revision of previously presented data. In addition, in the case of other emissions related to the economy (other than investments), the updated data for 2022 also includes data that was not yet available in the previous reporting. ING also explains that scope 1 emissions in 2023 were higher by 0.2% y/y, and 81% of emissions in this category are due to the fuel consumption of the bank's car fleet. The increase in emissions from petrol fuel (+17.7% y/y) is due to its higher consumption – more intensive use of company cars in 2023, partially compensated by changes in the structure of the car fleet (increased share of hybrid vehicles). Scope 2 emissions decreased in 2023 by 10.4% y/y and 31.0% compared to 2019. The main factor in the decrease is electricity emissions. This is mainly due to the reduced office space used, but our numerous actions to reduce energy consumption also affect us. This shows that the Bank takes a detailed approach to explaining the presented data.

Santander Bank Polska presents data on emissions at a consolidated level for the first time and does not have data for 2022 at the Group level. It states in the report that in 2022, the Bank's carbon footprint in Scopes 1 and 2 amounted to 31,613.6 t $CO_{2e}$ (location-based) / 19,499.8 t $CO_{2e}$ (market-based). The carbon footprint in Scope 3, resulting from business travel, amounted to 870.1 t $CO_{2e}$. The Bank is taking action to reduce its direct carbon footprint; for example, since 2020, it has been neutral regarding its $CO_2$ emissions. The energy it purchases directly comes only from renewable sources. In the current methodology for calculating Scope 3, the Bank still needs to consider the impact of the portfolio, which is significant on the climate. Santander Bank Polska S.A. is implementing the global "Net Zero" strategy of Banco Santander Group. $CO_2$ emissions hurt the environment. Therefore, the impact was identified as negative actual.

Not all of the analyzed banks set specific greenhouse gas emission reduction targets. Unfortunately, however, these data are comparable between them. A particular target (reduction of emissions by 55% by 2025) was set by BNP Paribas Bank Polska and PKO Bank Polski (reduction of greenhouse gas emissions by 60% by 2025). The remaining banks set it more generally without setting short-term targets, which will be assessed in the upcoming ESG reports.

In Q4 2023, ING Bank Śląski, in the spirit of the commitments set out in the Paris Agreement, published a document [74], which defines the ambitions for reducing emissions in its own economy and credit portfolio in the area of residential and commercial real estate and energy production. This document is linked to the ESG report.

Santander Bank Polska is taking action to limit the negative impact by reducing energy consumption and increasing renewable energy sources. The Group is implementing the Banco Santander Group's climate strategy and acting by the "Net Zero" strategy. The goal for 2050 to achieve zero net emissions could be more ambitious.

At PKO Bank Polski, the achievement of goals will be verified using reliable and fully measurable data. One adopted goal is to purchase more than 90% of energy with green certificates. In 2023, the bank purchased 97.6% of electricity with green certificates. PKO Bank Polski adopted indicators in the ESG area and included them in the non-financial goals of the Bank's Capital Group for the following years [75] and showed it in the ESG Report for 2023 [65] (including a 60% reduction in greenhouse gas emissions by 2025).

It is worth noting that various initiatives are being undertaken worldwide to implement sustainable development and ESG strategies fully. The Climate Pledge agreement, signed by 460 companies employing almost 10 million people, is worth noting. The deal assumes achieving net zero carbon dioxide emissions by 2040 (10 years before the Paris Agreement) and regular measurement and reporting of greenhouse gas emissions [76].

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



This provides an additional incentive for banks to report this greenhouse gas emissions indicator.

Despite climate issues often raised in reports, including greenhouse gas emissions reported by all WIG20 companies, every fourth company does not provide emission reduction targets and deadlines, and their ESG strategies often lack essential details, such as how to achieve the targets and when they will be implemented [77].

Research on the reports shows that new legal regulations introduced at the European level, addressed to the financial sector, force greater involvement in climate protection activities. The scope of climate-related information disclosed is similar to the reports of individual banks. It concerns the impact of the banks' activities on the climate and the financial products offered on the environment. Banks try to be socially responsible and consciously attempt to include climate issues in their reports. However, the reporting of this information is only at an early stage [78].

Banks set goals, but comparing them between banks is challenging and impossible based solely on a single report. Although setting a specific goal is already a sign of the seriousness of the Bank's approach to the future, consistency in data presentation is probably expected here. These goals are not easily comparable between banks because each bank sets them differently over a different period.

Water and paper reporting in the banks studied was also analyzed. This choice was made due to the decreasing need to document water consumption. All four banks report water and paper consumption in their ESG reports, but the level of detail in this respect varies. These banks monitor and often report data on these consumptions and even implement strategies to reduce consumption. Is this always justified? The analysis of water and paper consumption reporting is presented in Table 4.

**Table 4.** Comparison of the presentation of water consumption (as an irrelevant indicator) and paper consumption in the ESG reports of the surveyed banks.

| | BNP Paribas Bank Polska | ING Bank Śląski | Santander Bank Polska | PKO Bank Polski |
|---|---|---|---|---|
| | | Water consumption | | |
| Is water consumption presented? | yes | yes | no | yes |
| Is the significance of this parameter determined? | yes, but it does not generate significant impact | no, but it shows in scope 3 $CO_{2e}$ emissions | no | no |
| Is the trend of this consumption shown in the report? | yes 2023/2022 | yes 2023/2022 2023/2019 | no | yes 2023/2022 |
| Are actions proposed to reduce consumption? | yes only completed actions are shown | yes generally implemented activities | yes generally implemented activities | no |
| | | Paper consumption | | |
| Does the bank present paper consumption? | yes | yes | yes | no |
| Does the bank determine the significance of this parameter? | no | yes This shows in the $CO_{2e}$ emissions from scope 3 | no | no |
| Does the bank present the paper consumption trend? | yes 2023/2022 and 2023/2019 | yes 2023/2022 and 2023/2019 | yes 2021, 2022 and 2023 | yes It only shows the % decrease in consumption over |

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



| | | | | |
|---|---|---|---|---|
| | | | | the last 7 years and to the previous year |
| Does the bank propose actions to reduce paper consumption? | yes only completed actions are shown | no | no | yes only completed actions are shown |

Source: Own study based on the annual ESG reports of the surveyed banks *[55,59,60]*, [65].

The water used in all the banks surveyed comes from water supply networks and, after use, is discharged into sewage systems. It is used for food and hygiene purposes, and the scale of its consumption does not generate a significant adverse environmental impact. Its consumption is, therefore, not crucial for the bank's operations, and its savings are due to the use of other, newer-generation sanitary devices, which generate significant percentage savings compared to previous periods.

BNP Paribas Bank Polska has been consistently implementing solutions that reduce water consumption for years. It has installed, among other things, tap aerators, motion sensors, and electronic dishwashing programs that reduce the water used in the Bank. Naturally, the increasingly popular remote and hybrid work mode also impacts water consumption.

ING Bank Śląski analyzes water consumption for all of its locations. Thanks to the standards developed for office buildings and bank branches, it uses modern two-post toilets, dishwashers and aerators during each modernization. In 2023, water consumption increased by 9% y/y. This was mainly due to a failure of the water installation in one of the branches. This shows that one failure can change the annual water consumption by as much as 9%, i.e. water reporting is of no major importance to the bank's operations.

Santander Bank Polska installs dishwashers during each branch modernization. The Warsaw office uses a grey water system (a system for pre-treating water from showers and sinks for reuse in flushing toilets), efficient bathroom fittings and waterless urinals. In the Poznań office, rainwater is collected on the roofs of buildings, stored and then used to water green areas. In the Wrocław office building, the Bank reduced water consumption by half thanks to low-flow toilets and taps. The Group and the Bank do not present data on water consumption but emphasize that they are working on disclosing this indicator. The huge percentage savings when installing modern systems show that the subject is not important for reporting. The actions presented in this area mainly have an image effect.

The ESG report for PKO Bank Polski once again specifies water consumption. The bank reports an increase in water consumption (by 2.3% y/y), which is explained by the greater presence of employees in the office (by one p.p.), an increase in employment, and the inclusion of the Bank's foreign branches in the calculations for the first time.

Since banks use water only for consumption and sanitary purposes in their current operations, reporting this indicator is optional for stakeholders, so there is no need for detailed water consumption reporting in ESG reports. Banks probably do it for image reasons, often citing the use of new technology to reduce water consumption. However, in principle, there is no more excellent choice regarding the technology of sanitary devices. We believe reporting this parameter will disappear from banks' ESG reports in the coming years.

Another indicator checked is paper consumption. All the banks surveyed pay attention to this, but in the report, none of the banks defines this indicator as significant for the activity. All of them undertake initiatives that are concerned with reducing paper consumption. BNP Parinas Bank Polska, in cooperation with suppliers, prints mass correspondence and marketing leaflets on certified recycled paper. It also limits correspondence printing, encourages customers to use digital documents, and uses a unique platform for electronic contract signing and digital document circulation. It shows the savings achieved and plans to reduce paper consumption by 80% by 2025 (vs. 2019). It should be noted that this task has already been largely completed, as a 53% reduction in consumption has been achieved since 2019.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



ING Bank Śląski emphasizes that all office building employees in Warsaw and Katowice use the so-called follow-up printing system. This solution lets you print a document only after applying your ID card to the printer. The bank shows paper consumption in tons of $CO_{2e}$, showing the trend since 2019, which is a different approach.

Santander Bank Polska successively reduced paper consumption by 42% in 2021 and 38% in 2022. In 2023, paper consumption was at the same level as in 2022. It does not provide specific information on how it reduces paper consumption but informs that it suggests modern and ecological solutions for paperless service.

PKO Bank Polski states that one of the bank's strategic goals is to simplify and streamline processes by reducing paper documentation. But in total, it is more about simplifying processes, which results in, among other things, reducing paper consumption. Many methods have changed due to the partial transition to remote work, and this is emphasized in the report. It reports a 67% decrease in A4 paper usage over the last seven years and a 5% decrease in A4 paper usage to the previous year. In branches, it implemented a signature on a touch screen instead of paper, eliminating paper from the process. The other banks surveyed have also implemented similar solutions, although they do not mention this when reporting paper usage.

Banks operating in Poland examine indicators that are irrelevant to their operations. At that time, the authors assumed that ESG elements unrelated to banks' actual operations would be omitted from reports in a few years because it would no longer be possible to present the spectacular effects of reducing their use. This will also happen due to greater awareness and experience in reporting and reading ESG reports [12].

After two years, such a trend has occurred. At that time, it was also shown based on water consumption. In the analysed reports, none of the banks presented the water consumption parameter as significant, and one did not even provide consumption statistics.

Technological solutions can often support actions taken to reduce paper consumption. This is particularly visible in the financial and insurance sector, where computerization and so-called "paperless" customer service play an increasingly important role. Sustainable process management or Green Business Process Management takes into account environmental aspects. It includes identification, modelling, analysis, simulation, and implementation of business processes with particular attention to environmental consequences at each stage of the enterprise value chain. This approach allows the organization to contribute to meeting the challenges related to sustainable development in relation to the implemented processes [79].

Among the actions reducing direct greenhouse gas emissions, banks most often mention: increasing the energy efficiency of electrical devices, reducing energy consumption, limiting travel by using tele- and videoconferencing, financing employees' travel by public transport, replacing short-distance business flights with rail travel, introducing fuel consumption limits for company cars or participating in the costs of purchasing it by the employee, systematically replacing company cars with hybrid or electric cars, increasing the use of energy from renewable sources, increasing the use of paper made from waste paper [80].

In banks' ESG reports, one can find such mentions regarding using certified and recycled paper for printing devices and in mass correspondence [55].

Although paper consumption is essential for the bank today, PKO Bank Polski no longer reports it in numbers, showing only the percentage trend over time. This shows that the digitisation of processes will marginalise paper consumption. The downward trends until 2019 had spectacular effects, but in the case of water and paper, they were caused by absences caused by the COVID-19 pandemic. In the paper's case, the decline in consumption was also accelerated by the intensification of digitisation processes and the development of mobile banking.

Looking at the speed and direction of the changes being introduced, also from the point of view of banks improving their applications, one can see an additional goal: reducing the costs associated with customer service in other contact channels [81]. We believe that just as reporting water consumption is an irrelevant parameter for banks today, it will be similar to paper. Eliminating

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



indicators from reports of marginal importance for banks' operations will increase transparency for all recipients.

**6. Banks' Challenges in Adapting ESG Reporting to Regulatory Requirements**

The entire financial sector faced a challenge in preparing for new regulatory requirements for 2023's reporting. Many banks focused on adapting their ESG strategies. They made changes to their reporting so that the data in the current report could be comparable to the future reporting for 2024.

All banks surveyed have an ESG strategy and have conducted materiality studies. Their reports contain references to the NFRD Directive, the ESRS standards, the EU Taxonomy, and the SFRD Regulation. Each bank surveyed already applies elements of the CSRD Directive.

Many regulation changes can be a big challenge for banks, including those examined in this publication.

It was noted that a very positive effect of reporting ESG activities is the specification of indicators, e.g. regarding the reduction of greenhouse gas emissions, eliminating exposure to the mining sector, and increasing "green" financing. An additional reinforcement of ESG activities is the inclusion of an ESG risk assessment in the assessment of the borrower's business model and the impact of this assessment on the terms of the credit decision. This shows a particular trend in the market of banks' deliberate influence on their current and potential clients. In this way, the financial system can act as a catalyst for the transition to a more sustainable economy by all market participants. This will undoubtedly contribute to broader and specific ESG reporting by banks and other entities using their services [12].

Referring to individual directives and standards does not mean their complete application. However, it shows that banks take their obligation to apply them seriously already in reporting for the next period, which requires a different approach than in current reports. This gives a positive answer to the question about banks' preparation for the complete application of the new guidelines.

Looking at the reporting in the "parent" banks of the banks examined here, there is no visible difference in the quality of reporting. Banco Santander's report published in 2024 [82] is comprehensive and detailed, meeting the CSRD reporting rules. The Group conducted a double materiality assessment based on the GRI double materiality assessment and elements from the CSRD Directive. The thresholds used to categorize material aspects are critical, significant, important, informational, and minimal. According to CSRD, a sustainability issue is material if it is above the " important " category, regardless of whether the importance comes from the impact side or the financial side (risks and opportunities). Three sustainability issues – climate change, consumers and end users, and business conduct – are material (significant or critical), and two – own workforce and affected communities are informative. The results were conducted over a medium-term time horizon (3 years).

One of the main changes in the CSRD is the list of issues related to sustainable development. This makes Santander's previous ESG reporting slightly incomparable to the data from 2023. Therefore, the consistency of the current list of topics with the previous one was mapped and assessed. Thus, the results from 2023 reflect a high consistency with the relevant issues in 2022. Santander Group also provides current information on the ESG strategy [83].

BNP Paribas Group also presents its current ESG strategy [84]. ING Group informs in its annual report for 2023 that it will meet the guidelines of the SCRD Directive, and from 2025, the report will meet all requirements. The current report includes many CSRD elements [57].

For several years now, it has been noticeable that banks in Poland have been using ESG reporting at a reasonable European level, often in line with the elements used in their parent companies. Adaptation is a more straightforward process for these banks, and recalculating and correcting previous calculations for previous periods constitutes a great awareness of ESG reporting. It is also an element of reporting consistency across the Group. Banks with ESG strategies but recalculate only a few values (PKO Bank Polski) in their 2023 reports will have less opportunity to compare this data in future reports. It should be remembered that it is essential to reconcile regulations and the expectations of various stakeholder groups interested in the presented method of reporting and

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



reference to previous results. Many banks already treat changes in regulations and adaptation to new requirements as an obligation and a tool for competitive advantage in the banking sector. This primarily applies to opportunities for banks that intend to increase their market share.

A significant ESG risk for banks is the share of credit exposure in high-emission industries. The transition towards a low-emission economy is associated with transitional risks, which may include a decrease in the value of assets, higher costs of capital and a reduction in demand for products and services in high-emission sectors. Companies from these industries may become less competitive, which increases the risk of insolvency and, as a result, the risk of non-repayment of loans taken out in banks. This may mean the need to reduce credit exposure in these entities.

An additional challenge for banks is the CSRD assurance requirements. Companies subject to the CSRD are required to engage an independent assurance provider to provide limited assurance on the following [62]:

- compliance with CSRD reporting principles, including the adopted ESRS,
- process undertaken to identify material information to be reported based on the principle of double materiality,
- compliance with reporting obligations under the EU Taxonomy (Article 8),
- compliance with the requirement to label sustainability reports following Article 29d.

To meet the audit requirements imposed by the CSRD, companies must have a clear audit trail and documentation of processes and controls to support the disclosures provided. There are no legal requirements to apply specific standards and procedures to perform assurance. Auditors often apply the International Standard on Assurance Engagements (ISAE) 3000, as amended (ISAE 3000). However, other (national) standards or requirements for assurance engagements may be applied. In the future, the European Commission will adopt regulations on standards for limited assurance and further regulations on reasonable assurance standards [62].

The surveyed banks have already certified the described ESG activities in their reports for 2023, which is an indication of preparation in this respect for the rules applicable for 2024. The certification was performed there by entities verifying financial statements.

When issuing non-financial reports, the management of banks operating in Poland is guided by a number of principles and guidelines that aim to ensure transparency, consistency, and compliance with applicable regulations and standards. The basis is ensuring compliance with the legal provisions presented in this publication and the plan for adapting to the rules applicable next year (CSRD). It must ensure transparency and reliability and take into account the importance of information for all stakeholders.

Przemysław Gdański, President of the Management Board of BNP Paribas Bank Polska, believes that the approach to corporate responsibility for climate or social issues often divides entrepreneurs and politicians; ESG is an integral part of the long-term success of companies. This thesis is challenging to argue with, especially considering the regulatory conditions at both the national and supranational levels. The EU CSRD directive is critical, as it provides for the obligation to report ESG issues by many companies (in Poland, even 3-4 thousand) compared to its predecessor, NFRD, which covered 300 entities [85].

Brunon Bartkiewicz, President of the Management Board of ING Bank Śląski, believes that changes related to, among other things, new ESG regulations will significantly impact the functioning of the bank's customers, and the bank wants to be a partner supporting them in adapting to the new reality [85].

Michał Gajewski, President of the Management Board of Santander Bank Polska, emphasizes that the bank's CSRD directive means the obligation to report in 2025 according to ESRS standards already for the current year. Financial and non-financial data will be disclosed in one document, meaning they are equally crucial to stakeholders. In addition, reports on sustainable development will be subject to the certification requirement by auditors, ensuring their transparency and comparability [85].

The results of other studies of Finnish banks' approach to ESG frameworks underline the need for banks to integrate ESG issues into their governance structures and decision-making processes in order to support sustainable change and impact on society. Furthermore, this study reveals the

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



importance of developing clear and consistent ESG standards to facilitate better implementation and compliance [86].Other research conducted on a sample of European banks operating in 21 countries between 2005 and 2017 reveals that in times of financial turmoil, the longer the period of ESG disclosure, the greater the benefits for stability. The ESG-stability linkages of banks vary significantly depending on bank characteristics and operating environments. ESG strategies can act as an insurance-like risk mitigation tool for banks in financial distress. A possible explanation is that engaging in ESG practices seems to be associated with more prudent banking activities, strengthening more stable relationships with reference communities and improving the bank's reputation. Increasing ESG engagement in the banking sector is not only beneficial in terms of environmental and social impact. Still, it can also strengthen the banking sector's resilience in the event of a financial crisis [87].Bank management is guided by the principles of ethics and responsibility, which translates into disclosing information that is not only compliant with regulations but also ethically justified and socially responsible. This is of particular importance in the case of ESG reporting. All of the banks surveyed additionally carried out external attestation of their non-financial reports, which increases their credibility and ensures that the data is compliant with applicable standards and regulations.

The CSRD Directive is a crucial element of EU regulations concerning ESG and introduces stricter requirements for reporting sustainable development by companies, including banks. Analysis of the bank reports lets us conclude that the banks are well prepared to report according to the new rules. This is mainly confirmed by the fact that these banks meet the requirements of the new regulations, and their current reports show which data will be presented differently for 2024. A comparison of the reports shows differences in reporting the same issues in some places, which makes it challenging to compare selected data between banks. Still, it does not indicate a lack of preparation or a desire to hide specific data. Analysis of the reports allows us to conclude that after the announced changes, the reports for 2024 in the banks examined will meet all reporting guidelines. Another confirmation of good preparation is the independent and voluntary attestation of the presented ESG data for 2023.

Reporting according to the established rules should contribute to greater involvement of all banks in ESG activities. The banks' reports examined several elements that need to be fully reported. This concerns the employment rates of people with disabilities, reporting greenhouse gas emissions and water and paper consumption. For example, Santander Bank Polska does not provide numerical data regarding the employment of people with disabilities. PKO Bank Polski only provides the percentage number of people with disabilities. None of the banks provide information on the number of people with disabilities employed by the degree of disability, which is essential in assessing the approach to this issue. Also, none of the banks provides a specific declaration regarding the increase in employment of people with disabilities. In future reports, it would be good to show that a given bank strives to employ people with disabilities by adapting a given workplace to a specific type of disability. This needed to be included in the banks' reporting.

In BNP Paribas Bank Polska's greenhouse gas emission reporting, there was no reporting of emissions from scope 3. In the case of Santander, a measurable short-term goal regarding greenhouse gas emissions needs to be specified. The introduction of a provision regarding achieving net zero emissions by 2050 is a goal that every bank could include because it is also a goal of sustainable development and the climate policy of the European Union. However, BNP Paribas Bank Polska informs that work is underway to present the current exposure in financed greenhouse gas emissions in Scope 3.

Santander Bank Polska does not present the Bank's water consumption when other banks report this parameter. However, it informs that it is working on disclosing this indicator. However, because the bank uses water only for the sanitary needs of employees and the water always comes from the water supply network, such reporting is not important information for stakeholders, and the analysis in this area does not contribute much. Here, attention should rather be paid to other banks that focus unnecessarily on this indicator.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



In the information on paper consumption, PKO Bank Polski does not report numerical values but only presents the percentage decrease in consumption over time. In the case of the paper consumption parameter, no specific actions will be taken by all banks to reduce consumption in the next year. It should be emphasized here that actions resulting in decreased paper consumption are related to digitization and remote access to banks. This also causes network optimization, i.e., reducing the number of branches in banks, which additionally causes a faster decrease in paper consumption. Still, the banks must provide information about such a relationship in their report.

In the 2019 studies, state-owned and domestic banks showed greater involvement in this issue than banks with foreign capital. This result suggests that banks with foreign capital were only partially interested in sponsoring activities aimed at sustainable development [88]. It is also symptomatic that all banks whose main shareholder, directly or indirectly, is the government and most banks controlled by domestic shareholders showed more significant involvement in this issue than banks with foreign capital [88].

There are many reasons for this. State-owned banks often have a mandate to support public policies, including sustainable development. Domestic banks that are deeply embedded in the local context may be more sensitive to the needs of local communities and environmental regulations. Banks with foreign capital often operate within global strategies that may need to be fully adapted to the specific needs and priorities of sustainable development in individual countries. Differences in the involvement of state-owned, domestic, and foreign-owned banks in financing sustainable development may result from different strategies, priorities, and regulatory and market conditions. Nevertheless, consistent reporting principles may contribute to changes in this area, as stakeholders may be interested in locally implemented activities that will become comparable between banks operating in Poland.

In Poland, banks are required to comply with national and EU regulations regarding the disclosure of information on corporate governance, such as the Non-Financial Reporting Directive (NFRD) and the new regulations introduced by the CSRD Directive. These regulations require banks to publish information on their board structure, risk policies, business ethics, and other aspects of corporate governance.

Taking into account the results of the study "Voluntary Disclosure of Corporate Governance Information and Bank Performance: Evidence from an Emerging Market", which aimed to investigate the extent of voluntary disclosure of corporate governance information in the annual reports of banks in the United Arab Emirates, operating in an emerging economy in the Gulf Cooperation Council region, it is revealed what the impact of such non-financial disclosure of information on bank performance may be, differentiating between conventional and Islamic banks. The results indicate a low voluntary disclosure of corporate governance information in annual reports for most disclosure indicators. However, traditional and Islamic banks do not differ significantly. Moreover, the robust dynamic panel data results from the two-stage generalized system of moments estimation method confirm that voluntary disclosure of corporate governance information does not substantially affect bank performance [7].

Banks in Poland are more involved in corporate governance disclosure, mainly due to strict regulations and growing social and investor awareness of ESG issues. This is in contrast to the UAE, where voluntary disclosure is not widely practiced and has no significant impact on financial results. In Poland, transparency and compliance with regulations are becoming increasingly important for banks' long-term stability and reputation, and global European guidelines reinforce this transparency.

Most banks surveyed apply recognized reporting standards, such as GRI (Global Reporting Initiative) or Integrated Reporting standards. This allows for greater comparability of data between banks, although there are still some differences in the scope of presentation and detail of the presented data. Also, individual data presentation in individual years could be more consistent across all banks.

The non-financial reports of the banks surveyed have significant information potential, providing critical data on sustainable development, social responsibility and corporate governance.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



Although these reports are increasingly comparable thanks to the use of common standards, there are still some differences resulting from individual banks' priorities and strategies.

However, in many cases, banks are already reporting on adjusting the methodology for calculating individual indicators, which is a precursor of greater consistency and comparability in future periods.

About 70% of domestic banks in the UAE disclose information about their CSR activities. CSR information is moderately or obvious for most domestic banks, but the scope of the information presented is minimal (1–2 pages). Domestic/state-owned and conventional banks communicate their CSR more visibly and extensively than private and Islamic banks. Domestic/state-owned banks tend to follow the CSRC patterns observed in global banks [10]. In Poland, domestic and foreign banks are increasingly involved in disclosing information about their CSR activities, and the presented EU regulations also require the disclosure of detailed information on sustainability.

## 5. Conclusions and Recommendations

Based on the analysis of changes in ESG regulations, the experience of Polish banks in reporting ESG activities, and the study of the ESG reports of four commercial banks published in 2024 for 2023, Polish commercial banks are well prepared to introduce changes in reporting for the current financial year.

The analysis of the reports of banks BNP Paribas Bank Polska, ING Bank Śląski, Santander Bank Polska, and PKO Bank Polski shows significant preparations for the new ESG reporting rules. Each of the analyzed banks is taking several actions to adapt to future regulations and ensure the transparency and reliability of reported data.

BNP Paribas Bank Polska has published CSR reports since 2011 and integrated annual reports since 2019. Compliance with international reporting standards, such as GRI Standards 2021, Integrated Reporting Framework, and TCFD recommendations, and adaptation of reporting to the new ESRS regulations in force from 2025 are mainly evidence of this preparation.

At ING Bank Śląski, publishing integrated reports since 2016 is evidence of reporting experience, and updating the methodology for calculating ESG indicators according to GRI and EBA guidelines is a significant adjustment to the new reporting. The materiality assessment process involving internal and external stakeholders also demonstrates the application of the new approach to ESG.

At Santander Bank Polska, applying the international GRI standard, a comprehensive analysis of double materiality by the ESRS guidelines, introducing the green asset ratio (GAR), and analysing sustainable transactions are good examples of adaptation to the new rules.

At PKO Bank Polski, ESG risk has been integrated into the risk management strategy since 2021, and ESG assessment and classification processes have been introduced into credit processes. Using the PCAF methodology to assess greenhouse gas emissions is another example of this adaptation.

Polish commercial banks are taking extensive action to adapt to the new ESG reporting rules, which proves their high level of professionalism and responsibility. They attach great importance to compliance with international standards, transparency, and stakeholder engagement, allowing them to manage sustainable development issues and ESG reporting effectively. An additional confirmation of this professionalism is the introduction of external ESG attestation already in reporting for 2023.

The management of banks operating in Poland, when issuing non-financial ESG reports, is guided by several fundamental principles, which result from legal regulations and best practices in social responsibility and sustainable development. The first is compliance with legal regulations and adaptation to changes in regulations. The CSRD Directive will soon enter into force, and banks are prepared to implement it. In addition, banks use international ESG reporting standards, which help ensure reports' consistency, transparency, and comparability. Banks consider the expectations of various stakeholders (shareholders, customers, employees, regulators, and local communities) when creating ESG reports. This is crucial for understanding which environmental, social, and governance aspects are most important for their activities. ESG reports must be transparent, accurate, and based on reliable data. Bank management strives to ensure that the information in the reports is reliable and reflects the actual state of affairs. In ESG reports, banks analyze risks related to environmental, social,

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



and governance aspects, which is essential for assessing the long-term stability and responsibility of the bank.

These principles help banks meet regulatory requirements, build trust among stakeholders, and create added value through a responsible and sustainable approach to conducting business.

Non-financial ESG information reported by banks may differ depending on the country in which they operate. This results from differences in regulations, business practices, and the specific challenges and priorities of a given market. Current trends mean that reports of banks operating in the European Union will be more comparable by unifying reporting principles.

Non-financial ESG reports have significant information potential that can be used by various stakeholder groups, including investors, customers, employees, regulators, and local communities.

Comparability of ESG reports is one of the key challenges faced by both reporting banks and users of these reports. The information potential of non-financial ESG reports is large, especially in the context of risk assessment, transparency, and supporting investment decisions. However, their comparability remains a challenge due to differences in reporting standards, scope, and detail of reported data, applied indicators, and the impact of local regulations. Changes to regulations will significantly improve their comparability over time and across banks.

**Author Contributions:** Conceptualization, A.M-F; S.Ł.; J.K.B; methodology, A.M-F; S.Ł.; software, A.M-F; S.Ł.; validation, A.M-F; S.Ł.; J.K.B; formal analysis, A.M-F; S.Ł.; investigation, A.M-F; S.Ł.; resources, A.M-F; S.Ł.; data curation, S.Ł.; writing—original draft preparation, A.M-F; S.Ł.; writing—review and editing, A.M-F; S.Ł.; J.K.B.; visualization, A.M-F; S.Ł.; J.K.B.; supervision, A.M-F; S.Ł.; J.K.B. All authors have read and agreed to the published version of the manuscript.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** The article uses non-financial ESG information reported by banks—reference numbers [54-55; 56-57; 59-61; 64-65].

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References


1. Jeucken, M. Sustainable Finance and Banking: The Financial Sector and the Future of the Planet (1st ed.). Routledge, **2010,** https://doi.org/10.4324/9781849776264
2. Scholtens, B. Corporate Social Responsibility in the International Banking Industry," *Journal of Business Ethics,* **2009,** *86(2),* 159-17.
3. Zyznarska-Dworczak, B. Fijałkowska, J. Garsztka, P., Mamić Sačer, I., Mokošová, D., Săndulescu, M.S. Sustainability performance efficiency in the banking sector, *Economic Research-Ekonomska Istraživanja,* **2023,** 36(3), 2218473, doi: 10.1080/1331677X.2023.2218473.
4. Hawrysz, L. Social aspects of CSR reporting in Polish banks listed on the Warsaw stock exchange, 3rd International Multidisciplinary Scientific Conferences SGEM2016, Social Sciences & Arts Conference Proceedings, Bulgaria, **2016,** 587-594.
5. Gilan, S.l., Koch, A., Starks, L.T. Firms and social responsibility: A review of ESG and CSR research in corporate finance, *Journal of Corporate Finance*, **2021**, *66,* doi.org/10.1016/j.jcorpfin.2021.101889.
6. Sobhani, F.A.; Amran, A.; Zainuddin, Y. Sustainability Disclosure in Annual Reports and Websites: A Study of the Banking Industry in Bangladesh. *Journal of Cleaner Production,* **2012,** *23,* 75–85.
7. Nobanee, H., Ellili, N.O.D. Voluntary corporate governance disclosure and bank performance: evidence from an emerging market, *Corporate Governance,* **2022,** *22(4),* 702-719. https://doi.org/10.1108/CG-12-2020-0535 .
8. Ellili, N., Nobanee, H., Impact of economic, environmental, and corporate social responsibility reporting on financial performance of UAE banks. *Environment, Development and Sustainability***, 2023,** *25,* 1-17. doi: 10.1007/s10668-022-02225-6.
9. Menassa, E., Dagher, N. Determinants of corporate social responsibility disclosures of UAE national banks: a multi-perspective approach", *Social Responsibility Journal*, **2020,** *16(5),* 631-654. https://doi.org/10.1108/SRJ-09-2017-0191 .
10. Georgiadou, E., Nickerson, C. Exploring strategic CSR communication on UAE banks' corporate websites, *Corporate Communications: An International Journal*, **2020,** *25(3),* 413-428. https://doi.org/10.1108/CCIJ-02-2020-0044 .

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1




11. Abu Al-Haija, E., Kolsi, M.C., Kolsi, M.C.C. Corporate social responsibility in Islamic banks: to which extent does Abu Dhabi Islamic bank comply with the global reporting initiative standards?, *Journal of Islamic Accounting and Business Research*, **2021**, *12(8),* 1200-1223. https://doi.org/10.1108/JIABR-11-2020-0346 .
12. Matuszak-Flejszman, A., Łukaszewski, S., Budna, K. Reporting sustainable development in Polish commercial banks, *Engineering Management in Production and Services*, **2023**, *15(3),* 42-52, doi: 10.2478/emj-2023-0019.
13. Fijałkowska, J., Zyznarska-Dworczak, B. Sustainability reporting of Polish banks – a step towards greater accountability? *Entrepreneurship and Management*, **2018**, 19, 47-61.
14. Sardianou, E., Stauropoulou, A., Evangelinos, K., Nikolaou, I. A materiality analysis framework to assess sustainable development goals of banking sector through sustainability reports, *Sustainable Production and Consumption*, **2021,** 27, 1775-1793, https://doi.org/10.1016/j.spc.2021.04.020 .
15. Buallay, A., Fadel, S.M., Al-Ajmi, J.Y., Saudagaran, S. Sustainability reporting and performance of MENA banks: is there a trade-off? *Measuring Business Excellence*, **2020**, 24(2), 197-221. https://doi.org/10.1108/MBE-09-2018-0078
16. Khoury, R.E., Nasrallah, N., Alareeni, B. ESG and financial performance of banks in the MENAT region: concavity – convexity patterns, *Journal of Sustainable Finance and Investments*, **2021,** 13(1), 406-430, https://doi.org/10.1080/20430795.2021.1929807
17. Buallay, A., Marri, M.A., Nasrallah, N., Hamdan, A., Barone, E., Zureigat, Q. Sustainability reporting in banking and financial services sector: a regional analysis, *Journal of Sustainable Finance and Investments*, **2021,** 13(1), 776-801, https://doi.org/10.1080/20430795.2021.1978919 .
18. Maama, H. Achieving financial sustainability in Ghana's banking sector: Is Environmental, Social and Governance Reporting Contributive? *Global Business Review*, **2021,** https://doi.org/10.1177/09721509211044300 .
19. Gutiérrez-Ponce, H., Wibowo, S.A. Do sustainability activities affect the financial performance of banks? The Case of Indonesian Banks, *Sustainability*, **2023**, 15(8), 6892; https://doi.org/10.3390/su15086892 .
20. Halim, M.A., Lima, R.P., Islam, M.N. Sustainability reporting and bank performance in a developing country, International *Journal of Financial Engineering*, **2024,** 11(2), https://doi.org/10.1142/S242478632450004X .
21. Kartadjumena, E. & Rodgers, W. Executive Compensation, Sustainability, Climate, Environmental Concerns, and Company Financial Performance: Evidence from Indonesian Commercial Banks, *Sustainability*, **2019,** *11(6),* 1673; https://doi.org/10.3390/su11061673 .
22. Abukabar, L. & Handayani, T. Implementation of the Principles for Responsible Banking in Indonesian Banking Practices to Realize Sustainable Development Goals, Series: Advances in Social Science, Education and Humanities Research, Proceedings of the 3rd International Conference on Globalization of Law and Local Wisdom, **2019** (ICGLOW 2019), DOI: 10.2991/icglow-19.2019.26.
23. Amidjaya, P.G., Widagdo, A.K. Sustainability reporting in Indonesian listed banks: Do corporate governance, ownership structure and digital banking matter? *Journal of Applied Accounting Research*, **2020,** 21(2), 231-247. https://doi.org/10.1108/JAAR-09-2018-0149 .
24. Sumarta, N.H., Rahardjo, M., Satriya, K.K.T., Supriyono, E., Amidjaya, P.G. Bank ownership structure and reputation through sustainability reporting in Indonesia, *Social Responsibility Journal,* **2023,** 19(6), 989-1002, https://doi.org/10.1108/SRJ-01-2021-0024 .
25. Anis, I., Gani, L., Fauzi, H., Hermawan, A.A., Adhariani, D. The sustainability awareness of banking institutions in Indonesia, its implication on profitability by the mediating role of operational efficiency, *Asian Journal of Accounting Research,* **2023**, 8(4), 356-372. https://doi.org/10.1108/AJAR-06-2022-0179 .
26. Malini, H. Transparency and Accountability Contribution Toward Sustainability of Banking Sector in Indonesia, *Business Innovation and Entrepreneurship Journal,* **2021,** 3(4), 275-282, DOI:10.35899/biej.v3i4.337.
27. Matuszak, Ł., Różańska, E. An examination of the relationship between CSR disclosure and financial performance: The case of Polish banks, *Accounting and Information Management Systems,* **2017,** 16(4), 522-533, http://dx.doi.org/10.24818/jamis.2017.04005.
28. Murawski, T. Corporate Social Responsibility in Japanese Banking Sector, *Copernican Journal of Finance and Accounting*, **2016**, 5(2), 149-161, https://doi.org/10.12775/CJFA.2016.020 .
29. Zabawa, J. The significance of GRI (Global Reporting Initiative) standard in reporting of environmental information. The analysis of the Polish banking sector in the face of regulatory changes, *Copernican Journal of Finance and Accounting*, **2018,** 7(2), 111-125, https://doi.org/10.12775/CJFA.2018.012 (accessed on 18 June 2024).
30. Dhar, S. & Chowdhury, M.A.F. Impact of Environmental Accounting Reporting Practices on Financial Performance: Evidence from Banking Sector of Bangladesh, *International Journal of Asian Business and Information Management*, **2021,** 12(1), 24-42, doi:10.4018/IJABIM.20210101.oa2.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1




31. Care, R., Forgione, A.F. Assessing the Relationship Between Environmental Performance and Banks' Performance: Preliminary Evidence, *Socially Responsible Investments*, **2019,** 61-85, DOI:10.1007/978-3-030-05014-6_4.
32. Ryszakowska, B., Zabawa, J. The environmental responsibility of the World's largest banks, Economics and Business, 2018, 32, doi: https://doi.org/10.2478/eb-2018-0004.
33. Zabawa, J., Nosowski, A., Łosiewicz-Dniestrzańska, E. Bankowe raportowanie niefinansowe według standardu GRI - realizacja wymogów formalnych i potencjał informacyjny (Bank non-financial reporting according to the GRI standard - implementation of formal requirements and information potential), *Marketing i Rynek,* **2017,** 11, 733-744. (in Polish)
34. Avrampou, A., Skouloudis, A., Iliopoulos, G., Khan, N. Advancing the Sustainable Development Goals: Evidence from leading European banks, *Sustainable Development*, **2019,** 27(4), 743-757, https://doi.org/10.1002/sd.1938 .
35. Gunawan, J., Permatasari, P., Sharma, U. Exploring sustainability and green banking disclosures: a study of banking sector. *Environ Dev Sustain*, **2022,** 24, 11153–11194 https://doi.org/10.1007/s10668-021-01901-3.
36. Jan, A.A., Lai, F-W., Asif, M., Akhtar, S., Ullah, S. Embedding sustainability into bank strategy: implications for sustainable development goals reporting, *International Journal of Sustainable Development & World Ecology*, **2022,** 30(3), 229-243, https://doi.org/10.1080/13504509.2022.2134230 .
37. Lima R.M., Souza, I., Pereira, E., Belém, A.C., Pinto, C.M., Lazzaris, J., Fonseca, P. Characterising project management of lean initiatives in industrial companies – crossing perspectives based on case studies, *Engineering Management in Production and Services*, **2023,** 15(1), 57-72. doi: 10.2478/emj-2023-0005.
38. Monteiro M., Rosa, A., Martins, A., Jayantilal, S. Grounded theory – an Illustrative in the Portuguese footwear industry, *Administrative Science,* **2023,** 13(2), 59. doi: 10.3390/ admsci13020059.
39. Rashid A., Warraich M. A., Sabir S. S., Waseem, A. Case study method: A step-by-step guide for business researchers, *International Journal of Qualitative Method*s, **2019,**18, 1-13. doi: 10.1177/1609406919862424.
40. Voss C., Tsikriktsis, N., Frohlich, M. Case research in operations management. *International Journal of Operations & Production Management*, **2002**, 22(2), 195-219. doi: 10.1108/01443570210414329.
41. Berniak-Woźny, J., Wójcik-Jurkiewicz, M. The Impact of the NFI Directive on the Scope and Quality of Financial Institutions' CSR Reporting – the Case of the Polish Banking Sector, *WSEAS Transactions on Business and Economics*, **2021,** 18, 780-793, doi:10.37394/23207.2021.18.74.
42. Informacja na temat sytuacji sektora bankowego w 2022 roku (Information on the situation of the banking sector in 2022), UKNF, **2023.** (in Polish).
43. Dane finansowe sektora bankowego, NBP (Financial data of the banking sector, NBP), **2024,** https://static.nbp.pl/dane/sektor-bankowy/dane_sektora_bankowego.xlsx (accessed on 3 August 2024), (in Polish)
44. GUS podaje wartość sumy bilansowej banków w Polsce na koniec 2023 roku (The Central Statistical Office provides the value of the balance sheet total of banks in Poland at the end of 2023), **2024,** https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultaktualnosci/5503/5/28/1/wyniki_finansowe_bankow_w_2023_r.pdf (accessed on 3 August 2024), (in Polish).
45. Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (accessed on 3 August 2024).
46. Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (accessed on 3 August 2024).
47. Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards (accessed on 3 August 2024).
48. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (Text with EEA relevance) (accessed on 20 June 2024).
49. Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (Text with EEA relevance) (accessed on 20 June 2024).
50. Kosztowniak, A. Zrównoważone strategie rozwoju i konkurencyjności w sektorach bankowych krajów Unii Europejskiej. *Studia i Prace. Kolegium zarządzania i finansów*, **2024,** 197, SGH, Warszawa, doi: https://doi.org/10.33119/SIP.2024.197.10 (in Polish)
51. Różańska, E., Matuszak, Ł. Polityka rachunkowości w zakresie ujawnień dotyczących zrównoważonego rozwoju. W: M. Remlein i M. Masztalerz (red.), Polityka rachunkowości w

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1



kształtowaniu obrazu jednostki gospodarczej, **2024,**106–119. Wyd. Uniwersytet Ekonomiczny w Poznaniu, https://doi.org/10.18559/978-83-8211-219-1/7 (in Polish).

52. Uzasadnienie wniosku dotyczącego Dyrektywy Parlamentu Europejskiego i Rady w sprawie należytej staranności przedsiębiorstw w zakresie zrównoważonego rozwoju oraz zmieniająca dyrektywę (UE) 2019/1937 (*Justification of the proposal for a Directive of the European Parliament and of the Council on corporate due diligence for sustainable development and amending Directive (EU) 2019/1937*), https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A52022PC0071 (accessed on 18 June 2024), (in Polish).
53. Proposal for a Directive Of The European Parliament And Of The Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0071 (accessed on 3 August 2024).
54. Raporty CSR od 2011 r., a od 2019 r. - zintegrowane roczne raporty Grupy Kapitałowej BNP Paribas Bank Polska S.A. https://www.bnpparibas.pl/csr/raporty-csr (in Polish).
55. Sprawozdanie Zarządu z działalności Grupy kapitałowej BNP Paribas Bank Polska w 2023 roku, (Management Board Report on the Operations of the BNP Paribas Bank Polska in 2023), 2024, https://www.bnpparibas.pl/_fileserver/item/1544169 (accessed on 18 June 2024).
56. Global Reporting Initiative – GRI Standards **2021,** https://www.globalreporting.org/standards/ (accessed on 3 August 2024).
57. ING, Annual report, **2024,** https://www.ing.com/Investors/Financial-performance/Annual-reports/2023/2023-ING-Groep-N.V.-annual-report.htm (accessed on 3 August 2024).
58. The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, https://ghgprotocol.org/ (accessed on 18 June 2024).
59. Sprawozdanie Zarządu z działalności Grupy kapitałowej ING Banku Śląskiego w 2023 roku, (*Management Board Report on the Operations of the ING Bank Śląski Capital Group in 2023*), **2024,** https://www.ing.pl/_fileserver/item/nyw9zkg (accessed on 18 June 2024), (in Polish).
60. Raport ESG 2023 Grupy Kapitałowe Santander Bank Polska (ESG Report 2023 Santander Bank Polska Capital Groups), **2024,** https://esg.santander.pl/2023/wp-content/uploads/sites/17/2024/06/RaportESG2023_PL.pdf (accessed on 18 June 2024), (in Polish).
61. Report ESG **2021**, https://esg.santander.pl/2021/ (accessed on 18 June 2024).
62. Wytyczne do raportowania ESG – Przewodnik dla spółek (ESG Reporting Guidelines – A Guide for Companies), 2023, https://www.gpw.pl/pub/GPW/ESG/Wytyczne_do_raportowania_ESG.pdf (accessed on 18 June 2024).
63. Santander Home Page, Strategia i model biznesowy Banku, Available online: https://esg.santander.pl/2022/o-banku/strategia-i-model-biznesowy-banku/2022, (accessed on 18 Jne 2024).
64. Strategia PKO Banku Polskiego na lata 2023-2025, (PKO Bank Polski Strategy for 2023-2025) https://www.pkobp.pl/o-banku/odpowiedzialna-dzialalnosc/nasza-strategia, (accessed on 18 June 2024), (in Polish).
65. Podsumowanie ujawnień ESG w 2023 roku (Summary of ESG disclosures in 2023), https://www.pkobp.pl/relacje-inwestorskie/esg-w-grupie-pko-banku-polskiego/podsumowanie-ujawnien-esg/ (accessed on 18 June 2024), (in Polish).
66. Jednostkowe sprawozdanie finansowe PKO Banku Polskiego S.A. za rok zakończony 31 grudnia 2023 roku (Separate Financial Statements of PKO Bank Polski S.A. for the year ended 31 December 2023), 2024, https://raportroczny2023.pkobp.pl/, (accessed on 18 June 2024).
67. Raile A., Graham Austin C., Bratton, V.K. Can We Talk About Strategic Compensation Practices? An Exploratory Study on Framing Gender Pay Inequity. *Business and Politics,* **2023** , 25(1):1-17, doi: https://doi.org/10.1017/bap.2022.21 (accessed on 26 August 2024).
68. EU Directive 2022/2381 of **23 November 2022**, 2022, https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A32022L2381 (accessed on 26 August 2024)
69. EU Directive 2023/970 of **10 May 2023** https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A32023L0970 (accessed on 26 August 2024).
70. Farrugia, M., Borg, A, Thake, A.M. Investigating the gender pay gap in the Maltese financial and insurance sector: a macro and micro approach. *Equality, Diversity and Inclusion,* **2024,** 43(1), https://doi.org/10.1108/EDI-02-2022-0038, (accessed on 26 August 2024).
71. Copeland, P., Elomäki, A., Gaweda, B. Filtering politicisation towards a more social Europe? The European Parliament and EU social legislation. *Journal of European Public Policy*, **2024,** 1–25. https://doi.org/10.1080/13501763.2024.2345840 .
72. Østerud K.L., Vedeler J.S. Disability and Regulatory Approaches to Employer Engagement: Cross-National Challenges in Bridging the Gap between Motivation and Hiring Practice. *Social Policy and Society*. 2024, 23(1):124-140, doi: https://doi.org/10.1017/S1474746422000021, (accessed on 26 August 2024).

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 6 September 2024 doi:10.20944/preprints202409.0486.v1




73. Wieczorek-Szymańska, A. Działania na rzecz osób z niepełnosprawnościami jako element zarządzania różnorodnością – przegląd praktyk na przykładzie największych banków komercyjnych w Polsce. *Zarządzanie Zasobami Ludzkimi*, 2023, 152-153(3-4): 85-107. DOI: 10.5604/01.3001.0053.8935 (in Polish).
74. ING BSK's Directions of Action in the Area of Emission Reduction, 2023, https://esg.ing.pl/_fileserver/item/p18dsrd, (accessed on 26 August 2024).
75. PKO Bank Polski included ESG indicators in non-financial goals, https://media.pkobp.pl/148960-pko-bank-polski-uwzglednil-wskazniki-esg-w-celach-niefinansowych, 2021, (accessed on 26 August 2024).
76. Jasiuk, E., Czerwiński, M. Znaczenie raportowania zrównoważonego w zapewnieniu bezpieczeństwa ekologicznego. Veritas Iuris, **2023,** 2, 99-112, https://veritasiuris.lazarski.pl/fileadmin/user_upload/user_upload/VeritasIuris-2-2023_book-22-4-24.pdf, (accessed on 28 August 2024). (in Polish)
77. Błaszczak A. Rzetelne raporty ESG to podstawa zrównoważonego rozwoju, Rzeczpospolita, https://www.rp.pl/biznes-odpowiedzialny-w-polsce/art38185511-rzetelne-raporty-esg-to-podstawa-zrownowazonego-rozwoju, (accessed on 28 August 2024). (in Polish)
78. Trocka M. Reporting information related to the climate on the example of banks. Ruch Prawniczy, Ekonomiczny i Socjologiczny, **2023,** 2, 201-219. https://doi.org/10.14746/rpeis.2023.85.2.15 (in Polish).
79. Brajer-Marczak R., Kalinowski T.B., Bitkowska A. Green BPM jako koncepcja realizacji założeń ESG w sektorze fnansowo-ubezpieczeniowym. *Studia i Prace Kolegium Zarządzania i Finansów 196*, **2024**. https://bibliotekanauki.pl/articles/31804123.pdf, (accessed on 28 August 2024). (in Polish)
80. Kulińska-Sadłocha E. W jaki sposób banki mogą wspierać transformację gospodarki w kierunku modelu zrównoważonego? Ed. Uniwersytet Łódzki, **2022,** 312-331. https://dspace.uni.lodz.pl/bitstream/handle/11089/43850/17-Kulinska_Sad%c5%82ocha%20311_331.pdf?sequence=1&isAllowed=y, accessed on 28 August 2024]. (in Polish)
81. Matuszak-Flejszman A., Łukaszewski S. Development of the functionality of mobile applications in crisis situations: the case of Polish commercial banks, *Zeszyty Naukowe. Organizacja i Zarządzanie / Politechnika Śląska,* **2022,** 162, 435–452. http://dx.doi.org/10.29119/1641-3466.2022.162.24.
82. Annual Report **2023,** Banco Santander, https://www.santander.com/content/dam/santander-com/en/documentos/informacion-sobre-resultados-semestrales-y-anuales-suministrada-a-la-sec/2024/sec-2023-annual-20-f-2023-en.pdf (accessed on 18 June 2024).
83. ESG. Towards a more sustainable world, **2024,** https://www.santander.com/content/dam/santander-com/en/documentos/esg-presentation/2024/do-esg-presentation-1q-24-en.pdf (accessed on 18 June 2024).
84. BNP PARIBAS CSR Strategy, **2024**, https://invest.bnpparibas/en/document/bnp-paribas-csr-strategy-may-**2024** (accessed on 30 July 2024).
85. Green Finances in Poland 2024, ed. Kotecki L., 2024, https://ungc.org.pl/wp-content/uploads/2024/06/Zielone_finanse_w_Polsce_2024.pdf, (accessed on 26 August 2024)
86. Environmental, Social, and Governance (ESG) Principles in the Banking Sector. De-velopment, Integration, and Risk Management Strategies: a case study of a Finnish banks' approach to ESG Framework. Abramova, Anna (2024) https://www.theseus.fi/bitstream/handle/10024/865089/Abramova_Anna.pdf?sequence=2&isAllowed=y, accessed on 26 August 2024)
87. Chiaramonte, L., Dreassi, A., Girardone, C., Piserà, S. Do ESG strategies enhance bank stability during financial turmoil? Evidence from Europe. European Journal of Finance, **2022,** 281(12) :1173-1211, https://doi.org/10.1080/1351847X.2021.1964556,
88. Korzeb, Z., Samaniego-Medina, R. Sustainability Performance. A Comparative Analysis in the Polish Banking Sector, *Sustainability,* **2019,** 11(3), 653; https://doi.org/10.3390/su11030653.


**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.