

## Article

# Sustainability Reporting during the Crisis—What Was Disclosed by Companies in Response to the COVID-19 Pandemic Based on Evidence from Poland

Agnieszka Janik  and Adam Ryszko \* 

Faculty of Organization and Management, Silesian University of Technology, 41-800 Zabrze, Poland; agnieszka.janik@polsl.pl

\* Correspondence: adam.ryszko@polsl.pl

**Abstract:** This study presents the results of sustainability reporting investigations in the context of the COVID-19 pandemic. It is based on a content analysis of 297 reports published by 161 companies operating in Poland in the 2020–2021 period. This study covers specific disclosures on the impact of the pandemic on economic conditions and business activity of companies, corporate environmental performance, the safety and well-being of employees, and companies' community and stakeholder engagement. Moreover, an analysis is conducted of disclosures on changes in business strategies and environmental activities undertaken to respond to the pandemic, initiatives improving the safety and well-being of employees, and companies' social involvement during the COVID-19 crisis. Our study demonstrates that ensuring the safety and well-being of employees was the highest priority in the analyzed sustainability reports. Furthermore, the investigated companies exerted considerable efforts to harmonize adverse economic challenges created by the pandemic with altruistic actions manifested in active and wide-ranging social involvement addressed to local communities and primary stakeholders during the period under analysis. We believe that our study offers intriguing insights into disclosures on sustainability issues during the COVID-19 pandemic and addresses the call for research on the sustainability initiatives that emerged during that time to help companies remain resilient and sustainable.



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**Keywords:** sustainability reporting; non-financial reporting; COVID-19; pandemic; Poland

## 1. Introduction

The COVID-19 outbreak caused an unprecedented global crisis and its impact on the economy and society around the world was devastating [1,2]. It started on 17 November 2019 in Wuhan, China. The first cases of SARS-CoV-2 infection in Europe were reported on 24 January 2020, and the first infection in Poland was confirmed on 4 March 2020. The World Health Organization began referring to COVID-19 as a global pandemic on 11 March 2020 [3].

The COVID-19 pandemic disrupted the global economy and brought many companies to the edge of survival due to lockdowns, an unprecedented increase in business risks, and disruption of supply chains [4–9]. With lockdowns and recommendations to work remotely, the pandemic caused numerous changes affecting day-to-day operation of companies [10]. This required, inter alia, accelerated digitalization of business processes [11,12], application of smart technologies and IT tools [13,14], higher operating flexibility [15], implementation of lean omnichannel strategies [16], and a more collaborative business approach [17].

The destructive effect of the COVID-19 pandemic on the performance of enterprises varied depending on country-specific factors [18–20]. Almustafa et al. [21] suggested that one of the most crucial issues affecting the scope of the negative impact of the pandemic on the operation of firms was the quality of national governance. However, it is worth noting that for some sectors the effects of the pandemic turned out to be positive. In

particular, this concerned the e-commerce market, which expanded its scope, segments and range of offered products [22]. Working from home was perceived as attractive for some small businesses, but specific effects varied across different sectors [23]. In addition, it was suggested that Italian listed family firms demonstrated better market performance and operating profitability than others [24].

During the pandemic, companies were mainly focused on short-term decisions and economic issues, but the crisis also led to the development of new business routines and sustainability practices [25]. Carroll [26] suggested that the COVID-19 pandemic had put corporate social responsibility (CSR) to the test, and companies could reset CSR thinking and environmental, social, and governance (ESG) initiatives to respond to the crisis adequately. In fact, the COVID-19 pandemic has caused a remarkable change in companies' sustainability performance and sustainability reporting practices [27]. However, research that has comprehensively examined these issues is still scarce. Therefore, the purpose of this paper is to present the findings of a comprehensive content analysis of sustainability reports, aimed at identifying the scope and specificity of information disclosed by companies in the context of the COVID-19 pandemic.

The remainder of this paper is organized as follows. The results of the literature review are presented in Section 2. Section 3 describes details of the research methodology. The research results and discussion are presented in Section 4. Finally, Section 5 summarizes this study, presenting relevant conclusions and indicating the study limitations.

## 2. Literature Review

The growing awareness of entrepreneurs as to the financial consequences of threats that may appear unexpectedly (such as the global financial crisis or the COVID-19 pandemic) or long-term threats which may affect the economy, environment and society (such as climate change or biodiversity loss) causes a constant increase in demand for disclosure of information about companies' approach to sustainability. Thus, sustainability reporting plays an increasingly important role in identifying and disclosing sustainability-related opportunities and risks, i.e., uncertain environmental, social or governance events or conditions that, if they occur, may have potentially significant positive (opportunities) or negative (risks) impacts on the business model, the company's strategy and its ability to achieve its goals, affecting decisions made with regard to sustainability matters [28].

The term sustainability is often used in different senses. Literally, it means the ability to maintain a certain unit, result or process over time [29]. However, it is much more often used in the context of striving to improve and maintain a healthy economic, ecological and social system for human development [30]. Sustainability is also seen as a dynamic balance in the process of interaction between the population and the carrying capacity of the environment, in which the population develops to express its full potential without causing irreversible negative effects on the carrying capacity of the environment on which it depends [31].

The concept of sustainability is considered synonymous with the concept of sustainable development [32,33], defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' [34]. However, it should be noted that not everyone agrees with this assumption, claiming that sustainability is the goal or end point of a process called sustainable development [35,36]. These two concepts combine the three interconnected domains of sustainability—social, economic and environmental—and the need to integrate them for sustainable development [29].

Sustainability reporting constitutes a key platform for communicating economic, environmental and social impacts and performance of organizations. It covers reporting information related to sustainability matters including environmental, social and human rights, and governance factors [37]. It can be considered as synonymous with other non-financial reporting terms such as CSR reporting, ESG reporting, or triple bottom line reporting [38]. So far, there is no universally accepted standard for sustainability reporting—over 600 worldwide frameworks, requirements or recommendations are avail-

able in this area [39]. The most widely known guidelines include: the GRI Sustainability Reporting Standards [40], the UN Global Compact (Communication on Progress) [41], and the SASB Standards [42]. However, the GRI Standards seem to be the most trusted and widely used all around the world.

Considering the legal frameworks of sustainability reporting within the European Union, it is worth noting the Non-Financial Reporting Directive (NFRD), which imposed an obligation on public-interest entities exceeding 500 employees to disclose in the yearly management report a non-financial statement containing information on environmental, social and employee-related matters, respect for human rights, as well as anti-corruption and bribery issues [43], the Sustainable Finance Disclosure Regulation (SFDR), specifying sustainability-related disclosure rules for the sector of financial services [44], and the Corporate Sustainability Reporting Directive (CSRD), which strengthened the rules concerning sustainability information and expanded the number of companies obliged to report on sustainability after 2024 [37].

Recent studies demonstrated that the COVID-19 pandemic affected ESG investments [4] and intensified Sustainable Development Goals (SDGs) efforts [45]. Moreover, Yadav et al. [46] noticed an evolution of CEOs' SDG orientation from economic issues in the pre-pandemic period to social and environmental issues during the COVID-19 pandemic. Aguinis et al. [47] emphasized the critical role of individual employees in a successful response to COVID-19 through taking sufficient CSR initiatives. Furthermore, El Khoury et al. [48] indicated that the ESG performance contributed to the financial performance of firms during the pandemic. However, the effects depended on the level and specific pillar of the ESG efforts. The research carried out by Huang et al. [49] suggested that better CSR performance improved organizational resilience of firms to recover from the crisis caused by COVID-19. Cardillo et al. [50] indicated that higher ESG scores of European firms were related to better performance during the COVID-19 crisis. In this line, Bose et al. [51] indicated that the negative effect of the pandemic on the firm value was smaller for companies with better sustainability performance. In addition, Yoo et al. [52] and Qiu et al. [53] demonstrated that better ESG performance and engagement in CSR activities led to higher stock returns and lower volatility during the pandemic. However, Bae et al. [54] found no evidence that CSR affected stock returns during the COVID-19 crisis, and the research performed by Demers et al. [55] suggested that ESG efforts did not immunize stocks during that time.

Sustainability reporting has become a strategic tool to show stakeholders how companies respond to sustainability issues during a crisis period [56–58]. There are several studies dedicated specifically to sustainable reporting in the context of the COVID-19 pandemic. Krivačić and Janković [59] compared the information on environmental and social responsibility published by Croatian firms before and during the COVID-19 pandemic. Schwartz and Kay [60] analyzed various media sources to identify examples of CSR activity related to COVID-19. MacGregor-Pelikánová et al. [61] investigated new trends in CSR reporting caused by COVID-19 pandemic in international luxury fashion businesses. Zyznarska-Dworczak and Rudžionienė [62] explored the COVID-19-related risk disclosures in the financial and non-financial reports published by the largest electricity companies in Central and Eastern European countries.

The research conducted by Brand et al. [63] revealed that during the COVID-19 pandemic, the top 10 Swiss and German companies had expanded CSR reporting in all sustainability dimensions. An investigation of web-based sustainability reporting of universities in Italy during the COVID-19 pandemic showed strong commitment to the disclosure of social issues [64]. Based on the analysis of CSR actions released on Spanish firms' websites, García-Sánchez and García-Sánchez [65] indicated the CSR strategies implemented to accommodate the COVID-19 crisis, which formed the basis for establishing three responsibility clusters: (1) protecting the interests of shareholders and investors; (2) favoring the well-being of the society and vulnerable groups, and (3) combining altruistic actions with commercial interests. Another study demonstrated that the quality of sustainability

reporting in US financial institutions during COVID-19 was higher compared to the pre-pandemic period [66], and the COVID-related CSR information was improved in annual reports published by firms in India as the pandemic progressed [67]. In addition, Albitar et al. [68] suggested that the external assurance of CSR reports had a positive effect on the disclosure of COVID-19 information in these reports.

Furthermore, it was found that there was a positive association between COVID-19-related information and performance disclosure in annual reports of UK non-financial firms [69]. Poursoleyman et al. [70] observed that prior CSR reporting experience buffered companies from negative effects when the market was exposed to the COVID-19 crisis. In addition, Phang et al. [71] suggested that firms disclosing sustainability practices had remained more resilient during the COVID-19 pandemic, and Hoang et al. [72] indicated that the quantity of ESG data reported by UK firms could mitigate the negative impact of the COVID-19 pandemic on stock performance volatility. In this line, a study by Giannopoulos et al. [73] demonstrated a strong association between disclosed ESG activities and financial performance of Norwegian listed companies.

Relatively few studies have investigated the specificity of information disclosed in sustainability reports in the context of the COVID-19 pandemic so far. In addition, most of them were mainly focused on counting the number of relevant sentences related to the pandemic. For this reason, to address the identified research gap, this paper presents the findings of a comprehensive content analysis of sustainability reports, aimed at identifying the scope and specificity of information disclosed by companies in the context of the COVID-19 pandemic. It was based on reports published by the companies operating in Poland in the 2020–2021 period. To the best of our knowledge, such studies have not been performed to date. Taking into account the specificity of the pandemic, and dimensions of the sustainability concept combining social, environmental and economic issues, our study was intended to address the following research questions:

- Whether and in what context information on the COVID-19 pandemic was disclosed in the letters from the top management?
- Whether in the analyzed reports there were separate sections/chapters dedicated exclusively to issues related to the pandemic and, if so, what they covered?
- Whether and how the impact of the pandemic on the economic conditions and business activity of companies was described and whether specific changes were disclosed in the business strategies to respond to the pandemic?
- Whether and how the impact of the pandemic on companies' environmental performance was described and whether any environmental activities to respond to the pandemic were disclosed?
- Whether and how the impact of the pandemic on the safety and well-being of employees was described and whether any activities to improve it were disclosed?
- Whether and how the impact of the pandemic on the companies' community and stakeholder engagement was described and whether any activities in this area were disclosed that addressed issues related to the pandemic?

### 3. Materials and Methods

Our analysis was intended to determine whether and how information on the COVID-19 pandemic was disclosed in the sustainability reports published by companies operating in Poland.

The research was divided into the following phases:

Phase 1: Study design,

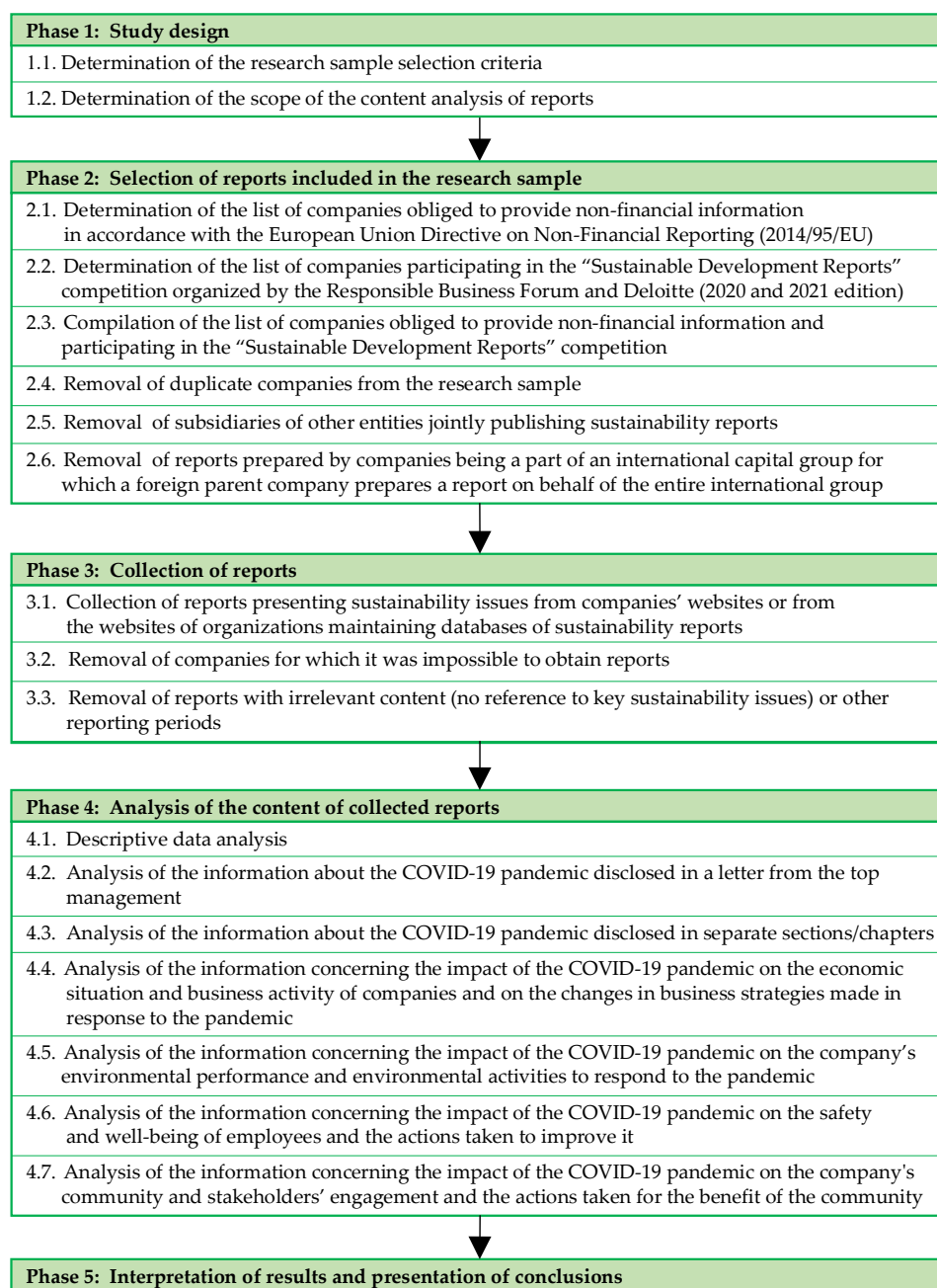
Phase 2: Selection of reports included in the research sample,

Phase 3: Collection of reports,

Phase 4: Analysis of the content of collected reports, and

Phase 5: Interpretation of results and presentation of conclusions.

The details of the phases of the research methodology applied in this study are presented in Figure 1.



**Figure 1.** Research methodology.

### 3.1. Study Design

The aim of Phase 1 was to define the criteria for the selection of reports included in the research sample and to determine the scope of the analysis to be carried out in subsequent phases of this study. It was assumed that the research sample would consist of sustainability reports published by companies which are obliged to disclose them in accordance with the Non-Financial Reporting Directive (NFRD) [43] or the Sustainable Finance Disclosure Regulation (SFDR) [44]. It was also decided to include the sustainability reports voluntarily prepared by companies in the research sample to compare whether and what the difference was in disclosing information on the COVID-19 pandemic in the situation of having an obligation to report sustainability issues and not having such an obligation.

Due to the fact that the applicable legal regulations did not indicate the type of report in which enterprises voluntarily or obligatorily present their approach to sustainability, the research sample was not limited to one specific type of report, but included Non-financial



Statements constituting a separate part of the report on the activities of the management board; Non-financial Reports constituting a separate report; Sustainability Reports; CSR Reports; and ESG Reports. It was also decided to include integrated reports in the research sample due to the fact that companies can also choose this type of report for the presentation of non-financial information disclosed on a mandatory basis.

In the next step, it was assumed that the research sample would be limited to reports published by companies operating in a selected country. This choice resulted from the fact that each country could independently set more rigorous requirements for mandatory reporting of non-financial information in accordance with the NFRD, and therefore different groups of companies could be obliged to disclose such information. Poland was chosen because it is one of the countries strongly affected by the COVID-19 pandemic and many Polish companies reporting sustainability issues felt negative but sometimes also positive effects of its occurrence.

It was indicated that the analysis would cover reports presenting information for 2020 and 2021, as that was the period when companies were most affected by the effects of the COVID-19 pandemic. Consequently, disclosures related to the pandemic were most expected in the reports for those years.

It was further assumed that the reports available in English or Polish would be obtained in the PDF format or in the online version from the website of the company preparing the report or from the websites of organizations maintaining databases of sustainability reports.

As part of Phase 1, the scope of the content analysis was also determined to indicate information on how the COVID-19 pandemic had affected the operation of companies and their approach to sustainability issues during the pandemic. First of all, it was assumed that references to the impact of the COVID-19 pandemic on the functioning of companies could appear in the letters of the management board, as well as in separate sections/chapters describing the effects of the COVID-19 pandemic on the companies and the actions taken by them to respond to it. In addition, it was assumed that the COVID-19 pandemic could undoubtedly have an impact on the companies' strategy, economic conditions and business activities. It could also affect the safety and the well-being of employees, and change the company's environmental impact and environmental performance. Another area where significant changes caused by the COVID-19 pandemic may have occurred is the area of social engagement, including activities dedicated to different stakeholders and involvement in social initiatives.

### 3.2. Selection of Reports Included in the Research Sample

The first group of reports included in the research sample is made of sustainability reports which are obligatorily prepared by public interest entities operating in Poland, i.e., large companies listed on the stock exchange, banks, insurance companies and other companies specified by the national authorities as public-interest entities, whose average annual employment exceeds 500 people (full-time equivalents) and which meet one of the following two financial conditions: the balance sheet total is above 20 million EUR or the net revenue exceeds 40 million EUR. The list of such companies was obtained from the website of the Instrat Foundation, which prepared it at the request of the Working Group for Sustainable Finance operating at the Polish Ministry of Finance. The list is available from the website: <https://esg.instrat.pl/csrd-csdd/> (accessed on 4 January 2023) It included 150 listed companies or capital groups which, in accordance with the guidelines of the NFRD and SFDR, were obliged to report non-financial information.

The second group of reports included in the research sample are those prepared by companies voluntarily to inform employees, customers, members of the local community and investors about undertaken sustainable efforts. Such reports are collected by various organizations, mostly non-profit ones, in order to present good practices followed by enterprises in the pursuit of sustainable development. One of such organizations is the Responsible Business Forum (in Polish: *Forum Odpowiedzialnego Biznesu*—FOB), which,

together with Deloitte, organizes the annual Sustainable Development Reports competition. The aim of the competition is to raise the awareness and quality of non-financial reporting and to select the best sustainability reports. Due to the fact that the FOB is the most recognized organization in Poland working to popularize sustainability issues and cooperating with companies considered as leaders in the implementation of this concept [74], it was decided that the reports submitted to the competition organized by the FOB in the 2020 and 2021 edition would be included in the research sample. The list of the companies participating in the competition was prepared based on the data available from the competition website (<https://raporty2r.pl/biblioteka-raportow/> (accessed on 4 January 2023)). The list included 73 companies.

In the next step, both lists were combined giving 223 enterprises in total. Then, the companies that duplicated each other (due to the fact that they were required to report non-financial data and that their reports were submitted to the FOB competition) were removed from the list. As a result, 25 companies were removed from the research sample. In addition, it was decided that entities for which the parent company was a foreign company that prepared a report on behalf of the entire international group (8 such cases) and enterprises that were part of a capital group that prepared a separate report for the entire group, which were already entered on the list (3 such cases), would be removed from the sample.

Taking into account all the exclusion criteria described above, ultimately 187 enterprises remained in the research sample.

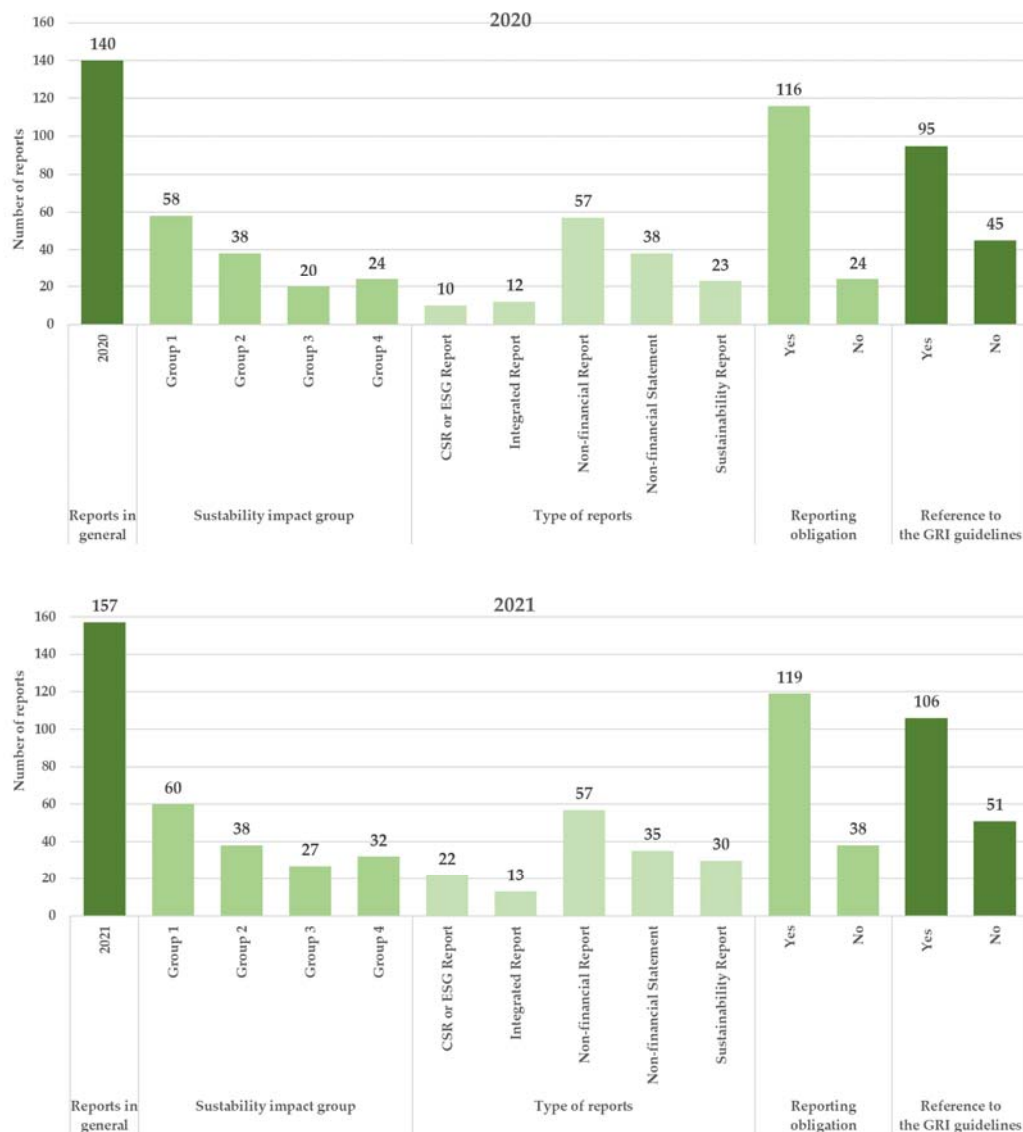
### 3.3. Collection of Reports

The collection of reports from companies included in the research sample took place at the turn of January and February 2023. In order to find reports for each of the companies in the research sample, the websites of each of them were searched for the availability of sustainability reports for 2020 and 2021 in the PDF format or online. In the absence of a report on the company's website, reports on the websites of organizations collecting reports on sustainability issues were searched. As a result, it was possible to obtain sustainability reports for 166 companies included in the research sample, while for 21 companies it was not possible. After an initial review of the reports, it was found that reports prepared by 5 companies should be additionally removed from the research sample because they covered a longer reporting period (5 years) or did not contain references to key sustainability issues (although the name of the report suggested that such issues would be included in the report). Ultimately, 161 companies remained in the research sample, 75% of which are required to report on sustainability issues and 25% do so voluntarily. Among the companies included in the research sample, 38.5% operate in sectors that, according to the GRI methodology, represent Group 1 of sustainable impact, i.e., sectors producing and supplying basic materials and needs (such as exploration, production, refining and marketing of oil and gas products, mineral extraction, food and beverage production, textiles, energy generation, but also life insurance companies and commercial banks), 24% belong to Group 2—Industrial (e.g., companies operating in sectors classified as heavy industry and operating in the automotive industry), 17.5% are enterprises included in Group 3—Transport, infrastructure and tourism (e.g., telecommunications operators, media companies, real estate developers, transport infrastructure and mode operators and hotel management companies), while almost 20% are enterprises from Group 4—Other services and light manufacturing (e.g., enterprises operating in the light industry, as well as enterprises providing education, health, security and all repair services except automotive, and restaurants, catering services and non-governmental organizations) [75].

Considering the report type, companies most often disclosed sustainability issues in Non-financial Reports and Non-financial Statements. The most common reports voluntarily prepared by companies were Sustainability Reports.

Reports for 2020 and 2021 were collected for 136 enterprises, while for 25 enterprises it was possible to collect a report for only one year (2020 or 2021). In total, the research

sample included 297 reports—140 reports for 2020 and 157 reports for 2021. The main characteristics of the research sample are shown in Figure 2, and in Table A1 in Appendix A.



**Figure 2.** Research sample characteristics.

### 3.4. Analysis of the Content of Collected Reports

The content of the collected reports was analyzed to identify whether and where in the sustainability report and in relation to which issues the companies disclosed information on the COVID-19 pandemic. The content analysis method was chosen because this is a method for collecting systematic, objective and repeatable information contained in the analyzed set of texts, and then interpreting the information to draw conclusions. An Excel file was used to collect the data describing the disclosure of information about the COVID-19 pandemic in the sustainability reports. To facilitate the interpretation of the obtained information and to perform its quantitative analysis, we decided to codify the data identified in the content analysis into categorical variables using: value 1—when the company disclosed information about the COVID-19 pandemic in a given area of the report; value 0—when the company did not disclose information about the COVID-19 pandemic in a given area of the report; and n/a—when the report for the given year was not obtained.



Based on these data, a descriptive analysis was performed to determine the main issues that companies most frequently disclosed about the COVID-19 pandemic. In the next step, a detailed qualitative analysis of specific information on the COVID-19 pandemic disclosed by individual companies included in the research sample was performed within the scope determined in the first phase of this study.

The final phase of this study included interpretation of the results as well as presentation and discussion of the main findings.

#### 4. Results and Discussion

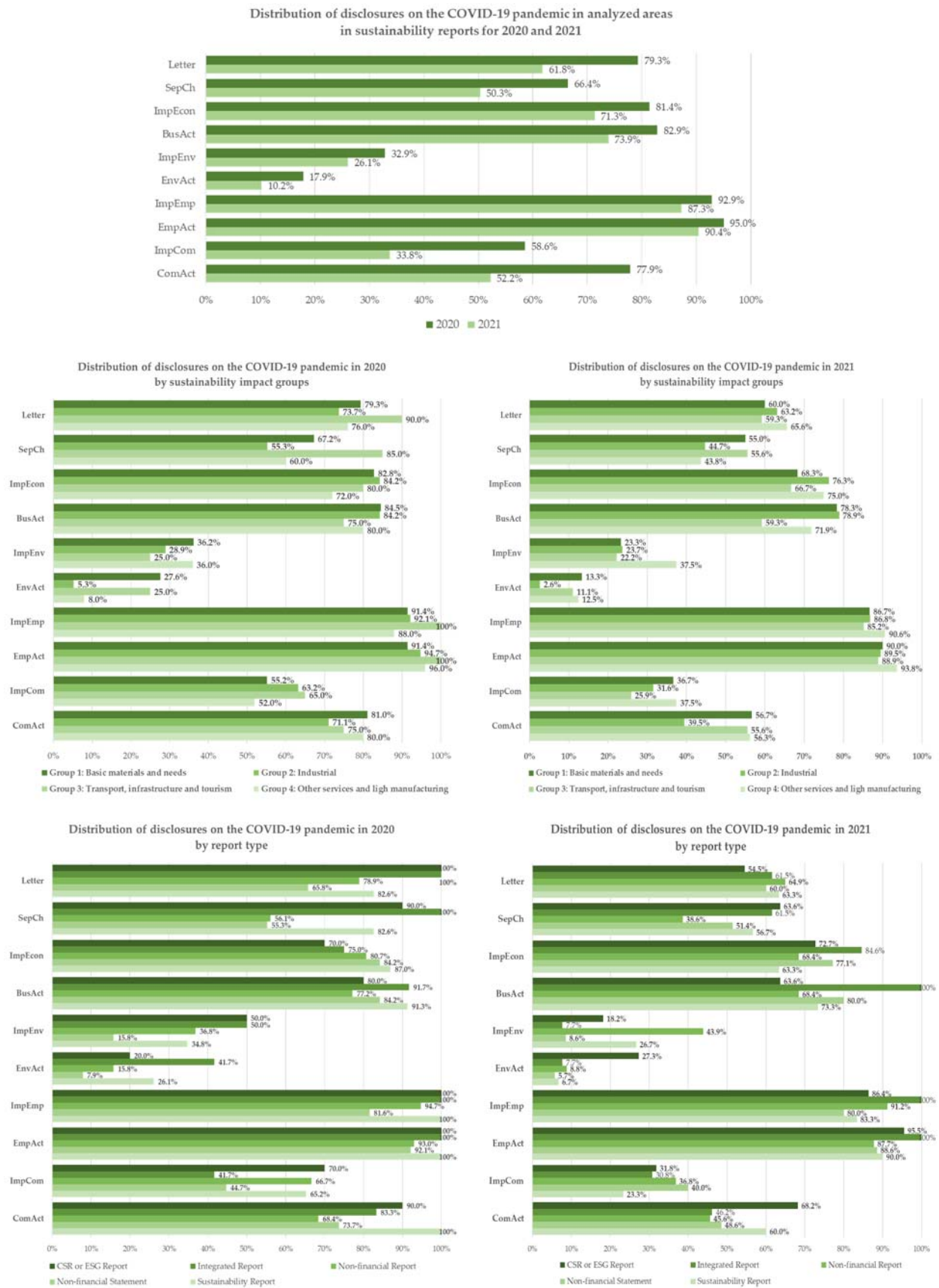
##### 4.1. Descriptive Analysis of Disclosures on the COVID-19 Pandemic in the Analyzed Sustainability Reports

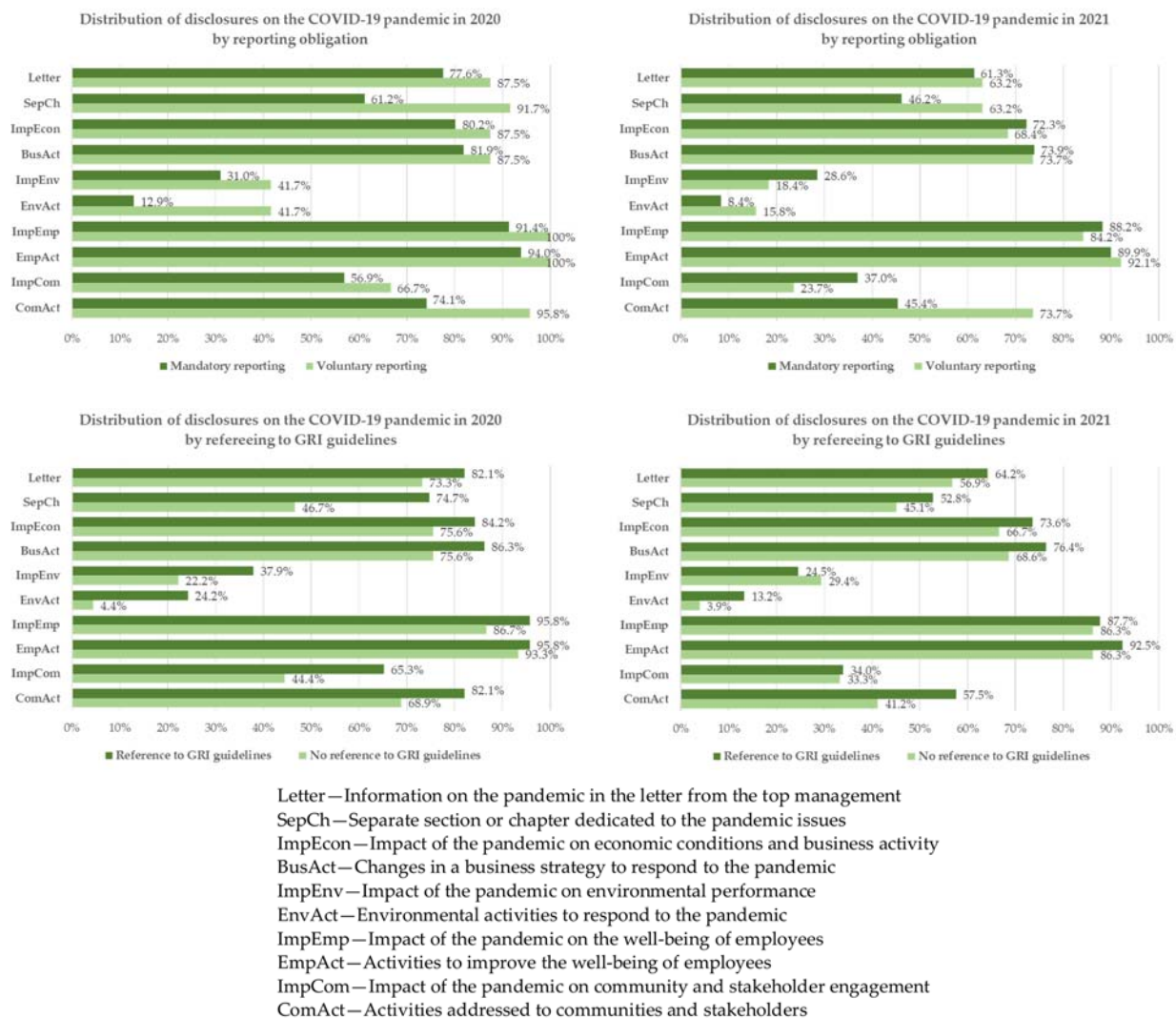
In order to analyze the extent of information on the impact of the COVID-19 pandemic on the operation and activities disclosed by companies in their sustainability reports, a descriptive analysis of the achieved results was carried out. In accordance with the adopted scope of the analysis of the content of the reports, the appearance of information about COVID-19 was analyzed in relation to:

- Statements on the pandemic in the letter from the top management (Letter);
- Separate section/chapter dedicated to pandemic issues (SepCh);
- Impact of the pandemic on economic conditions and business activity (ImpEcon);
- Changes in the business strategy to respond to the pandemic (BusAct);
- Impact of the pandemic on environmental performance (ImpEnv);
- Environmental activities to respond to the pandemic (EnvAct);
- Impact of the pandemic on the well-being of employees (ImpEmp);
- Activities to improve the safety and well-being of employees (EmpAct);
- Impact of the pandemic on community and stakeholder engagement (ImpCom);
- Activities addressed to communities and stakeholders (ComAct).

The relevant data disclosed by the companies in the analyzed areas was related to the number of reports obtained for 2020 and 2021. The analysis took into account the percentage share of disclosures related to the COVID-19 pandemic in individual reporting areas for each year of the analysis, and the distribution of disclosures related to the pandemic in the areas under consideration, taking into account: (1) sustainability impact group, (2) type of report, (3) obligation or lack of obligation to prepare a report presenting non-financial data, and (4) reference or lack of reference in the report to the GRI guidelines. Figure 3 presents the aggregated results of the performed analyses.

Taking into account the number of disclosures appearing in individual areas in all analyzed reports, it can be seen that in each of the investigated areas in 2020, companies provided more information related to the COVID-19 pandemic than in 2021. In both years, most of the COVID-19 disclosures concerned employee issues, i.e., companies most often described activities undertaken by them to improve the safety and well-being of employees during the COVID-19 pandemic (95% of reports for 2020 and 90.4% of reports for 2021 contained such information). The reports also indicated how the COVID-19 pandemic affected the safety and well-being of employees (92.9% of reports in 2020 and 87.3% of reports in 2021 contained such information). In both years under analysis the smallest number of disclosures regarding the COVID-19 pandemic were presented by companies in relation to changes in environmental performance caused by the pandemic and environmental activities undertaken to respond to it. Taking into account the changes in disclosures regarding the COVID-19 pandemic in each of the analyzed areas between 2020 and 2021, the biggest change occurred in the information regarding activities addressed to communities and stakeholders (in 2021 the share of companies that disclosed information on this subject decreased by 33%).





**Figure 3.** Descriptive analysis of disclosures on the COVID-19 pandemic in the analyzed areas (in general and in groups based on the adopted division criteria).

Considering the sustainability impact group, the analysis revealed that in 2020 the companies from Group 1: Basic materials and from Group 3: Transport, infrastructure and tourism had most often presented in their reports information on the impact of the COVID-19 pandemic on the safety and well-being of employees (100% of companies from Group 3 and 91.4% from Group 1). The companies from Group 2: Industrial and Group 4: Other services and light manufacturing preferred to describe actions aiming to improve the safety and well-being of employees (96% of companies from Group 4 and 94.7% from Group 2). In all groups, the smallest number of disclosures appeared in relation to changes in environmental performance due to the COVID-19 pandemic and in environmental activities to respond to it. Comparing the data presented by the companies in different groups in 2020 and 2021, it was indicated that in 2021 in groups 1, 2 and 4 the largest decrease in the number of companies disclosing information had occurred in the case of information on activities addressed to communities and stakeholders, while in Group 3—information on changes caused by the COVID-19 pandemic in social engagement. In addition, in 2020, in each of the analyzed areas, the companies from groups 1, 2 and 3 presented more information about the COVID-19 pandemic than in 2021, while in group 4 in 2021 more disclosures appeared in relation to changes in environmental performance, changes in economic conditions and the safety and well-being of employees.

Analyzing the report type, it can be seen that in 2020, all companies presenting sustainability issues in CSR or EGS Report, Sustainability Reports and Integrated Reports included information on the impact of the COVID-19 pandemic on employee issues, which was not so common among companies preparing the Non-financial Report and the Non-financial Statement. In 2021, the number of disclosures in this area decreased in most types of reports and only in the case of the Integrated Report did it remain unchanged, i.e., 100% of reports of this type contained information on the impact of the COVID-19 pandemic on employee issues.

The analysis showed that in 2020 information about the impact of the COVID-19 pandemic was more often disclosed by companies voluntarily reporting on sustainability issues. This applied to each and every analyzed area of the reports. This pattern did not occur in 2021, as in the case of some of the areas under analysis (changes caused by the COVID-19 pandemic in social engagement, in the safety and well-being of employees, in environmental performance, and in economic conditions) more disclosures were presented by companies obliged to report non-financial data compared to companies preparing voluntary sustainability reports. Comparing the information presented in the reports in both analyzed years by companies obliged to report non-financial data, it was demonstrated that in 2021 the share of disclosed information on COVID-19 had decreased in all investigated areas of mandatory reports. The largest decrease was observed for the disclosure of information on the impact of the pandemic on the change in community and stakeholder engagement, and on activities addressed to communities and stakeholders. In the case of reports voluntarily prepared by enterprises, the largest decrease was also observed in the disclosure of changes in community and stakeholder engagement.

The obtained data were also analyzed in terms of reference to the inclusion and non-inclusion of GRI guidelines in the reports. The analysis showed that in 2020, in each investigated area, more disclosures related to the COVID-19 pandemic were presented in reports taking into account the GRI guidelines. The situation was similar in 2021, with the exception of information on changes in environmental performance as a consequence of the pandemic, which more often appeared in reports in which there was no reference to the GRI standards. Analyzing the data in terms of changes in the disclosed information on the COVID-19 pandemic in individual years, in the case of reports referred to the GRI guidelines, in all analyzed areas in 2021 the share of reports presenting information on COVID-19 decreased compared to 2020. A similar relationship occurred in the case of reports in which the GRI guidelines were not taken into account, except for the presentation of information on changes in environmental performance, where in 2021 there was an increase in the share of reports in which this information was presented.

#### *4.2. Information Related to the COVID-19 Pandemic Disclosed in Letters from Top Management*

A letter from the top management or the CEO letter is a principle document written generally for shareholders and investors. However, considering sustainability reports, this type of document is addressed to a wide range of the company's stakeholders. It presents a vision of past and future events, justifies the CEO's actions and decisions, and undoubtedly tries to make a good impression [76]. As the CEO letter consists of the most essential information on the company's activity, it can be assumed that if the issues related to the COVID-19 pandemic are included in it, this proves that they are considered to have an important impact on the company's operation and are supposed to be worth mentioning.

Our analysis revealed that information related to the COVID-19 pandemic was disclosed in 111 letters from the top management out of 140 sustainability reports covering the year 2020 (79.3% of all sustainability reports for 2020), and it appeared in 97 CEO letters out of 157 analyzed reports covering the year 2021 (61.8% of all reports for 2021).

Various issues were highlighted in the CEO letters. First of all, it was pointed out that this had been a period full of unprecedented and unknown challenges and adversities, including mention of the great black swan in the form of the COVID-19 pandemic. It had

also been a time of trying to find the essence of acting in a new reality. Dynamic changes in economic and business conditions were emphasized.

In this context, it was mentioned that the pandemic had caused market instability, disruption of supply chains, disturbance of availability and higher prices of materials and services, an increase in labor costs related to a high sickness absence, extra expenditures on anti-COVID-19 protection, as well as problems with the implementation of key projects. In some cases, it was also necessary to temporarily reduce salaries or freeze their rise.

In the analyzed CEO letters, it is often mentioned that the pandemic had become a kind of verification of the credibility of the companies, which, despite adversity, passed a difficult test while maintaining a responsible and ethical attitude and respecting the requirements of sustainable development regardless of the circumstances. Some companies mentioned that even when the epidemiological situation had forced them to temporarily suspend their operation, the time had been used effectively, e.g., to modernize plants and improve production processes.

The strength and resilience of companies to various perturbations were emphasized, along with the need for a quick and flexible reaction and reorganization of the way of working, most often to the remote mode, to swiftly adapt to the new conditions and introduce appropriate preventive measures. Intensive work was required to respond to the needs of the most important groups of stakeholders. An increased sense of responsibility was extended to employees and their families, customers, contractors, suppliers, business partners, owners and communities in which the companies operated.

The importance of the employees was most often emphasized and the main priority was to ensure their safety, health and support. In addition, the vital role of responsibility and loyalty of the employees, as well as a committed and well-coordinated crew in ensuring continuous functioning of the companies during the pandemic were indicated. The employees' dedication and understanding of the situation were extremely appreciated. At times, the employees were considered as heroes. Moments of great sadness were also mentioned when long-term and deeply dedicated employees were lost as a result of the coronavirus infection.

Some companies referred in their CEO letters to activities supporting customers, including launching new communication and sales channels. The specificity of support depended on the sector of activity. For example, banks offered to customers the option of suspending loan instalment payments and extending the loan period.

It was emphasized that the pandemic had revealed the essential nature of the products and services provided by the companies and of the value offered to customers. Therefore, continuing to serve customers both safely and reliably was demonstrated as a particular priority. A huge role in this respect was played by the digital transition accelerated by the COVID-19 pandemic. This concerned not only enabling remote communication between employees, and contacts with customers and business partners to ensure operational continuity, but also the use of user-friendly and secure digital services, provision of remotely accessible digital products and processes, and expanding omnichannel activity as a crucial element of building a competitive advantage. Moreover, it was emphasized that such solutions, introduced due to the pandemic, would remain in operation for the coming years to satisfy the customers' needs arising from the new habits formed during the pandemic.

In general, the pandemic was also an impulse that accelerated the implementation of innovative solutions and made companies react positively to many challenges. This concerned both implementation of proprietary solutions used to fight the SARS-CoV-2 virus, and innovations introduced to meet the changing expectations of customers.

Considering social engagement, the analyzed CEO letters mentioned that, due to the restrictions, it had not been possible to implement some previous voluntary activities or social initiatives. Instead, however, there were numerous references to the companies' involvement in projects aimed at solving the most important social problems and helping social groups particularly vulnerable to the negative effects of the pandemic (e.g., the



elderly, children in nursing homes). The support most often concerned financial and in-kind donations to hospitals, medical facilities and schools.

When it comes to environmental issues, it is worth noting that the CEO letter in some companies revealed that they had reduced the environmental impact, which was not only the result of the restrictions and lockdowns forced by the pandemic but also an effect of the solutions implemented to increase energy efficiency.

The letters from the top management from 2021, although still taking heed of the risks associated with new strains of the coronavirus, more and more often mentioned the revival of production and commercial activities due to gradual stabilization of the situation related to the pandemic, including, above all, the restoration of supply chains and the opening of most markets. Moreover, the continuation of proven practices and actions implemented as an effective response to the pandemic in 2020 was emphasized.

In general, the analyzed statements on the COVID-19 pandemic included in the letters from top management emphasize that the interests of shareholders and investors during the crisis were protected, the safety and well-being of employees as the highest priority was assured, and companies put great effort to combine economic challenges with altruistic actions. This is in line with the CSR strategies to accommodate the COVID-19 crisis identified by García-Sánchez and García-Sánchez [65].

Examples of statements on the COVID-19 pandemic included in letters from top management included in the analyzed sustainability reports are presented in Table 1.

**Table 1.** Examples of statements on the COVID-19 pandemic included in letters from top management.

Example Statements	Company Name (Reporting Year)
"Every day we learned new practices and worked intensively on unprecedented solutions to ensure the safety of our crew."	ArcelorMittal Poland (2020)
"Due to the great commitment and discipline of employees, we introduced all new products for the 2020 season on time. During the difficult time of the pandemic, we took care not only of the safety of employees, but also of their mental health and well-being."	Carlsberg Polska (2020)
"We reacted to the immediate challenges of the COVID-19 pandemic by focusing on three priorities: (1) protecting the health and safety of our employees and their families, our contractors, customers and suppliers, and the communities in which we operate; (2) continuing to serve our customers both safely and reliably by leveraging our digital technologies; and (3) strengthening our liquidity position through various bold actions."	CEMEX (2020)
"Due to the consistency, diligence and talent of our team, we took care of the safety of customers and employees, while striving to achieve the assumed goals."	GK BNP Paribas Bank Polska (2020)
"The priority for us was the protection of the health of our employees and the safety of our customers."	GK ING Bank Śląski SA (2020)
"In accordance with our core value, which is innovation, in a few months we have developed, tested and implemented proprietary solutions that ensure effective surface and air sterilization, commonly used to fight the SARS-CoV-2 virus."	GK LUG SA (2020)
"The pandemic year showed us that there is strength in the group, and a committed and well-coordinated crew is always a determinant of success."	GK Zakłady Magnezytowe Ropczyce (2020)
"The ongoing pandemic makes us act with an increased sense of responsibility—for our employees, subcontractors and contractors."	GK ZUE (2020)
"The COVID-19 pandemic has taken its toll on the lives of all of us in the past year, and I am proud that in this extremely difficult time we have passed the test of continuing our business effectively and we have confirmed that social responsibility is integral to our strategy regardless of the circumstances. Our business model has proven resilient in the face of the turmoil caused by the pandemic that hit the economy."	Globe Trade Centre (2020)

Table 1. Cont.

Example Statements	Company Name (Reporting Year)
"The pandemic period was a difficult time for our teams, but also for business partners, customers and owners. We emerged victorious from this trial."	Grupa Apator (2020)
"The restrictions related to the COVID-19 pandemic introduced last year, as well as the solutions we implemented to increase the energy efficiency of the operation of our showrooms, resulted in a reduction in the energy consumption rate."	Grupa CCC (2020)
"The actions, efforts and management methods we have taken are another expression of our responsibility for employees, partners and customers, as well as the local communities of which we are a part."	Grupa Echo Investment (2020)
"The pandemic made us realize the importance of our social responsibility and of the need to ensure an uninterrupted food supply chain while maintaining the maximum sanitary regime."	Grupa Eurocash (2020)
"Despite the pandemic, we did not slow down. In terms of the long-term outlook, we continued to advance key investments."	Grupa KGHM Polska Miedź SA (2020)
"The priority was the safety of our employees in the first place, and then supporting the continuity of critical processes in our clients' organizations."	Grupa Sygnity (2020)
"The year 2020 had its heroes. For us, these are our employees. Despite the understandable fears arising from the pandemic, tens of thousands of exceptional people showed up for work in our stores and distribution centers every day. It is their dedication, sense of mission and understanding of the situation that has allowed millions of customers to safely shop in their favorite chain stores."	Jeronimo Martins Polska (2020)
"It is worth noting that thanks to the generosity of the convalescent miners and the plasma they donated, it was possible to effectively treat the most severe cases of COVID-19 in the most difficult period of the pandemic."	JSW SA (2020)
"Even in such difficult conditions, we have risen to the occasion, providing customers with uninterrupted, safe and comfortable access to food products, safe and stable working conditions for employees, and the support needed at this time for entities involved in the fight against the pandemic."	Kaufland Polska (2020)
"No matter what the future holds, we will stay on course, maintaining an ethical and responsible approach to employees, customers, suppliers, business partners and other stakeholders, and taking care of the natural environment."	Kompania Piwowarska/2020
"The pandemic was an impulse that accelerated the implementation of innovative solutions and made us react positively to many challenges."	Raben (2020)
"We managed to overcome all the challenges related to the pandemic. It would not have been possible without my team, which showed 100% commitment, 100% responsibility, 100% perseverance."	Rawlplug SA (2020)
"In the past year, we focused on protecting our customers from falling out of the financial market due to financial distress caused by COVID-19. We developed Good Practices for Vulnerable Customer Service, an information website for customers with credit repayment problems and resources for advisors."	Santander Bank Polska SA (2020)
"I would like to thank our employees for their exceptional, responsible attitude during the ongoing pandemic, for their commitment and loyalty, which allowed us to function without significant interruptions in our daily activities."	Wawel SA (2020)
"Our priority was to adapt production plants to operate in accordance with the sanitary regime while increasing their efficiency and ensuring maximum work comfort for our employees and partners."	Wielton SA (2020)
"In this special, pandemic year, our priority was to ensure the continuity of services to our users and customers and guarantee safe conditions for employees."	Wirtualna Polska Holding SA (2020)

Table 1. Cont.

Example Statements	Company Name (Reporting Year)
"The COVID-19 pandemic was a practical verification of what kind of organization we are. Many times we have shown responsibility and full commitment to what we do. At the same time, this situation has shown that our digital transformation and continuous optimization of operations bring measurable social benefits"	Zarząd Transportu Metropolitalnego (2020)
"Employees have always been important to us, which is why during the pandemic we took care of such an organization of work that ensured their safety, health and support."	Grupa VELUX (2020–2021)
"The last year was a period of revival of commercial activities, which was possible thanks to the gradual stabilization of the situation related to the COVID-19 pandemic, and as a result, the restoration of supply chains and opening up to most markets."	GK Fasing SA (2021)
"We are involved in solving the most important social problems through financial and material support in the fight against COVID-19."	GK PZU (2021)
"We introduced a vaccination program which included a cash reward for fully vaccinated employees and an additional reward for those receiving a booster dose."	GK Stalprofil SA (2021)
"We undertook social activities, making targeted donations for the purchase of equipment for foundations and medical facilities. The solutions introduced due to the pandemic in the field of customer service will stay with us for years, including the rapid digitization of processes."	GK Tauron Polska Energia SA (2021)
"Another year of the pandemic showed that we were able to adapt even to such a difficult, long-term and complicated situation, which is undoubtedly due to our professional crew."	Grupa Trakcja (2021)
"The pandemic has accelerated changes in the way our consumers buy our products. We constantly adapt to these changes, investing in our brands, adjusting our route to the market, introducing innovations in developing segments and developing the skills of our team to meet the changing expectations of customers."	Grupa Żywiec SA (2021)
"We would like to thank all employees and associates for their responsible approach to the solutions proposed by the Management Board in these very limiting restrictions."	Korporacja KGL SA (2021)

#### 4.3. Chapters and Sections in the Analyzed Sustainability Reports Dedicated to COVID-19 Pandemic Issues

The conducted analysis demonstrated that quite a few companies publishing sustainability reports had decided that issues related to the COVID-19 pandemic were so important that they deserved separate chapters or sections dedicated exclusively to that topic. Such separate chapters or sections were included in 93 reports covering year 2020 (66.4% of analyzed reports for 2020) and in 79 reports covering year 2021 (50.3% of reports for 2021). In particular, this concerned companies disclosing integrated, CSR, ESG or sustainability reports.

The chapters and sections dedicated to the COVID-19 pandemic most often covered issues related to the occupational health and safety of employees. In addition, such chapters presented activities undertaken in companies during the pandemic, including primarily those aimed at adapting operations to new circumstances and ensuring appropriate working conditions for employees, creating adequate safety for customers at the same time.

Moreover, the companies highlighted their response to the COVID-19 crisis, indicating the biggest challenges created by the pandemic and characterizing its impact and the restrictions it imposed on their operation.

Separate chapters or sections were also dedicated to the support during the pandemic, including the support to the public in general, as well as the support for local communities and customers in particular. It should be noted that the titles of these chapters or sections sometimes emphasized issues such as responsibility, reliability, engagement and commitment, but also threat and fight.

Examples of the titles of the chapters or sections dedicated to COVID-19 pandemic issues included in the analyzed sustainability reports are presented in Table 2.

**Table 2.** Examples of the titles of the chapters or sections dedicated to the COVID-19 pandemic issues.

Examples of Titles	Company Name (Reporting Year)
Activities during the COVID-19 pandemic	GK Cognor (2020 & 2021); GK Pamapol (2020); Grupa Energa (2020 & 2021); Grupa Banku Millennium (2020); Grupa Famur (2020); Grupa KOM-EKO (2021); Grupa Kruk (2020); Kaufland Polska (2020–2021); McDonald’s Polska (2021); Wielton SA (2020)
Challenges related to COVID-19	Solaris Bus & Coach Sp. z o.o. (2020)
Commitment to preventing the effects of the COVID-19 pandemic	Grupa UNIMOT (2021)
Counteracting the effects of the COVID-19 pandemic	GK ING Bank Śląski SA (2020)
COVID-19 and activities in the area of occupational health and safety	GK Unibep (2020)
[Company Name] during the COVID-19 pandemic	Grupa Eurocash (2020); GK LUG SA (2020); GK Tauron Polska Energia SA (2021); Grupa Azoty SA (2020 & 2021); Grupa Żabka (2021); LPP SA (2020)
How we change for the client during the COVID-19 Health of employees during a pandemic	Grupa Echo Investment (2020)
Impact of the COVID-19 pandemic on our operations	Wirtualna Polska Holding SA (2020)
Impact of the COVID-19 pandemic on the operations of [Company Name]	Amica SA (2021); ArcelorMittal Poland (2020); Bank Gospodarstwa Krajowego (2020); Firma Oponiarska “Dębica” SA (2020 & 2021); GK BNP Paribas Bank Polska (2020); GK Enea (2020 & 2021); GK ZUE (2020 & 2021); Grupa Famur (2021); Grupa KGHM Polska Miedź SA (2020 & 2021); Grupa PKP Cargo (2020); mBank SA (2020)
Impact of the COVID-19 pandemic on non-financial aspects	GK Fasing SA (2020); GK Torpol (2021)
Impact of restrictions resulting from the pandemic on the Rawlplug development	Rawlplug SA (2020)
Information on the threat of COVID-19	GK Rafamet (2020 & 2021)
Occupational health and safety during the COVID-19 pandemic	Grupa Benefit Systems (2020); GK Fabryki Mebli “Forte” (2020 & 2021); GK Lubelski Węgiel Bogdanka (2020); GK LUG SA (2021); GK Mercor SA (2020 & 2021); Grupa KOM-EKO (2021); Grupa Pekabex (2020 & 2021); GK Polski Holding Nieruchomości SA (2020 & 2021); GK PZU (2021); GK Relpol SA (2020 & 2021)
Organization of work during COVID-19	GK Gaz System (2020)
Our engagement during the pandemic—Managing the COVID-19 situation in 2020 Ensuring security during the COVID-19 pandemic	Santander Bank Polska SA (2020)
Our response to COVID-19	CEMEX (2020); GK Inter Cars (2020)
Preventing the COVID-19 pandemic in the work environment Support for local communities during the COVID-19 pandemic	CEMEX (2021)
PZU faced with the COVID-19 pandemic	GK PZU (2020)
Reliable in the face of the pandemic	Grupa Eneris (2020)
Response to the COVID-19 pandemic	Kompania Piwowarska (2020 & 2021); Raben (2020 & 2021)
Responsibility during the pandemic	Jeronimo Martins Polska (2020)
Responsibility of the ENEA Group in the context of the COVID-19 epidemic	GK Enea (2020)
Safety of employees during the COVID-19 pandemic	GK ING Bank Śląski SA (2020)
Safety during the pandemic	GK Gaz System (2021)

Table 2. Cont.

Examples of Titles	Company Name (Reporting Year)
Situation of the Rainbow Tours in connection with the pandemic caused by the SARS-CoV-2 coronavirus	GK Rainbow Tours (2020)
Support activities related to the COVID-19 epidemic	GK Solar Company SA (2020)
Support during the COVID-19 pandemic	Grupa VELUX (2020–2021)
Support of the public during the COVID-19 pandemic	Grupa KGHM Polska Miedź SA (2020 & 2021)
Support to customers during the COVID-19 pandemic	GK BNP Paribas Bank Polska (2020 & 2021); Santander Bank Polska SA (2021)
TAURON Group against the greatest global challenges—the coronavirus pandemic Responsibility towards the client in the era of the SARS-CoV-2 pandemic	GK Tauron Polska Energia SA (2020)
TAURON Group in the era of the coronavirus pandemic	GK Tauron Polska Energia SA (2021)
The COVID-19 pandemic	GK Seco/Warwick SA (2020 & 2021)
The fight against the pandemic	Carlsberg Polska (2020 & 2021)
The impact of the COVID-19	GK Solar Company SA (2021); GK Orange Polska (2020)
The pandemic and the safety of our employees The pandemic and the safety of our customers The pandemic and social support from ROBYG	GK ROBYG SA (2021)
We support the fight against the coronavirus	Grupa OEX (2020)

#### 4.4. Disclosures on the Impact of the COVID-19 Outbreak on Economic Conditions and Business Activity of Companies, and Changes in Business Strategies to Respond to the Pandemic

Information on the impact of the COVID-19 outbreak on economic conditions and business activity of companies appeared in 81.4% of the analyzed reports for 2020 and in 71.3% of the disclosures for 2021. The changes in business strategies to respond to the pandemic were reported slightly more frequently (82.9% and 73.9%, respectively).

The announcement of the state of the epidemic in March 2020 had a key impact on the uncertainty of business activity. Due to the situation, a significant part of the analyzed reports pointed to the COVID-19 pandemic as the key external risk for the functioning of companies. The pandemic disrupted supply chains, limited product availability and increased costs of components and raw materials. Subsequent administrative decisions gradually extended restrictions on business activities. The economic condition of customers became uncertain and the ability to cover liabilities was affected. Minimizing the risks associated with the spread of the COVID-19 virus became the key area of updated business strategies. The main challenge indicated by companies were actions aimed at securing the continuity of operation. The introduction of flexible management played an important role, especially in the area of logistics, inventory management and cooperation with new suppliers to maintain an undisturbed flow of production and timely deliveries. Delays or postponements in the implementation of plans adopted in business strategies were disclosed. In many cases, a significant revision of business strategies was required, and it turned out that it was even necessary to prepare and implement savings and reorganization plans. However, enterprises emphasized that despite the pandemic their personnel, property and financial situation were stable. The use of subsidies granted under the government's anti-crisis shield played a significant role in this respect. In addition, in 2021, companies were more aware and better adapted to effectively operate under the COVID-19 pandemic constraints and their adverse effects.

It was indicated in the analyzed reports that the pandemic had changed consumer behavior. Due to lockdowns, sales in brick-and-mortar stores (especially those in shopping malls) recorded a dramatic decrease. It became necessary to optimize sales activities,



including the reconstruction and relocation of showrooms to more favorable locations. On the other hand, staying at home more often meant that many more purchases and services were ordered online. This resulted in the development of the e-commerce industry, digital marketing and online sales channels, which allowed customers to access a wide range of products in a safe way, and companies to function despite strict restrictions. During the pandemic, consumers used mobile applications and online banking more often. The requirements for remote work and education resulted in an increase in the number of sold PCs, and a stable internet connection became a first-need service for many households, resulting in the development of the high-speed fiber-optic broadband internet as the leading technology.

The adaptation to changes related to the less predictable pandemic environment required an introduction of a flexible approach and quick adaptation to the current and anticipated circumstances. Personal business contacts were limited to the necessary minimum with due care, and most meetings were held remotely. As a result, during the pandemic companies focused on accelerated digitalization and implementation of new technological solutions that made it possible to communicate effectively with employees, customers and contractors. An important issue was to create platforms and channels for efficient communication between employees and the company, and above all to ensure the security of the IT structure and the confidentiality of business information. The customer service models were changed and the channels to reach customers were expanded. Remote contact with customers was made possible through the use of suitable IT systems, increasingly common chatbots and other modern IT technologies. In addition, technological capabilities were used to automate work, especially in the implementation of monotonous and error-prone tasks, which made it possible to effectively respond to staffing problems during the pandemic.

For many companies, it was a period of intensive product development, process optimization and implementation of new technological initiatives. New functions were added to existing products and services in response to the needs arising during the pandemic (e.g., washing machines with functions to eliminate bacteria and viruses, new offices equipped with modern air purification technologies, insurance against SARS-CoV-2 infection).

The spread of the COVID-19 epidemic was also a time of introducing changes in the strategies of companies aimed at expanding their operation with protective products used to fight the SARS-CoV-2 virus that they had not used before (e.g., textile hygienic and medical masks, hand disinfectants, solutions for surface and air sterilization).

Other companies focused on applying aggressive marketing, including online webinars to demonstrate the applications of their products to customers. There were also companies that undertook radical changes in business strategies during the pandemic by streamlining their development to accelerate the technological, logistics and sales transformation to integrate physical sales and e-commerce channels and build omnichannel organizations.

It should be added that many companies, especially financial institutions (i.e., banks, insurance companies), in addition to new functions and improvements in mobile applications and developments in online services, implemented assistance measures for customers who found themselves in a difficult financial situation by allowing the payment deadline for loan instalments or premiums to be postponed, spreading payments into instalments or extending the loan period. Moreover, they implemented tools to assist customers in submitting applications for subsidies under the government's anti-crisis shield. Other companies, in turn, provided their franchisees with the necessary financial, material and legal assistance to maintain business continuity and secure supplies.

In general, the analyzed reports demonstrated that companies had put in a great deal of effort to cope with the adverse economic challenges created by the pandemic. They focused on guaranteeing the continuation of value creation, ensuring job protection and improving the quality of products and services [65]. The accelerated digitalization and the development of e-commerce made many companies significantly modify their business

strategies and operation, and adapt themselves to changes in the market conditions and consumer behavior during that period.

Examples of information on the changes in business strategies to respond to the pandemic are presented in Table 3.

**Table 3.** Examples of information on the changes in business strategies to respond to the pandemic.

Example Information on the Changes in Business Strategies	Company Name (Reporting Year)
Minimizing the threats related to the spread of the COVID-19 pandemic as a key area of the updated business strategy	Wielton SA (2020 & 2021)
Introduction of flexible management, especially in the area of logistics and inventory management, and cooperation with new suppliers to maintain an undisturbed flow of production and timely deliveries	GK Fabryki Mebli “Forte”; GK Zakłady Magnezytowe Ropczyce (2020); Solaris Bus & Coach Sp. z o.o. (2020 & 2021); Grupa Żywiec SA (2020)
Revision of the business strategy to accelerate the technological, logistics and sales transformation, integration of physical sales and e-commerce channels, building an omnichannel organization	LPP SA (2020); Grupa CCC (2021)
Optimization of sales activities and reconstruction of the franchise network and showroom network, modernization and relocation of showrooms to more favorable locations (outside shopping malls)	GK CDRL SA (2021); GK Monnari Trade SA (2020 & 2021)
Introduction of new products and services in response to the needs arising during the pandemic (e.g., new offices equipped with modern air purification technologies; touchless devices and systems, washing machines with functions that eliminate viruses and bacteria; home delivery and collection of purchases from the store; insurance against SARS-CoV-2 infection).	Grupa Echo Investment (2020 & 2021); Amica SA (2020); Grupa Żabka (2021); GK PZU (2020)
Change in the strategy aimed at expanding the business with protective products directly dedicated to the fight against the pandemic (e.g., textile hygienic and medical masks; disinfecting aerosols, disinfectants, virucides for surface disinfection, UV-C luminaires for surface and air sterilization; protective clothing, triage systems and tent systems)	GK Protektor (2020); Grupa Ciech (2020); Rawlplug SA (2020); Grupa Azoty SA (2020); GK Gaz System (2020); GK Lubawa (2020)
Continuation of the development of protective products indispensable during the pandemic (hygienic and medical masks, protective gloves)	GK Protektor (2021); GK Mercator Medical SA
Introduction of aggressive marketing and adjusting offers to the needs and capabilities of customers, including the launch of online webinars showing customers the applications of offered products	Rawlplug SA (2020)
Acceleration of digital transformation processes and intensive development of remote channels to protect customers and employees against a coronavirus infection and provide new services and products, including the development of online banking, new functions of mobile applications and expanding the use of chatbots	Credit Agricole Bank Polska SA (2020); GK Banku Pekao SA (2020); GK BNP Paribas Bank Polska (2020); GK PKO BP SA (2020); mBank SA (2020); Santander Bank Polska SA (2020)
Focus on accelerated digitalization and automation of processes (software robots) and implementation of new technological solutions to enable faster customer service and contact with contractors	GK Inter Cars (2020); Vantage Development (2021)
Use of virtual reality to enable an overview of offered products	Grupa Echo Investment (2020 & 2021)
Intensive development of the fast fiber-optic broadband internet as the leading technology	GK Orange Polska (2020 & 2021)
Activities in the area of e-commerce and development of digital marketing and online sales channels to keep customers and ensure safe shopping	GK CDRL SA (2020); GK Komputronik (2021); GK Wojas (2020); GK Mercator Medical SA (2020 & 2021)
Expanding channels to reach the customer and enabling remote contact with customers through the use of modern technologies and information systems, including chatbots	Grupa Kruk (2020); GK ROBYG SA (2021)

Table 3. Cont.

Example Information on the Changes in Business Strategies	Company Name (Reporting Year)
Development of the service support area based on remote channels	GK PGE (2020)
Development of a platform for communication between employees in dispersed work teams, including teleconferences and videoconferences, and ensuring the security of the IT structure and the confidentiality of business information	GK Relpol SA (2020); PKP Energetyka (2020)
Adjusting the public transport structure to real needs and restrictions (minimizing the occupancy on less loaded lines and increasing the rolling stock/the number of vehicles on lines serving the most heavily loaded routes)	Zarząd Transportu Metropolitalnego (2020)
Providing franchisees with financial, material and legal assistance to maintain the continuity of operation of stores and secure supplies, and to provide customers with the possibility of safe shopping	Grupa Żabka (2021)
Introduction of support solutions for customers (possibility of postponing the payment deadline, spreading payments into instalments, extending the loan period; assistance in submitting applications for financial subsidies under the government's anti-crisis financial shield).	GK Banku Pekao SA (2020); GK ING Bank Śląski SA (2020); GK PZU (2020); mBank SA (2020); Santander Bank Polska SA (2020)
Implementation of a savings and reorganization scheme to reduce operating costs	Credit Agricole Bank Polska SA (2021); GK Relpol SA (2020); Grupa Alumetal (2020); GK Agora SA (2020)
Delaying or postponing the implementation of the business strategy, including postponing the launch of completed investments	GK Dino Polska SA (2020); GK Elektrotim (2020); Grupa Ciech (2020)
Revision of the assumed financial results communicated in previous years	GK Banku Pekao SA (2020); GK Elektrotim (2020); Grupa Zamet (2020)
Tightening of credit procedures and temporary limitation of sales on credit to B2B customers	GK Komputronik (2021)

#### 4.5. Disclosures on the Impact of the COVID-19 Outbreak on Companies' Environmental Performance and Environmental Activities to Respond to the Pandemic

Krivačić and Janković [59] suggested that the quantity of information on environmental responsibility increased during the pandemic compared to previous years. However, the disclosures on the impact of the COVID-19 pandemic on the companies' environmental performance and environmental activities to respond to the pandemic were the least frequently indicated in the analyzed sustainability reports among all the issues under analysis. The issues related to the impact of the pandemic on the change in environmental performance appeared in 32.9% of the reports for 2020 and in 26.1% of the disclosures for 2021. Even fewer reports included the information on environmental activities undertaken in response to the pandemic (17.9% and 10.2%, respectively).

The sustainability reports for 2020 mainly referred to the reduction in the consumption of raw materials, components, fuel, electricity, heat and hot water, as well as the decrease in the emissions and waste generation compared to 2019. The companies indicated that this was the effect of the limitation of operating activities due to lockdowns and the economic downturn caused by the pandemic, working in the remote mode, limited in-person visits to customers, limited use of cars and business trips. Sometimes the analyzed companies pointed to specific issues, for example that the increasing digitalization of processes and popularization of online systems during the pandemic had a significant impact on paper consumption. During the first year of the pandemic some enterprises recorded an increase in certain environmental impacts, which was most often due to the specificity of their operation (e.g., an increase in water consumption and the amount of sewage discharged due to extended opening hours of convenience stores, increase in the use of detergents for disinfection of public transport vehicles, increase in the amount of medical waste generated by firms conducting medical tests).

In the sustainability reports for 2021, most of the companies referring to environmental issues in the context of the pandemic noted an increase in the consumption of raw materials, components, water, fuel and energy, as well as in greenhouse gas emissions and discharged sewage compared to 2020, after the easing of the hard lockdown and the economic recovery, when employees could work in the stationary or hybrid mode.

It should be noted that while some companies emphasized that despite the COVID-19 crisis environmental projects were performed as planned without interruptions, other enterprises revealed that due to the pandemic, the assumptions of key environmental actions and plans had to be significantly modified, and even postponed or suspended.

For some companies, the pandemic time was used to improve energy efficiency (e.g., thermal modernization, upgrading of heat sources and replacement of lighting) and implement actions to reduce electricity consumption and greenhouse gas emissions. The period of the pandemic was also the time when specific environmental solutions were created to respond to the challenges associated with it. This concerns, for example, recycling of products that were not sold due to lockdowns and mobile applications facilitating waste management during the pandemic. In addition, educational campaigns were organized, focusing on environmental issues during the pandemic (e.g., energy system transformation and municipal waste handling and disposal during the pandemic). Studies within this area were prepared in collaboration with the reporting companies (e.g., a survey on the changes in consumer attitudes in Poland in the era of COVID-19; a survey on environmental preferences and changes in the ecological lifestyle during the pandemic).

Examples of the information on the impact of the COVID-19 outbreak on companies' environmental performance and environmental activities to respond to the pandemic disclosed in the analyzed sustainability reports are presented in Table 4.

**Table 4.** Examples of information on the impact of the COVID-19 outbreak on companies' environmental performance and environmental activities to respond to the pandemic.

Examples of the Impact of the COVID-19 Outbreak on Environmental Performance and Environmental Activities to Respond to the Pandemic	Company Name (Reporting Year)
Reduction in fuel and energy consumption and emissions due to the limitation of operating activities, working in the remote mode, limited in-person visits to customers, limited use of cars by employees and business trips	GK CDRL S.A. (2021); GK ENEL MED (2020 & 2021); GK ING Bank Śląski SA (2021); GK Mercator Medical SA (2020); GK ZUE (2021); Grupa Asseco Poland (2020); Grupa Kruk (2020); Grupa Neuca (2020); LPP SA (2020); Santander Bank Polska SA (2021 & 2021); Wawel SA (2020); Wielton SA (2020)
Reduction in energy consumption for administrative purposes due to the ongoing pandemic and the low occupancy rate of employees working in offices	GK PGE (2020); GK Polski Holding Nieruchomości SA (2020)
Reduction in electricity, heat and hot water consumption due to the remote working mode	GK Rainbow Tours (2021)
Decrease in the consumption of raw materials and components due to a lower production volume during the economic downturn caused by the pandemic	GK Mangata Holding (2020)
Reduction in paper consumption due to digitalization of processes and popularization of online systems during the pandemic	GK ENEL MED (2020 & 2021); GK PGE (2020); GK PZU (2020); GK ZUE (2021); Grupa Ergo Hestia (2020); Vantage Development (2021)
Reduction in waste generation due to the decreased number of purchasing processes	Grupa Asseco Poland (2020)
Increase in water consumption and the amount of sewage discharged due to extended opening hours of stores during the pandemic	Jeronimo Martins Polska (2020)

Table 4. Cont.

Examples of the Impact of the COVID-19 Outbreak on Environmental Performance and Environmental Activities to Respond to the Pandemic	Company Name (Reporting Year)
Increase in the use of detergents for disinfection of public transport vehicles	Zarząd Transportu Metropolitalnego (2020)
Increase in energy and fuel consumption in the second year of the pandemic after the easing of the hard lockdown and the economic recovery	GK Fasing SA (2021); GK PZU (2021)
Increase in energy consumption and greenhouse gas emissions due to the return to the operation of showrooms and to the bigger scale of operations	Grupa CCC (2021)
Increase in energy and water consumption for administrative purposes and more sewage discharged due to the return of employees from remote work	GK PGE (2021)
Increase in electricity consumption in 2021 compared to 2020 due to the increase in the production volume and the fact that employees were allowed to work in the hybrid mode	GK Mercator Medical SA (2021); Sanok Rubber Company SA (2021)
Increase in the consumption of raw materials and components due to higher production volumes being a result of the recovery of the market demand after a significant slowdown in 2020	GK Mangata Holding (2021)
Increase in the amount of medical waste due to the specificity of offered services (medical tests) and the sanitary regime during the pandemic	GK Voxel SA (2021)
Increase in volatile emissions from disinfectants used to prevent and reduce the transmission of COVID-19	GK PKN Orlen SA (2021)
Despite the COVID-19 pandemic, environmental projects were performed as planned without interruptions (e.g., the “CEMEX for the Planet” educational campaign; the implementation of the Recycled Claim Standard; the Eco Aware Production program).	CEMEX (2021); GK Lubawa (2020); LPP SA (2020)
Due to the COVID-19 pandemic, some assumptions of key environmental projects were modified (e.g., the “Forests Full of Energy” project; the forest planting program aimed to compensate for land used for stores, parking lots and other infrastructure)	GK PGE (2020); Leroy Merlin Polska (2021)
Due to the COVID-19 pandemic, some of the planned environmental activities were postponed or suspended (e.g., optimization of energy consumption; photovoltaic systems; installation of online emissions monitoring systems; adaptation to the requirements of the Best Available Techniques conclusions for large combustion plants)	GK Agora SA (2021); GK SuperDrob (2020–2021); Grupa Benefit Systems (2020); CEMEX (2020); GK Tauron Polska Energia SA (2020)
The pandemic time was used to improve energy efficiency (e.g., thermal modernization, upgrading of heat sources and replacement of lighting) and implement actions aiming to reduce electricity consumption and greenhouse gas emissions	GK LUG SA (2020); GK Orange Polska (2020); GK PZU (2020); Sanok Rubber Company SA (2020); Grupa CCC (2020); Grupa Neuca (2021)
Specific environmental solutions were implemented to respond to the challenges posed by the pandemic (e.g., production of biogas based on processing unsold beer; a free mobile application “ecoAPP” as a source of practical knowledge about waste management during the pandemic)	Grupa Żywiec SA (2021); Grupa KOM-EKO (2020)
Educational campaigns were organized (e.g., energy system transformation and proper municipal waste handling and disposal during the pandemic)	GK ING Bank Śląski SA (2020); Grupa Asseco Poland (2020); Grupa Eneris (2020)
Studies on environmental issues were carried out during the pandemic (e.g., “Changes in consumer attitudes in Poland in the era of COVID-19”; “Green transformation in the post-pandemic world”; “Environmental education of customers” to determine preferences and changes in the ecological lifestyle during the pandemic)	Grupa Kruk (2020); GK ING Bank Śląski SA (2020); GK ROBYG SA (2021)

#### 4.6. Disclosures on the Impact of the COVID-19 Pandemic on the Safety and Well-Being of Employees and Activities to Improve It

During the COVID-19 pandemic, the safety of employees, as well as taking care of their mental balance and well-being, became one of the most important issues for companies.



This is confirmed by the results of the analysis, according to which information on the actions taken to improve the safety and well-being of employees, and information on the impact of the pandemic on this area, were the most frequently disclosed items regarding the pandemic in reports for 2020 and 2021. This was found regardless of the sustainable impact group, the obligation or lack of obligation to report non-financial data, and the inclusion or non-inclusion of GRI guidelines in the reports. In addition, companies often devoted entire separate chapters or sections in their reports to the description of the impact of the pandemic on employees' issues and presentation of actions taken to ensure the safety and well-being of their personnel during the pandemic, which proves how important these aspects were for companies at that time.

The analyzed reports indicated that the outbreak of the COVID-19 pandemic was a threat to the continuity of business operation due to the ease of the virus spreading and hence the high risk of the employees getting infected. As a consequence, this could result in the absence of infected employees and other people who had contact with them (due to the mandatory quarantine). It could also have a negative impact on the health of patients in general. For this reason, enterprises reported that they had re-assessed the occupational risk to include the threats associated with the occurrence of the SARS-CoV-2 virus, as well as take account of the risk reduction due to the emergence of the possibility of preventive vaccination against COVID-19.

The reports also revealed whether and to what extent the COVID-19 pandemic had had an impact on the level of employment and salary. In addition, the companies that had suffered the most from the effects of the pandemic had to make their employees and associates take unpaid leaves. The reports indicated whether and to what extent this forced economic shutdown had reduced the working time and how it had affected the employees' salaries in order to save jobs.

Information was also revealed on the scale of the impact of the pandemic on the employees' absenteeism due to the COVID-19 disease and on the decrease in the number of accidents being an effect of the fact that a part or all of the staff were made to work from home.

The time of the pandemic also changed the recruitment process for new employees. Describing these issues, the companies indicated that in order to ensure a sense of comfort and security, the entire recruitment process was conducted online, and sometimes even with the use of electronic recruitment systems to receive relevant documents and applications from the candidates.

Another issue was the impact of the COVID-19 pandemic on the significant reduction in the implementation of training and development programs offered to employees. The companies revealed that some trainings had been suspended, and those that did not require physical presence of participants were organized remotely. As a consequence, the number of training hours per employee decreased significantly in both the years under analysis.

The enterprises indicated that the COVID-19 pandemic had also changed the exchange of information and the way in which employees were updated on the decisions and the most important changes made in the company. Various remote communication channels were used to send messages to employees, and all recommendations regarding work organization and all pieces of information on the current situation in the company were collected in one place to make it easier for the employees to get to know them.

In many companies, a special team/group/committee was established. Its task was to identify threats resulting from the crisis situation that could adversely affect their functioning, analyze them, and then recommend necessary actions to reduce or eliminate relevant risks. Based on appropriate crisis awareness, companies could effectively respond to a given threat and make the right decisions, saving time and resources.

The most important change that occurred in the functioning of enterprises during the COVID-19 pandemic was the large-scale introduction of remote work. Employees whose duties allowed this were directed to work remotely, while employees who were unable to perform their duties remotely were provided with personal and collective protective

measures. Their workplaces were adapted to satisfy the guidelines set out by the State Sanitary Inspectorate and the State Labor Inspectorate. In the analyzed reports it was often noted that thanks to the great discipline of the employees, who very conscientiously followed the rules of the sanitary regime, as well as thanks to the sense of responsibility, it was possible to avoid or significantly reduce new outbreaks of the disease.

During the pandemic, companies not only took care to create safe working conditions for their employees, but also tried to ensure comfort if work was done from home. Therefore, the reports presented examples of actions aiming to make it easier for employees to perform remote work and help them reconcile home duties with the home-office requirements.

Companies attached great importance to maintaining constant online contact with employees by organizing regular online meetings between employees, and with top management representatives. During these meetings, the current situation of the company was presented, taking into account possible threats that resulted from the crisis situation. The employees were informed what actions the company had taken to adapt to relevant sanitary and epidemiological guidelines. Employees also had the opportunity to ask questions to representatives of the top management (whether directly during meetings, or via chat or e-mail). On the one hand, it allowed the top management to know the employees' concerns regarding the functioning of the company in a crisis situation, and on the other hand enabled identification of actions the company should take to make employees feel safe in the workplace.

In addition, taking care to maintain mental balance of employees, the companies tried to create conditions so that employees could meet each other in virtual reality at informal meetings and have a space where they could share their fears and problems and exchange ideas on how to spend their free time and how to separate work from private life during home-office hours.

Another issue presented in the reports were actions taken by enterprises to promote a healthy and active lifestyle for employees. Many companies developed incentive programs and made various activities available for employees to perform at home via internet platforms.

The analyzed reports also included information on series of webinars organized by enterprises on work ergonomics, safety rules in a pandemic situation, as well as maintaining good mental health, which could be disrupted due to forced isolation, changes in work organization or fear of uncertain future. Therefore, it became extremely important for companies to provide psychological support to their employees and their families.

It was also indicated that in connection with the COVID-19 pandemic, employees who had fallen ill with COVID-19 were financially supported by equalizing their basic remuneration for the time of illness or by providing them with an additional discretionary benefit, the amount of which depended on the employee's financial situation. In addition, some enterprises allocated funds to co-finance rehabilitation for employees who had suffered severely from COVID-19 and struggled with complications after the disease. The enterprises also disclosed that they financially supported employees whose income was significantly reduced due to the inability to earn or the limitation of earnings by other persons in the same household, and also paid employees an equivalent for remote work, additional benefits for stationary work, or also so-called COVID-19 benefits, which were a one-off additional financial benefit for all employees as a token of gratitude for responsible work during the pandemic. As a form of financial support, the analyzed companies also indicated providing employees with insurance against infection.

An important issue as part of the activities undertaken by enterprises to improve the safety and well-being of employees was to provide them with a wide package of medical care during the pandemic and appropriate post-COVID-19 diagnostics, as well as organize vaccination campaigns against influenza and COVID-19 for employees and their families.

Many reports also included information that due to the COVID-19 pandemic, companies had to limit or change the form of activities they used to arrange for their employees before the pandemic outbreak. For example, some sports events had to be abandoned or postponed to the next year and those that were realized were carried out with a significant

reduction in the number of participants. Where possible, enterprises decided to change the form of the activities so that employees could do them remotely, or introduced activities that did not require direct participation.

In general, it should be emphasized that the analyzed disclosures showed that the companies' response to the pandemic was undoubtedly characterized by putting the employees' well-being over short-term financial goals [77] and giving top priority to the safety and well-being of employees over profitability [60].

Examples of information on activities improving the safety and well-being of employees disclosed in the analyzed sustainability reports are presented in Table 5.

**Table 5.** Examples of information on activities improving the safety and well-being of employees during the COVID-19 pandemic.

Example Activities Improving the Safety and Well-Being of Employees	Company Name (Reporting Year)
Online recruitment process	GK Bank Handlowy w Warszawie SA (2020), GK Best (2020)
Reduction in the number of trainings conducted in contact with others and development of the online training offer	Ambra SA (2020), Amica SA (2020), Emitel (2020), GK Agora (2021), GK Best (2021), GK Polsat Plus (2021), Grupa Apator (2020)
Introduction of new ways of communication between employees using modern long-distance communication tools and the intranet; internal information portals	AC SA (2021), Arctic Paper SA (2021), Emitel (2020), GK PKO BP SA (2020), GK Mercator Medical SA, Grupa Apator (2020), Grupa Ciech (2020), Grupa Erbud (2020)
Introduction of different work systems (remote, stationary, rotation) and a shift work system (to limit physical contact)	GK PKO BP SA (2020), GK Mercor SA (2020), GK ROBYG SA (2021),
Equipping employees with individual and collective protection equipment	AC SA (2020), GK LUG SA (2020), GK Mercor SA (2020), GK PKO BP SA (2020), GK ROBYG SA (2021), Grupa Ciech (2020)
Introduction of changes in the workspace structure to keep distance between employees and reduce the number of people in a room, etc.	AC SA (2020), GK LUG SA (2020), GK Mercor SA (2020), GK PKO BP SA (2020), GK ROBYG SA (2021)
Introduction of body temperature measurements	GK LUG SA (2020), GK ROBYG SA (2021), Żabka (2021)
Introduction of ventilation, disinfection and/or ozonation of rooms, as well as disinfection of rooms, touched surfaces and communication routes	GK ENEL MED (2020), GK LUG SA (2020), GK PKO BP SA (2020), GK ROBYG SA (2021), Grupa Erbud (2020), Grupa Żabka (2021), JSW SA (2020)
Ensuring safe transport of employees performing stationary work to and from work (providing company cars, organizing transport on separate buses)	GK LUG SA (2020), GK PKO BP SA (2020), Grupa Ciech (2020), Wawel SA (2020)
Creation of a team/group/commission to respond to a crisis situation	ArcelorMittal Poland (2021), Carlsberg Polska (2020), GK BNP Paribas Bank Polska (2020), GK Enea (2020), GK Fabryka Farb i Lakierów Śnieżka SA (2020), GK ZE PAK SA (2020), Grupa Eurocash (2020), Grupa Żywiec SA (2021)
Purchase of laptops for employees who had desktop computers and providing access to tools and applications facilitating remote work	GK ENEL MED (2020), Grupa Ciech (2020)
Ensuring an appropriate quality of the internet connection and providing employees with additional access to the internet to enable them to work remotely	GK Mercator Medical SA (2020), Grupa Ciech (2020)
Supplying the home office with a desk and an armchair to adapt the workplace to the home-office system	GK Mercator Medical SA (2020)
Organization of workshops on remote work (how to organize yourself at home and take care of your work–life balance, how to present yourself better in front of the camera)	mBank SA (2021)

Table 5. Cont.

Example Activities Improving the Safety and Well-Being of Employees	Company Name (Reporting Year)
Support for parents in childcare during the COVID-19 pandemic, as well as for kindergartens and schools (provision of an educational platform, introduction of flexible working rules to allow employees to perform tasks at times that do not interfere with household duties)	GK Cognor (2020), Grupa Żabka (2021), Kaufland Polska (2020–2021), mBank (2021), Vantage Development (2020)
Supplying employees' children with computer equipment	Grupa Ciech (2020)
Organization of regular online meetings with top management representatives to provide employees with information on the current situation and plans of the company	GK Best (2020), GK BNP Paribas Bank Polska (2020), GK CD Projekt (2020)
Creating platforms on intranet portals of enterprises where employees could exchange ideas on how to spend their free time and how to separate professional duties from private life during remote work or where to share their concerns and problems	Emitel (2020), GK Orange Polska
Providing technical opportunities to organize informal online meetings for employees to talk to and see each other	Leroy Merlin Polska (2021)
Organization of webinars and online meetings on maintaining the well-being and mental health of employees during the pandemic	Carlsberg Polska (2020), Cemex (2021), Grupa Budimex (2021), Grupa Ergo Hestia (2021)
Promoting an active lifestyle by launching well-being platforms and online pro-health programs, as well as granting additional days off for physical activity	GK Best (2021), GK Inter Cars (2020), GK PKO BP SA (2021), Santander Bank Polska SA (2020)
Abandoning some and changing the form of other social activities intended for employees to the remote mode. or postponing them to the next year (e.g., integration trips, meetings with interesting people, and participation in sports events)	GK Best (2020), GK CD Projekt (2020), GK PKN Orlen SA (2021), Grupa Apator (2020), TIM (2020)
Providing a wide package of medical care to employees along with appropriate post-COVID-19 diagnostics	AC SA (2020), GK Banku Pekao SA (2021), GK PKO BP SA (2020), Grupa Ergo Hestia (2021), Wielton SA (2020)
Psychological support for employees and their families (launch of an anonymous hotline operated by psychologists, organization of training sessions with psychologists, individual psychological consultations)	Agora (2021), Carlsberg Polska (2020), Emitel (2020), GK ING Bank Śląski SA (2020), GK ING Bank Śląski SA (2021), Grupa Asseco Poland (2021), Grupa Ciech (2020)
Introducing the possibility of anonymous submission of comments and ideas for changes regarding the rules of the company functioning during the pandemic	GK Best (2020), GK Cognor (2021)
Conducting an online survey on the employees' well-being, remote work, as well as areas requiring support	GK PKO BP SA (2020), Grupa Asseco Poland (2021)
Financial support for employees who have fallen ill with COVID-19 (in the form of equalization of the basic salary, an additional discretionary benefit, or co-financing of rehabilitation trips after recovery)	GK ING Bank Śląski SA (2021), Grupa Bank Millennium (2020)
Financial support for employees whose income has been significantly reduced due to the inability to earn or due to the reduction in earnings of other persons in the same household	GK Agora (2021), GK ING Bank Śląski SA (2021), Wawel SA (2020)
A COVID-19 benefit—a one-off additional financial benefit for all employees as a thank you for their work during the pandemic	GK ING Bank Śląski SA (2021)
An additional cash benefit for employees working in the stationary mode	Grupa Ciech (2020), Jeronimo Martins Polska (2020)
Reimbursement of costs for remote work	GK BNP Paribas Bank Polska (2021), GK PKO BP SA (2021)
Infection insurance offered to employees	Grupa Ciech (2020), GK Gaz System (2021), GK ING Bank Śląski SA (2021), GK LUG SA (2020)

Table 5. Cont.

Example Activities Improving the Safety and Well-Being of Employees	Company Name (Reporting Year)
Financing COVID-19 tests	Carlsberg Polska (2020), GK ROBYG SA (2021), Grupa Ergo Hestia (2021), JSW SA (2020), Santander Bank Polska SA (2020)
Organization of a COVID-19 vaccination campaign for employees and their families	AC SA (2021), GK ENEL MED (2021), GK PKO BP SA (2021), Grupa Apator (2021), Grupa COMARCH (2021), Grupa Żabka (2021), Kaufland Polska (2020–2021), Santander Bank Polska SA (2021)
Organization of a campaign of vaccination against influenza for employees	AC SA (2021), GK PKO BP SA (2021), Grupa Żabka (2021), Kaufland Polska (2020–2021)
An additional day off with the right to remuneration for people fully vaccinated against COVID-19	Carlsberg Polska (2021), Grupa Energa (2021)

#### 4.7. Disclosures on the Impact of the COVID-19 Pandemic on the Companies' Community and Stakeholder Engagement and on the Activities concerning Social Involvement

The COVID-19 pandemic had a significant impact on the social commitments of companies in the period under analysis. Its outbreak in 2020 came as a shock and a wide range of companies tried to help in the fight against its adverse effects. This was confirmed by the results of our analysis, according to which 77.9% of the companies disclosing sustainability reports for 2020 included information on activities addressed to communities and stakeholders during the COVID-19 pandemic, and 58.6% described the impact of the pandemic on their social involvement. This level dropped notably in 2021, which may have been an effect of the return of companies to support initiatives they had been involved in before 2020 and which were not related to the pandemic. In addition, in 2021 the need for emergency assistance to entities on the frontline of the fight against the pandemic decreased, which certainly influenced the companies' social involvement related to the pandemic and thus caused a decrease in relevant disclosures in 2021.

Our analysis demonstrated that information on activities concerning social involvement in connection with the COVID-19 pandemic was more often disclosed in CSR, ESG, and sustainability reports, prepared by companies voluntarily. For some companies, the presentation of issues related to social involvement during the COVID-19 pandemic was so important that they included the information on this subject in a separate chapter.

Companies often indicated, especially in 2020, that due to the pandemic they had to revise plans in the area of social responsibility and often adapt them to the existing restrictions. Some of the projects were postponed and some were modified and adapted to the new circumstances. Therefore, the form of support and its scope often needed changing. However, companies still tried to support the entities that they had supported previously.

Unfortunately, some companies reported that due to the necessity to reduce operational costs, they had had to significantly diminish the level of social involvement, and sometimes even completely stop supporting social initiatives. In such situations, companies declared that as soon as their economic situation improved, they would become socially involved again.

The activities concerning social involvement during the COVID-19 pandemic took many forms—from various social campaigns and initiatives, technical support, in-kind support, financial support in the form of subsidies, to physical assistance of companies' employees in fighting the adverse effects of the pandemic. It should be noted that most of the companies disclosed the amount of the support they provided and the names of the beneficiaries.

The analyzed companies reported that their social involvement during the pandemic was mainly directed towards local communities and primary stakeholders, and was aimed to support as much as possible the people and entities they had cooperated with so far and the people and entities operating in the immediate vicinity. For example, they supported



business partners and local small entrepreneurs who, due to lockdowns, had lost the opportunity to sell their products and services.

During the pandemic, companies significantly supported schools and pupils. It was disclosed that they helped schools prepare for remote teaching by setting up accounts for pupils and teachers, and conducting training on the use of applications enabling remote lessons. In addition, in order to equalize educational opportunities, companies provided computer equipment and access to the internet to children who could be at risk of digital exclusion and have difficulty participating in remote lessons.

Another group considerably supported by companies were the people who were most affected by the pandemic, i.e., the elderly, the youth and children in the first place. This meant not only financial support, but also providing psychological assistance, personal protective equipment and transport for vaccination, delivering meals and creating opportunities for educational and recreational activities.

It should be emphasized that undoubtedly the greatest financial and in-kind support of companies during the pandemic was directed to assist people and institutions that were most involved in the fight against the pandemic and its adverse effects, i.e., hospitals and medical staff, paramedics, nursing home staff, uniformed services or sanitary inspection. Companies paid much attention to describe the support they provided to these groups, specifying the type of support, its amount, and often indicating the exact name of the hospitals or nursing homes that they supported. In addition, in numerous sustainability reports it was revealed that companies were appreciated for their social involvement and that they had received various awards and distinctions for their commitment in social assistance during the pandemic. On the one hand, this may demonstrate how important social involvement during the pandemic was for those companies, and on the other hand, it could also serve to strengthen the image of a socially engaged entity.

Nevertheless, our analysis seems to confirm the findings of this study carried out by Manuel and Herron [77], which suggested that while it was not possible to indicate the actual motives for the companies' social involvement during the pandemic, many initiatives appeared to be motivated by deontological principles (i.e., the moral imperative to do what is right) rather than a utilitarian approach. Furthermore, the analyzed disclosures demonstrate that during the pandemic crisis many companies gave priority to social involvement over short-term profitability [59].

Examples of information on the activities concerning social involvement addressed to communities and stakeholders during the COVID-19 pandemic are presented in Table 6.

**Table 6.** Examples of information on the activities addressed to communities and stakeholders during the COVID-19 pandemic.

Activities Addressed to Communities and Stakeholders during the COVID-19 Pandemic	Company Name (Reporting Year)
Financial or in-kind support for hospitals, emergency medical stations, social welfare homes and uniformed services in providing personal protective equipment to all employees involved in the fight against the COVID-19 virus (protective masks, face shields, disposable gloves, protective suits, protective goggles, disinfectants, soap, etc.)	ArcelorMittal Poland (2020), Bank Gospodarstwa Krajowego (2020), Carlsberg Polska (2020), GK Gaz System (2020), GK Action SA (2020), GK Bank Ochrony Środowiska SA (2020), GK Decora (2020), GK Dino Polska S.A. (2021), GK BNP Paribas Bank Polska (2020), GK Elektrotim (2020), GK Mangat Holding (2020), GK Mercator Medical SA (2020), GK PGE (2020), GK PKN Orlen SA (2020), GK PCC Rokita (2020), GK PZU (2021), GK Fabryka Farb i Lakierów Śnieżka S.A. (2020), GK Torpol (2020), GK Zakłady Magnezytowe Ropczyce (2020), Grupa Famur (2020), Grupa KGHM Polska Miedź SA (2020), Grupa Pekabex (2020), JSW SA (2020), Leroy Merlin Polska (2020), Santander Bank Polska (2020), Wirtualna Polska Holding SA (2020)

Table 6. Cont.

Activities Addressed to Communities and Stakeholders during the COVID-19 Pandemic	Company Name (Reporting Year)
Financial or in-kind support for hospitals in obtaining medical equipment necessary to provide adequate medical care during the COVID-19 pandemic (e.g., ventilators, infusion pumps, germicidal lamps, electric aspirators, and ambulances)	Bank Gospodarstwa Krajowego (2021), GK Gaz System (2020), GK CDRL SA (2020), GK Decora (2020), GK Enea (2021), GK Fabryki Mebli “Forte” (2020), GK PGE (2020), GK Polsat Plus (2020), GK Unibep (2020), Grupa Energa (2021), Grupa KGHM Polska Miedź SA (2020), Grupa Żywiec SA (2020), JSW SA (2020), LPP SA (2020), Solaris Bus & Coach Sp. z o.o. (2020), Totalizator Sportowy (2021)
Financial support for the purchase of computer equipment for hospitals and units performing vaccinations and tests for the SARS-CoV-2 virus	Grupa CCC (2020), Wirtualna Polska Holding SA (2020)
Financial support for the purchase of SARS-CoV-2 rapid tests	GK Polsat Plus (2020), Grupa UNIMOT (2021), Kaufland Polska (2020–2021)
Providing personal protective equipment produced by enterprises (protective masks, disposable gloves, disinfectants) as a donation or at a preferential price	GK Boryszew (2020), GK Mercator Medical SA (2020), Grupa Azoty SA (2020), Korporacja KGL SA (2021)
Involvement of employees in the production of personal protective equipment (visors, reusable masks, protective footwear, etc.) transferred to people involved in the fight against the pandemic (hospital employees, paramedics, uniformed services, employees of nursing homes)	GK Fabryka Farb i Lakierów Śnieżka SA (2020, 2021), Grupa Azoty SA (2020), Grupa CCC (2020), Grupa VELUX (2020), Grupa Pekabex (2020), LPP SA (2020)
Participation in the construction of temporary hospitals	GK PKN Orlen SA (2020)
Support for helplines of sanitary services and the National Vaccination Program to relieve their employees	Bank Gospodarstwa Krajowego (2020), GK PZU (2021), Grupa Energa (2020)
Financial support for sanitary and epidemiological stations, non-governmental organizations, research centers actively fighting the pandemic	GK Enea (2021), Grupa Banku Millennium (2020), Grupa Energa (2021)
Providing personal protective equipment to seniors, local government institutions, schools, orphanages and other entities forming the local community together with the company	GK Bank Ochrony Środowiska SA (2020), Grupa Kęty SA (2021), Grupa UNIMOT (2021), Jeronimo Martins Polska (2021)
Delivery of food products, fruit, as well as hygiene products to hospitals, families in need and to centers providing round-the-clock care for the elderly, the disabled and the chronically ill.	Bank Gospodarstwa Krajowego (2020), Grupa Eurocash (2021), Jeronimo Martins Polska (2021), Kaufland Polska (2020–2021)
Financial support for the “Meal for medics” campaign	GK BNP Paribas Bank Polska (2020), Fiberhost (2021), GK CD Projekt (2020), Grupa Pekabex (2020)
Organization of and financial support for the “Apartment for medics” campaign	Grupa Comarch (2020)
Giving packages with sweets to medics, rescuers, nurses and everyone involved in the fight against the COVID-19 pandemic as a thank you for everyday help during the pandemic	Wawel SA (2020)
Donating household appliances to employees of social care homes as a thank you for their help during the pandemic	Amica SA (2020)
Help for seniors (providing personal protective equipment, transport for COVID-19 vaccination, help with shopping and delivering meals)	Amica SA (2021), Credit Agricole Bank Polska S.A. (2020), GK Gaz System (2021), GK Polsat Plus (2020), Emitel (2020)
Providing computer equipment to children at risk of exclusion from participation in online educational activities (purchase of new computer equipment, transfer of used equipment adapted to the needs of students, provision of access to the internet)	Amica SA (2020), GK Gaz System (2020), GK BNP Paribas Bank Polska (2021), GK PKN Orlen SA (2020), GK Polsat Plus (2020), Grupa Auto Partner SA (2020), Grupa COMARCH (2020), Grupa Kęty SA (2021), Grupa Kruk (2020), JSW SA (2020), Wawel SA (2020)

Table 6. Cont.

Activities Addressed to Communities and Stakeholders during the COVID-19 Pandemic	Company Name (Reporting Year)
Technical support for schools in the organization of remote teaching (configuration of logins and passwords for students and teachers, training of teachers in the use of applications for conducting remote lessons)	Cemex (2020, 2021), GK Banku Handlowego w Warszawie SA (2021), GK Fabryki Mebli “Forte” (2020) Grupa Energa (2020)
Organizing various educational and recreational activities for children and teenagers during summer and winter holidays	Cemex (2021), Totalizator Sportowy (2021)
Introduction of programs to reduce the post-pandemic “health gap” in adults, children and adolescents	GK BNP Paribas Bank Polska (2020), GK Orange Polska (2020), GK PZU (2021)
Support for aid activities for seriously ill children who, due to the epidemiological threat, had limited contact with specialists	GK Action SA (2020)
Financial support for the organization of psychological assistance points and the functioning of hotlines for children and adolescents, as well as adults whose well-being and mental state deteriorated due to the COVID-19 pandemic	GK Gaz System (2021), GK Orange Polska (2020), Santander Bank Polska (2020)
Promotion of the COVID-19 vaccination campaign (preparation and presentation of spots on internet portals presenting the stories of people who have lost their loved ones in the pandemic, promotion of the national vaccination program lottery)	Totalizator Sportowy (2021), Wirtualna Polska Holding SA (2021)
Marketing and advertising support for business partners and small local entrepreneurs using the company’s own communication channels	Grupa Comarch (2020), Wirtualna Polska Holding SA (2020)
Providing business partners with personal protective equipment (protective masks, disposable gloves, disinfectants) as well as protective screens for direct service stations	GK PZU (2020)
Supporting the activities of business partners by developing information materials with recommendations for good practices in the field of security and support of the sales process during the pandemic	GK Fabryka Farb i Lakierów Śnieżka SA (2020)
Organizing webinars for business partners and other stakeholders on topics related to the COVID-19 pandemic	GK Fabryki Mebli “Forte” (2020)
Support for local entrepreneurs who have lost the opportunity to sell goods and services (e.g., organization of the “We support Polish winemaking” campaign, involving restaurants in the preparation of meals as part of the “Meal for medics” or “Meal for a senior” campaigns)	Ambra SA (2020), Carlsberg Polska (2020), Fiberhost (2021), Grupa Erbud (2020)
Organization of a social campaign indicating the role of local shops during the pandemic and encouraging safe shopping to support them	Grupa Eurocash (2020)
Financial support for cultural institutions by purchasing all tickets for selected performances	Fiberhost (2021)
Financial support for initiatives aimed at improving health conditions; promoting a healthy lifestyle among the local community	GK ZUE (2020)
Organization of the “Survival boxes” campaign and purchase of vaccines for people most affected during the pandemic period	GK Mercator Medical SA (2021)
Organization of the “Stop hate! Don’t slander the miner” campaign to change the attitude of the society towards the inhabitants of Upper Silesia, especially miners	JSW SA (2020)
Organization of an action promoting public transport to rebuild passengers’ trust in public transport during the COVID-19 pandemic	Solaris Bus & Coach Sp. z o.o. (2020)

## 5. Conclusions

The COVID-19 pandemic has had a significant impact on the functioning of societies and businesses around the world. It affected not only the business activity of companies but

also served as a test of their responsibility. To combat the pandemic's effects and prevent their emergence, companies have undertaken various activities to protect the interests of shareholders and investors, as well as to ensure the safety and well-being of employees and various stakeholders, including social groups most vulnerable to the pandemic.

The COVID-19 pandemic has brought about remarkable changes in sustainability reporting, which has become a vital tool for showcasing to stakeholders how companies manage crisis situations and whether they continue to act in accordance with the principles of sustainable development during such circumstances. Hence, the aim of this paper was to present the findings of a comprehensive content analysis of sustainability reports, aimed at identifying the scope and specificity of information disclosed by companies in the context of the COVID-19 pandemic based on reports published by the companies operating in Poland in the 2020–2021 period.

This study has several theoretical and practical contributions. First of all, it extends the existing research on sustainability reporting to indicate the specificity of disclosures related to the COVID-19 pandemic. It reinforces the previous literature, evidencing that companies' sustainability activities during the crisis emerge from the intersection of equilibrium theory, stakeholder theory, and theory of common good [78]. In fact, it was revealed that companies put great effort to combine economic challenges with altruistic actions, and this allowed them both to survive and to serve the common good of society, however, focusing on specific interest groups [65]. In addition, our study offers a comprehensive overview aimed to identify the sustainability report areas in which companies present the impact of the pandemic on corporate activities and performance.

Furthermore, this study provides some practical contributions for policy makers, managers, and practitioners to support and facilitate sustainability reporting. It outlines a set of best practices that companies have adopted during the COVID-19 pandemic, which can serve as a reference for other enterprises in similar crisis situations. This especially applies to companies newly obligated to prepare such reports based on the Corporate Sustainability Reporting Directive (CSRD), beginning in 2025, when the number of entities obliged to prepare sustainable reports will significantly increase. Our results may also support current efforts to develop European Sustainability Reporting Standards (ESRS).

The analysis revealed that the scope of disclosed information concerning the COVID-19 pandemic varied greatly. Some companies provided precise descriptions of the actions taken to combat the pandemic, while others made only passing references to it. Most frequently, companies disclosed information about the impact of the pandemic on employees and the actions taken to ensure the safety and well-being of employees during the pandemic. Across all the analyzed areas, more disclosures pertaining to the pandemic were evident in 2020 than in 2021. This disparity could be attributed to the initial shock of the pandemic in 2020, which prompted companies to swiftly implement numerous activities to adapt to the new circumstances.

The statements on the COVID-19 pandemic included in the letters from top management within the analyzed sustainability reports emphasized that the interests of shareholders and investors during the crisis were protected, the safety and well-being of employees as the utmost priority was assured, and companies exerted considerable efforts to harmonize economic challenges with altruistic actions.

Our analysis revealed that a considerable number of companies publishing sustainability reports deemed issues related to the COVID-19 pandemic so significant that they warranted separate chapters or sections exclusively dedicated to this topic. These chapters and sections predominantly addressed issues concerning employee occupational health and safety. Furthermore, they presented a wide array of activities undertaken by companies during the pandemic, particularly those aimed at adapting operations to new circumstances, ensuring suitable working conditions for employees, and simultaneously creating adequate safety measures for customers.

The analyzed reports demonstrated the substantial efforts companies invested in overcoming the adverse economic challenges posed by the pandemic. They focused on

guaranteeing the continuation of value creation, safeguarding employment, and improving the quality of products and services. Accelerated digitalization and the development of e-commerce played a pivotal role, prompting many companies to significantly adapt their business strategies and operations to new circumstances.

Among all the issues under analysis, disclosures on the impact of the pandemic on the companies' environmental performance and environmental activities to respond to the pandemic exhibited the lowest frequency within the analyzed sustainability reports. While some companies emphasized that their environmental projects continued as planned even amid the COVID-19 crisis, others disclosed that the pandemic necessitated significant modifications, postponements, or suspensions of key environmental actions and plans. Moreover, certain companies seized the pandemic period as an opportunity to enhance their environmental performance and implement targeted measures within this area.

It was revealed that regardless of the sustainable impact group a company belongs to, whether reporting non-financial data is obligatory or not, and whether GRI guidelines are included in the reports or not, companies gave the highest priority to presenting information about the impact of the pandemic on employee safety, and activities undertaken to ensure the safety and well-being of employees. It can be assumed that the top priority given to employee safety stems from the pandemic's significant health impact. Consequently, companies aimed to provide the safest working conditions and take care of their employees' well-being.

As the COVID-19 pandemic continued, companies collected appropriate information from various sources and assessed its credibility when necessary. Then, identified any threats caused by the pandemic in order to be aware of the risks posed by this crisis situation. They also tried to get to know how employees perceive the crisis situation in order to provide them, if possible, with appropriate working conditions causing minimized stress at the connection with the pandemic. Based on such knowledge, companies could quickly react to emerging threats and ensure safe working conditions.

The COVID-19 pandemic significantly impacted the social commitments of companies during the analyzed period. Due to the economic situation, certain pre-pandemic social activities were postponed, modified to adapt to new circumstances, or suspended. Nevertheless, many companies simultaneously engaged in various activities and offered financial and in-kind assistance to support entities heavily involved in pandemic-fighting efforts and the social groups most adversely affected by the pandemic.

Our analysis indicated that companies disclosed information related to crisis situations, such as the COVID-19 pandemic, in varying ways and extents. Consequently, locating and comparing relevant information disclosed in the reports proved challenging. However, this information should be easily accessible to a wide array of stakeholders. Hence, the necessity arises to establish a framework that would allow companies to demonstrate their approach to crisis situations in sustainability reports and their resilience to such circumstances. A similar perspective is presented by La Torre et al. [79], emphasizing that sustainability reports should reveal companies' efforts to mitigate crisis effects on society. Our viewpoint extends this, asserting that sustainability reports should not only highlight actions taken to benefit society amid crises but should also elucidate how the crisis impacted all sustainability areas and the actions taken by the company in each of these domains. Creating such a standard would address the issue of information asymmetry that arises when companies prepare reports based on their individual guidelines [80]. Furthermore, this standard would bridge a gap in sustainability reporting by accounting for emergency situations [58].

Currently, efforts are underway to develop European Sustainability Reporting Standards (ESRS). Following the Corporate Sustainability Reporting Directive (CSRD), these standards will guide companies in preparing sustainability reports from 2024 onwards. The analysis of the draft ESRS standards available on the EFRAG website ([www.efrag.org](http://www.efrag.org) (accessed on 3 July 2023)) revealed that they only minimally and predominantly in relation to social issues including guidelines for disclosing information about crisis situations

in sustainability reports. However, these guidelines should encompass all sustainability domains, as different crises can affect various facets of a company's operations. Hence, it seems optimal to establish a distinct standard outlining how companies should address crisis situations in sustainability reports when they arise. Such guidelines should enable the presentation of comparable information while remaining flexible to apply to all types of crises. Despite some criticism towards "harmonization" of the sustainability reporting framework [81], such a framework appears likely to enhance the quality and usefulness of the information presented. This also concerns the possibility of assessing and comparing companies' responses to crisis situations.

Although this study provides valuable insights, it is not free from limitations. Firstly, the research sample was limited to companies operating in Poland. Consequently, the results obtained cannot be generalized to other countries that differ, particularly in socio-economic characteristics. Therefore, conducting similar studies in other countries or performing cross-country comparisons could yield a better understanding of the specificity of sustainability reporting and the sustainability initiatives that emerged during the COVID-19 pandemic. Secondly, our analysis focused on COVID-19 pandemic-related matters disclosed in sustainability reports between 2020 and 2021. Future studies might delve into such disclosures over an extended period or center around post-pandemic sustainability initiatives. Moreover, our paper was focused on specific communication channel, i.e., sustainability reports. Therefore, research on other communication channel targeted at relevant audiences with specific crisis messages during the pandemic would be interesting. Such investigations could aid companies in maintaining resilience and sustainability during potential future pandemics or other global crises. Thirdly, the research employed the content analysis method, which carries inherent limitations due to possible subjectivity. Nonetheless, to enhance reliability and minimize biased screening, two independent researchers conducted the analysis of all reports, and appropriate procedures were followed to mitigate subjectivity concerns.

Despite the mentioned limitations, we believe that our study offers intriguing insights into disclosures on sustainability issues during the COVID-19 pandemic. Moreover, it addresses the call for research on the sustainability initiatives that emerged during that period [82].

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## Appendix A

**Table A1.** List of companies and relevant sustainability reports included in the research sample.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
AC SA	Group 2: Industrial	Manufacturer of gas installations, electronics and wiring harnesses for cars	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
Ambra SA	Group 1: Basic materials and needs	Producer, importer and distributor of wines and other alcohols	Non-financial Report (2020) Non-financial Report (2021)	07.2019–06.2022	Yes	No
Amica SA	Group 4: Other services and light manufacturing	Manufacturer of household appliances	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
ArcelorMittal Poland	Group 1: Basic materials and needs	Producer of steel and coke	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Arctic Paper SA	Group 1: Basic materials and needs	Producer of paper	CSR Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
ASBISc Enterprises	Group 4: Other services and light manufacturing	Distributor of IT products	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Bank Gospodarstwa Krajowego	Group 1: Basic materials and needs	Banking and financial services company	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Carlsberg Polska	Group 1: Basic materials and needs	Beer producer	Sustainability Report (2020) ESG Report (2021)	2020–2021	Yes	Yes
CEMEX	Group 2: Industrial	Producer of cement, ready-mix concrete and aggregates	Integrated Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Credit Agricole Bank Polska SA	Group 1: Basic materials and needs	Banking and financial services company	CSR Report (2020) CSR Report (2021)	2020–2021	No	Yes
Emitel	Group 3: Transport, infrastructure and tourism	Operator of terrestrial radio and television infrastructure in Poland	CSR Report (2020) ESG Report (2021)	2020–2021	No	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Fiberhost	Group 3: Transport, infrastructure and tourism	Construction, maintenance and management of open fiber optic networks, and provision of telecommunications services	CSR Report (2021)	2021	No	No
Firma Oponiarska “Dębica” SA	Group 2: Industrial	Tire manufacturer	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
Fundacja Dorastaj z nami	Group 4: Other services and light manufacturing	Foundation supporting children of public service representatives who died or were injured in the performance of their duties	Sustainability Report (2021)	2021	No	Yes
Gdańsk Transport Company	Group 3: Transport, infrastructure and tourism	Operator of A1 Motorway	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
GK Action SA	Group 4: Other services and light manufacturing	Wholesale company (Manufacturer and distributor in the areas of ICT, smart home and PV solutions)	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Agora	Group 3: Transport, infrastructure and tourism	Media company	CSR Report (2020) CSR Report (2021)	2020–2021	Yes	Yes
GK Alior Bank	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Arteria SA	Group 3: Transport, infrastructure and tourism	Group of companies offering comprehensive solutions in the area of outsourcing contact center services, marketing as well as sales and logistics support	Non-financial Statement (2021)	2021	Yes	No
GK Bank Ochrony Środowiska SA	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Statement (2020) ESG Report (2021)	2020–2021	Yes	Yes
GK Banku Handlowego w Warszawie SA	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Report (2020) Non-financial Report(2021)	2020–2021	Yes	Yes
GK Banku Pekao SA	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Best	Group 1: Basic materials and needs	leaders in the debt collection industry	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Bioton SA	Group 2: Industrial	Biotechnology company providing solutions for diabetes care	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK BNP Paribas Bank Polska	Group 1: Basic materials and needs	Banking and financial services company	CSR Report (2020) ESG Report (2021)	2020–2021	Yes	Yes
GK Boryszew	Group 2: Industrial	Manufacturer of components for cars, steel products and industrial chemical, and non-ferrous metals processing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Bumech	Group 1: Basic materials and needs	Mining hard coal, providing services in the field of drilling underground workings and production, service and repair of mining equipment and machinery	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK CD Projekt	Group 3: Transport, infrastructure and tourism	Production and publishing of video games and related products	Sustainability Report (2021)	2021	Yes	Yes
GK CDRL SA	Group 1: Basic materials and needs	Production and sale of clothing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Cognor	Group 1: Basic materials and needs	Producer of raw steel (semi-finished, billet) and metallurgical final products	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
GK Columbus Energy	Group 1: Basic materials and needs	Provider of services on the modern energy market (photovoltaics, heat pumps, energy storage or electric vehicle chargers)	Sustainability Report (2021)	2021	No	Yes
GK Comp	Group 3: Transport, infrastructure and tourism	Group consisting of technology companies specializing in IT, network and cryptography security solutions as well as solutions for trade and services	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Decora	Group 4: Other services and light manufacturing	Production and distribution of interior decoration articles	Sustainability Report (2019–2020) Sustainability Report (2021)	2019–2021	Yes	Yes
GK Dekpol	Group 2: Industrial	Construction, real estate development and production of accessories for construction machines	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Delko SA	Group 4: Other services and light manufacturing	Wholesale and retail trade in hygienic, chemical and food products	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Dino Polska SA	Group 4: Other services and light manufacturing	Chain of supermarkets	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Elektrotim	Group 2: Industrial	Contractor of electrical and power installations and networks, automation systems for construction, industry and energy	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Enea	Group 1: Basic materials and needs	Energy sector company	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK Enel-Med	Group 4: Other services and light manufacturing	Private operator of medical services	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Fabryka Farb i Lakierów Śnieżka SA	Group 2: Industrial	Manufacturer of paints and varnishes	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Fabryki Mebli “Forte”	Group 4: Other services and light manufacturing	Furniture manufacturer	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Fasing SA	Group 2: Industrial	Manufacturing of industrial chains	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Gaz System	Group 1: Basic materials and needs	Transmission Gas Pipeline Operator	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
GK Gobarto	Group 1: Basic materials and needs	Slaughter, cutting and distribution of meat	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Hydrotor	Group 2: Industrial	Manufacturing of power hydraulics	Non-financial Report (2019–2020) Non-financial Report (2021)	2019–2021	Yes	No
GK Immobile	Group 2: Industrial	Group operating in electromechanical industry, hotel industry, construction investments, industrial construction, real estate rental and clothing industry	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK ING Bank Śląski SA	Group 1: Basic materials and needs	Universal bank	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Inter Cars	Group 2: Industrial	Wholesale of parts and accessories for motor vehicles	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
GK Komputronik	Group 4: Other services and light manufacturing	Retail sale of computers, peripherals and software	Non-financial Report (2020/2021) Non-financial Report (2021/2022)	04.2020–03.2022	Yes	No
GK Lentex	Group 2: Industrial	Manufacturing of floor coverings and nonwovens	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Lubawa	Group 1: Basic materials and needs	Production, processing and sale of fabrics and knitted fabrics	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
GK Lubelski Węgiel Bogdanka	Group 1: Basic materials and needs	Coal mining company	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
GK LUG SA	Group 2: Industrial	Manufacturing of professional lighting systems	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	No	No
GK Mangata Holding	Group 2: Industrial	Manufacturing of automotive industry components, fasteners, industrial valves and automation	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Mercator Medical SA	Group 4: Other services and light manufacturing	Manufacturing of disposable personal protective equipment for medical purposes and surgical drapes	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Mercor SA	Group 4: Other services and light manufacturing	Producer of passive fire protection systems	Non-financial Report (2020) Non-financial Report (2021)	04.2020–03.2022	Yes	No
GK Mirbud	Group 2: Industrial	Construction company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes



Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Monnari Trade SA	Group 1: Basic materials and needs	Designing and sale of women's clothing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Mostostal Warszawa	Group 2: Industrial	Construction company	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK Newag	Group 2: Industrial	Production, maintenance, and modernization of railway rolling stock	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Orange Polska	Group 3: Transport, infrastructure and tourism	Telecommunications service provider	Integrated Report (2020) Integrated Report (2021)	2020–2021	No	Yes
GK OT Logistics	Group 3: Transport, infrastructure and tourism	Transport and logistics services	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Otmuchów	Group 1: Basic materials and needs	Food industry of confectioneries	Non-financial Statement (2020)	2020	Yes	No
GK Pamapol	Group 1: Basic materials and needs	Meat and vegetable processing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK PCC Rokita	Group 2: Industrial	Manufacturing of specialized chemical products and industrial formulations	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK PGE	Group 1: Basic materials and needs	Energy sector company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK PKN Orlen SA	Group 1: Basic materials and needs	Integrated, multi-utility company providing energy and fuel	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK PKO BP SA	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK Polimex Mostostal	Group 2: Industrial	Engineering and industrial construction company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Polsat Plus	Group 3: Transport, infrastructure and tourism	Provider of integrated media and telecommunications services	CSR Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
GK Polski Holding Nieruchomości SA	Group 3: Transport, infrastructure and tourism	Real estate management and investment project implementation	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK Protektor	Group 1: Basic materials and needs	Manufacturer and distributor of footwear	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK PZU	Group 1: Basic materials and needs	Insurance company	Non-financial Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
GK Rafamet	Group 2: Industrial	Manufacturing of special-purpose machine tools for wheelset machining	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Rainbow Tours	Group 4: Other services and light manufacturing	Tour operator	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Relpol SA	Group 2: Industrial	Manufacturing of relays and control equipment	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK ROBYG SA	Group 3: Transport, infrastructure and tourism	Real estate developer	ESG Report (2021)	2021	No	Yes
GK Seco/Warwick SA	Group 2: Industrial	Manufacturing of solutions for heat treatment of metals	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK Solar Company SA	Group 1: Basic materials and needs	Designing and production of original collections of women's clothing and clothing accessories	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Stalprofil SA	Group 4: Other services and light manufacturing	Distribution of steel and metallurgical products	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK SuperDrob	Group 1: Basic materials and needs	Production and sale of poultry products	Sustainability Report (2020–2021)	2020–2021	No	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
GK Tarczyński SA	Group 1: Basic materials and needs	Production, processing and preservation of meat	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK Tauron Polska Energia SA	Group 1: Basic materials and needs	Energy holding company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK TIM	Group 4: Other services and light manufacturing	Wholesale distributor of electrotechnical goods	Non-financial Statement (2020) Integrated Report (2021)	2020–2021	Yes	Yes
GK Torpol	Group 2: Industrial	Construction, modernization and repairs of railway infrastructure	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
GK Unibep	Group 2: Industrial	Construction company	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
GK Voxel SA	Group 4: Other services and light manufacturing	Highly specialized medical diagnostic services	Non-financial Report (2021)	2021	Yes	No
GK VRG SA	Group 1: Basic materials and needs	Designing and distributing fashion collections for men and women, as well as jewelry and watches	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
GK WASKO SA	Group 3: Transport, infrastructure and tourism	Information and communication technologies	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
GK Wojas	Group 1: Basic materials and needs	Leather footwear manufacturing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
GK Zakłady Magnezytowe Ropczyce	Group 1: Basic materials and needs	Manufacturing of high-quality basic and aluminosilicate refractory materials	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK ZE PAK SA	Group 1: Basic materials and needs	Electricity production	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
GK ZUE	Group 3: Transport, infrastructure and tourism	Transport and railway infrastructure construction	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Globe Trade Centre	Group 3: Transport, infrastructure and tourism	Real estate developer	ESG Report (2020) ESG Report (2021)	2020–2021	No	Yes
Grupa 7R	Group 3: Transport, infrastructure and tourism	Rental of warehouse space	ESG Report (2021)	2021	No	Yes
Grupa AB	Group 4: Other services and light manufacturing	Chain of specialized shops offering consumer electronics and home appliances	Non-financial Report (07.2019–06.2020) Non-financial Report (07.2020–06.2021) Non-financial Report (07.2021–06.2022)	07.2019–06.2022	Yes	No
Grupa Allegro EU SA	Group 4: Other services and light manufacturing	Trading platform	ESG Report (2021)	2021	No	Yes
Grupa Alumetal	Group 1: Basic materials and needs	Producer of primary and secondary aluminum casting alloys	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
Grupa Apator	Group 4: Other services and light manufacturing	Group of manufacturers and distributors of measuring devices and systems, as well as suppliers of solutions supporting the operation of electricity, water and gas networks	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Asseco Poland	Group 3: Transport, infrastructure and tourism	Software company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Auto Partner SA	Group 2: Industrial	Importer and distributor of spare parts for cars, vans and motorcycles	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Azoty SA	Group 2: Industrial	Fertilizer and chemical industry company	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Grupa Banku Millennium	Group 1: Basic materials and needs	Banking and financial services company	Non-financial Report (2020) ESG Report (2021)	2020–2021	Yes	Yes
Grupa Benefit Systems	Group 4: Other services and light manufacturing	Healthy lifestyle, physical recreation, culture and entertainment, and adapted cafeteria programs	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Budimex	Group 2: Industrial	Construction company	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
Grupa CCC	Group 4: Other services and light manufacturing	Retail sale of footwear	Non-financial Report (01.2020–01.2021) Sustainability Report (02.2021–01.2022)	2020–2021	No	Yes
Grupa Ciech	Group 2: Industrial	Chemical industry company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Comarch	Group 3: Transport, infrastructure and tourism	Producer of innovative IT systems for key sectors of the economy both in Poland and abroad	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Grupa Echo Investment	Group 3: Transport, infrastructure and tourism	Real estate developer	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Grupa EMC Instytut Medyczny SA	Group 4: Other services and light manufacturing	Health care services (the owner of hospitals and clinics on the market of private medical services)	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
Grupa Energa	Group 1: Basic materials and needs	Energy sector company	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Grupa Eneris	Group 1: Basic materials and needs	Company specializing in environmental protection: waste and raw material management, water and sewage management and renewable energy	Sustainability Report (2019–2020)	2019–2020	No	Yes
Grupa Erbud	Group 2: Industrial	Construction company	Integrated Report (2020)	2020	Yes	Yes
Grupa Ergo Hestia	Group 1: Basic materials and needs	Insurance company	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Grupa Eurocash	Group 1: Basic materials and needs	Wholesale distributor of FMCG products	CSR Report (2020) CSR Report (2021)	2020–2021	Yes	Yes
Grupa Famur	Group 1: Basic materials and needs	Manufacturer of machines and systems used in underground mining and supplier of related aftermarket services	Non-financial Statement (2020) Integrated Report (2021)	2020–2021	Yes	Yes
Grupa Introl	Group 2: Industrial	Installing industrial machinery, equipment and fittings	Non-financial Statement (2021)	2021	Yes	No
Grupa Kęty SA	Group 1: Basic materials and needs	Aluminum processing	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
Grupa KGHM Polska Miedź SA	Group 1: Basic materials and needs	Production of copper and silver	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
Grupa KOM-EKO	Group 1: Basic materials and needs	Waste disposal and cleaning	ESG Report (2021)	2021	No	No
Grupa Kruk	Group 1: Basic materials and needs	Debt collection and management of receivables	Non-financial Statement (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
Grupa Makarony Polskie	Group 1: Basic materials and needs	Production of pasta	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
Grupa Mostostal Zabrze	Group 2: Industrial	Industrial construction	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes



Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Grupa Neuca	Group 4: Other services and light manufacturing	Wholesale of pharmaceutical and medical products	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Grupa OEX	Group 4: Other services and light manufacturing	Retail and e-commerce services	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Grupa Pekabex	Group 2: Industrial	Designing, production and assembly of facility structures based on prefabrication technology	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
Grupa PKP Cargo	Group 3: Transport, infrastructure and tourism	Railway freight carrier	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
Grupa Rafako SA	Group 2: Industrial	Manufacturing of technological solutions related to power generation and environment protection	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Grupa Sygnity	Group 3: Transport, infrastructure and tourism	IT company	Non-financial Report (2020) Non-financial Report (2021)	10.2019–09.2021	Yes	No
Grupa Trakcja	Group 2: Industrial	Construction and modernizing of railway and road infrastructure	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Grupa UNIMOT	Group 1: Basic materials and needs	Wholesale of liquid and gas fuels	ESG Report (2021)	2021	No	Yes
Grupa VELUX	Group 4: Other services and light manufacturing	Roof windows manufacturing	Sustainability Report (2020–2021)	2020–2021	No	Yes
Grupa Zamet	Group 1: Basic materials and needs	Equipment for metallurgical and mining industry and large-size steel structures	Non-financial Report (2021)	2021	Yes	No
Grupa Żabka	Group 4: Other services and light manufacturing	Convenience stores	CSR Report (2021)	2021	No	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Grupa Żywiec SA	Group 1: Basic materials and needs	Beer producer	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	No	Yes
Jeronimo Martins Polska	Group 4: Other services and light manufacturing	Chain of supermarkets	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
JSW SA	Group 1: Basic materials and needs	Coal mining company	Sustainability Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
Kaufland Polska	Group 4: Other services and light manufacturing	Hypermarket chain	Sustainability Report (2020–2021)	2020–2021	No	Yes
Kompania Piwowarska	Group 1: Basic materials and needs	Brewing group	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Korporacja KGL SA	Group 3: Transport, infrastructure and tourism	Manufacturing of plastic food packaging and production tools	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No
KPPD Szczecinek SA	Group 1: Basic materials and needs	Acquisition and production of wood and wood-based products	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Leroy Merlin Polska	Group 4: Other services and light manufacturing	Home improvement and gardening retailer	CSR Report (2021)	2021	No	Yes
Lidl Polska	Group 4: Other services and light manufacturing	Discount retailer chain	Sustainability Report (2019–2021)	03.2019–02.2021	No	Yes
LPP SA	Group 1: Basic materials and needs	Designing, production and distribution of clothing	Integrated Report (2020) Sustainability Report (2021)	02.2020–01.2022	Yes	Yes
mBank SA	Group 1: Basic materials and needs	Universal bank	Integrated Report (2020) Integrated Report (2021)	2020–2021	Yes	Yes
McDonald's Polska	Group 4: Other services and light manufacturing	Fast food chain	ESG Report (2021)	2021	No	Yes
Odlewnie Polskie SA	Group 1: Basic materials and needs	Manufacturing of ADI cast iron and nodular cast iron	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	No

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
PKP Energetyka	Group 1: Basic materials and needs	Electricity distributor to railway network and other business customers	ESG Report (2021)	2021	No	Yes
Raben	Group 3: Transport, infrastructure and tourism	Logistics company	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
Rawlplug SA	Group 2: Industrial	Manufacturing of tools, fasteners and fixings	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	Yes	Yes
Sanok Rubber Company SA	Group 2: Industrial	Rubber products and rubber compounds manufacturing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes
Santander Bank Polska SA	Group 1: Basic materials and needs	Universal bank	ESG Report (2020) ESG Report (2021)	2020–2021	Yes	Yes
Solaris Bus & Coach Sp. Z o.o.	Group 2: Industrial	Bus and trolleybus manufacturer	Sustainability Report (2020) Sustainability Report (2021)	2020–2021	No	Yes
T-Mobile Polska	Group 3: Transport, infrastructure and tourism	Mobile network operator	Sustainability Report (2021)	2021	No	Yes
Totalizator Sportowy	Group 4: Other services and light manufacturing	Number games and cash lotteries	Integrated Report (2021)	2021	No	Yes
Vantage Development	Group 3: Transport, infrastructure and tourism	Real estate developer	ESG Report (2021)	2021	No	Yes
VGL Solid Group	Group 3: Transport, infrastructure and tourism	Truck transportation and services in logistics	CSR Report (2021)	2021	No	No
Wawel SA	Group 1: Basic materials and needs	Confectionery manufacturing	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	No
Wielton SA	Group 2: Industrial	Manufacturing of semi-trailers, trailers and car bodies	Non-financial Report (2020) Non-financial Report (2021)	2020–2021	Yes	Yes

Table A1. Cont.

Company Name	Sustainability Impact	Activity Type	Report Type	Reporting Period	Reporting Obligation	REFERENCE to GRI Guidelines
Wirtualna Polska Holding SA	Group 3: Transport, infrastructure and tourism	e-commerce, advertising and media activities	Non-financial Statement (2020) Non-financial Statement (2021)	2020–2021	Yes	Yes
Zarząd Transportu Metropolitalnego	Group 3: Transport, infrastructure and tourism	Collective public transport	CSR Report (2020)	2020	No	Yes

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