



Article

Evolution of Energy Companies' Non-Financial Disclosures: A Model of Non-Financial Reports in the Energy Sector

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Abstract: In the 21st century, the disclosure of non-financial information in non-financial reports (N-FRs), in particular in Corporate Social Responsibility reports (CSRRs), integrated reports (IRs), and activity reports (ARs), has a global dimension, and the quality and scope of such disclosures affects both a wide range of stakeholders and the global economy. In the last decade, changing trends, considerations, as well as economic, legal and social factors have significantly influenced the content of corporate disclosures. In the context of N-FRs, special attention should be paid to the energy sector, which is in many ways essential for both the domestic and global economy. Therefore, its functioning also attracts the attention of researchers. The objective of this paper is to show the practical aspects of N-FRs and to assess the quality of reports submitted by companies in the Polish energy sector. The authors assessed the quality of non-financial information contained in the reports of energy sector companies in terms of four key management areas: Environmental Management System (EMS), Quality Management System (QMS), Enterprise Risk Management System (ERMS), and Corporate Governance Principles (CGPs). On the basis of their analysis of all CSRRs and IRs submitted by Polish energy sector companies in Poland in 2010–2020, the authors propose a model for the disclosure of information on these systems. Standardized reporting on these key management areas in the energy sector will improve the quality and usefulness of information from the perspective of all stakeholders. A model like this may be useful in many countries that manage their energy sectors in a similar way, such as Central and Eastern Europe (CEE) and other developing countries.

Keywords: N-FRs; non-financial disclosure; CSR; sustainable development; energy sector; CEE



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1. Introduction

As Corporate Social Responsibility (CSR) and sustainable development (SD) concepts become a growing trend, more and more entities around the world publish non-financial information. In Poland, CSR and SD concepts have also become a current and important research problem in the literature and economy. As defined by Directive 2014/95/EU [1], non-financial information is related to CSR and as a minimum should address environmental and social issues, labor, human rights, and combating corruption and bribery. Non-financial information presented by businesses from different economic sectors is of interest to different audiences, including stakeholders who use it to make better-informed business decisions.

The benefits of N-FRs go in many different directions, and may be perceived differently by various groups of stakeholders. For companies, non-financial disclosures mean positive relations with their clients, whereas for the economy, N-FRs means more sustainable and innovative business operations. This, in turn, makes it possible to build a more cohesive society, which may become a springboard for a sustainable economic system [2].

In 2017, the Global Reporting Initiative (GRI) ran a study demonstrating that over 50% of companies believed that IRs were the most appropriate method of reporting on SD. Some

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85% of all interviewed companies stated that IRs would become the basic reporting tool in the coming decade. Additionally, global professional associations of accountants have been intensively working on improving business reporting standards. The number of N-FRs has been rapidly growing every year [3–5], in response to the omnipresent CSR and SD doctrine, as well as growing demand for information among stakeholders. Given the wide range of guidelines on N-FRs (GRI, GC and ISO 26000) and the fully discretionary format of their presentation (CSRRs or IRs), the published reports differ significantly in terms of scope and content. Importantly, the reports have become more and more detailed, and their content and form change constantly, which eventually affects their quality. The quality aspect of non-financial disclosures needs to be considered from a pragmatic perspective, i.e., from the point of view of their usefulness. Thus, it is important to understand the value of non-financial information to each group of stakeholders in the context of the goals pursued by that group [6]. Depending on the sector in which the reporting company operates, the content of the report is often adapted to the needs of stakeholders. The reports of companies operating in different sectors may differ from one another due to additional sector-specific regulations. Moreover, the usefulness of information is a highly subjective quality. It is assessed by the recipients themselves, depending on their specific needs and goals. Therefore, it is difficult to precisely evaluate reports and carry out a comparative analysis addressing companies from different sectors. It is far easier to make an unbiased comparative evaluation of N-FRs within one sector (e.g., the energy sector) and to develop a model scope of the non-financial information desired by the stakeholders in this particular sector.

Importantly, in addition to the absence of uniform N-FRs guidelines, the reporting practice has been diversified by changes taking place in the overall business setting. As suggested by some authors, over the last two decades, corporate reporting practices have diversified in response to major changes in the external reporting environment [7]. The more recent ones include, among other things, the introduction of Directive 2014/95/EU, and the COVID-19 pandemic. The said changes inspired these authors to study the evolution of the scope, form and content of N-FRs in the last decade.

The analysis focuses on companies from the energy sector, which is one of the sectors with the highest ESG (Environmental, Social Responsibility, Corporate Governance) risk rating. Institutional investors operating in the energy sector in developed markets use ESG risk information as an additional source of data determining the investment risk. Among other things, ESG takes into account compliance with applicable environmental standards [8]. The role of the energy sector in the economy was an additional factor justifying its choice for the study. Just like the financial sector, it determines the strength and growth rate of the economy. Moreover, the energy sector significantly affects the functioning of other industries, such as mining, trade, processing, construction and transport [9]. The energy sector is of strategic importance for the economy, because electricity, heat and gas are the most staple commodities [10].

The motive for writing this article was to describe the practices of N-FRs in the Polish energy sector. At the same time, taking into account the sector's role in the economy, as well as its relationship with and impact on the environment, it is reasonable to analyze the non-financial disclosures presented by energy companies.

An additional reason to address the subject matter in question was the authors' intention to make a contribution to the ongoing scholarly discussion on the scope and quality of CSRRs and IRs disclosures made by business organizations all over the world. While the subject of N-FRs has been repeatedly discussed by numerous authors, so far, there have been no detailed analyses addressing its evolution and presenting the factors determining the content of N-FRs by companies from various sectors. It should be emphasized that in the last couple of years, there have been few studies that systematically consider how external pressures influence the formats and contents of N-FRs. The authors attempt to fill this research gap.

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Their objective is to show the practical aspects of N-FRs (CSRRs and IRs) and to assess the quality of reports submitted by companies in the Polish energy sector in the last decade. In addition, the paper identifies the factors that have determined the content of those reports. The following research questions were formulated to support the paper's objective:

RQ1: What did the main elements of non-financial reports in the energy sector companies in Poland look like in the study period (volume and percentage of non-financial data, information on relationships with stakeholders, and a declaration of ethics)?

RQ2: Did the non-financial reports of the investigated companies contain a description of Environmental Management Systems, Quality Management Systems, Enterprise Risk Management Systems, and the Principles of Corporate Governance?

RQ3: What was the quality of information about the above systems?

RQ4: Has the content of the investigated non-financial reports been verified externally? RQ5: Has the introduction of the provisions of Directive 2014/95/EU influenced the verification of non-financial reports of energy companies in Poland?

To answer the above RQs, the authors analyzed the non-financial reports of all companies from the energy sector in Poland, published in the period from 2010 to 2020. By viewing from a ten-year perspective, the study enabled a temporal comparative analysis, and indicated a number of trends taking place in the analyzed period. Despite the fact that the study focuses on Poland alone, it may reflect the tendencies and trends in N-FRs in the energy sector in other developing countries and CEE.

In this context, Poland is a representative research subject because it is the fourth largest energy producer in the European Union (EU), with a share of 8%. The main energy sources are coal, lignite and gas, providing Poland with an appropriate level of energy security and production stability. In addition, given the number of jobs, the lignite and hard coal mining sector in Poland plays a key social role. Importantly, the energy sector creates about 8% of the gross added value of the Polish GDP (of which 4.1% is in the energy sector itself, and 4.2% is in related sectors), with employment in the range of 600 thousand employees [11].

The paper is divided into seven sections. Section 1 introduces the subject matter, defines the paper's objective and lists the research questions. Section 2 describes the main guidelines in terms of standards and legal regulations in Poland applicable to N-FRs. Section 3 is a review of the Polish and foreign literature concerning N-FRs with reference to observations and studies by other authors. Section 4 describes the research methodology and research subjects. Section 5 presents the results of the study and the authors' model of N-FRs in the energy sector. The paper ends with a summary (Section 6) in which the authors present the conclusions from and limitations of the study, and indicate the prospects for future research directions.

2. Standardization and Low Regulation of Non-Financial Reports

In Poland, the question of N-FRs gained particular importance after the Polish transposition of Directive 2014/95/EU. By virtue of the Directive, nearly 300 large entities in Poland have been obliged to disclose non-financial information in the form of a statement or report since 2018. Prior to the Directive, only around 40 entities in Poland reported on an annual basis. Moreover, not only do the new regulations require companies to publish N-FRs, but they are also part of the EU policy to promote sustainable development [12].

In Poland, large entities are defined as public interest entities and listed companies, obliged to report non-financial information by an amendment of the Accounting Act. The basic eligibility criterion is the number of employees (500 and above). Moreover, one of two financial criteria must be met. The first one is net sales revenues exceeding PLN 170 million in the financial year. The other criterion is total assets in the balance sheet exceeding 85 million PLN at the end of the financial year. The criteria must be met for two consecutive years. For those entities that do not meet the above requirements, N-FRs is discretionary.

The provisions of the Directive indicate that non-financial information may be disclosed in one of three ways. The first one is a relevant disclosure presented as a separate

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section in the annual report. Another one is a separate N-FR, prepared together with the annual activity report. The third option ensures a fair deal of freedom in N-FRs. Namely, companies are allowed to choose any applicable set of rules (internal, national, EU or international) and present a CSRR or IR on that basis. Importantly, the selected set of rules must be clearly indicated.

Article 49b of the Accounting Act emphasizes that the statement of non-financial information must include as a minimum [13]:

- a brief description of the entity's business model;
- key non-financial performance indicators related to the entity's operations;
- a description of the entity's social, labor, environmental, human rights, and anticorruption policies, and an overview of their results in practice;
- a description of due diligence procedures (if any);
- a description of material risks associated with the entity's operations that may adversely affect its business, e.g., issues related to the organization's products or its relationships with the external environment, including counterparties, as well as a description of how such risks are managed.

The scope of the non-financial statement must enable the reader to assess the development, performance and condition of the entity and the impact of its activities on the issues in question [13]. The Accounting Act requires companies to highlight the relationships (if any) between the presented information and the amounts disclosed in the financial statements, and to make additional explanations in this regard. Such an approach ensures cohesion between financial and N-FRs. In addition, it demonstrates to the stakeholders that the non-financial disclosures are credible, because they are cross-referenced to financial information.

Pursuant to Article 49b of the Accounting Act, an entity may choose to prepare a separate non-financial report, rather than a non-financial statement in the activity report. In this case, the report must be made available on the entity's website within 6 months of the balance sheet date. As noted by some authors, the timely public disclosure of the required information by obliged issuers significantly reduces the scale of insider trading, an illegal practice that has a devastating effect on the capital market. It involves dealing with financial instruments based on privileged inside information. The greater the scale of insider trading, the lower the trust in the market [14].

Non-financial information reported by entities bound by the obligations under Directive 2014/95/EU is not subject to full verification. External auditors are only required to check whether a non-financial disclosure has been made. In such a regulatory context, full auditing of non-financial information is a matter of choice rather than necessity. The choice is typically made by the entity's management [15]. According to the Polish Act on Statutory Auditors, Audit Firms and Public Supervision, attestation services are aimed at providing a high or moderate degree of assurance with regard to issues such as: financial and non-financial information; systems; processes; aspects of corporate behaviors or attitudes, based on evidence obtained through appropriate procedures, which serve as a basis for the assessment of the audited issues, presented in the audit report [16].

The development of CSR and SD concepts, and N-FRs with them, has contributed to the standardization of the process. As noted by some authors, standardization in this area may be an important factor in reducing information asymmetry, which depends on the scope of complete and reliable information available to stakeholders (e.g., [17]). Various organizations have developed standards that serve as generally applicable guidelines and specify the most desirable features of non-financial reports. These include: GRI-G4, the International Standards Organization (ISO), the United Nations Global Compact (UNGC)—10 Principles, the SustainAbility Global Reporters Program (in United Nations Environment Programme), the International Federation of Accountants (IFAC)—Sustainability Framework, the European Federation of Financial Analysts Societies (EFFAS)—ESG Framework, AccountAbility's AA1000 Standards, the OECD guidelines [18], the Polish Standard for Non-Financial Information (PSN-FI) and the Eco-Management and Audit Scheme (EMAS).

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The Directive 2014/95/EU provides reporting entities with the freedom to choose the N-FRs standard they wish to apply. The guidelines specifically referred to in the Directive are provided by way of example only. Directive 2014/95/EU lists the thematic areas (environmental, social and labor issues, respect for human rights, anti-corruption and anti-bribery) that should be included in non-financial reports. They are listed to ensure the consistency and comparability of non-financial information disclosed within the EU. The European Commission (EC) emphasizes the presence of numerous worldwide reporting frameworks for presenting non-financial information by companies; this includes the UNGC framework, the ISO 26000 and the GRI [19].

Many authors have noted that there are many standards and sets of guidelines for N-FRs in the world, but only a few of them are wide enough to enable reporting on all aspects explicitly mentioned in the Accounting Act. Moreover, some of the more popular guidelines, such as GRI G4, are designed in a way that offers a fair degree of freedom in deciding what to include in the report [20].

Based on the practice of N-FRs by Polish companies, it is reasonable to assume that most of them choose to apply the GRI standards. Globally, these are the most commonly applied sustainable development reporting guidelines [21,22]. They have been developed and published by an independent international organization for sustainable development reporting. GRI standards allow entities, regardless of their size or organizational/legal structure, to understand their own economic, environmental and human impacts, and to report on those impacts in a comparable and credible way. In this way, the standards improve the transparency of entities' contribution to sustainable development [23]. GRI has defined sector-specific supplements presenting sets of reporting indicators for companies in that particular sector. The supplements developed so far apply to sectors such as Construction and Real Estate, Energy, and Financial Services [24]. Additionally, GRI raises companies' awareness of the need to certify both positive and negative outcomes of their sustainability policies [25]. The popularity of GRI regulations is primarily owed to two factors. Firstly, in developing its standards, GRI collaborates with many international organizations, such as the Organization for Economic Co-operation and Development, the United Nations and ISO 26000, thus creating a specific network of stakeholders and experts from different backgrounds. Secondly, the GRI standards are flexible, because they include both general (universal) content, as well as specific content that takes into account the practical operating aspects of entities from different sectors. Hence, the standards can be successfully applied by different organizations, regardless of their size, business or location [26]. The GRI Framework is one of the most advanced CSR reporting tools. Moreover, reports prepared in accordance with the GRI Framework are subject to verification by third-party statutory auditors, which increases their credibility and usefulness [27].

Reporting according to general international regulations, such as GRI, ISO 26000 or Global Compact, has proven insufficient for many companies. Therefore, based on the various standards, norms and guidelines, they have defined their own CSR reporting frameworks, which are adequate to their CSR strategies and consistent with the specific nature of their industry, region and operations [28].

3. Literature Review

Today, many companies choose to communicate their environmental strategies to stakeholders through voluntary environmental disclosures. Moreover, many companies in Poland are obliged to disclose non-financial information as a result of the Directive's 2014/95/EU provisions. The quality of such disclosures depends on the company's size and business. Moreover, disclosures in non-financial statements may be influenced by certain external and internal factors from the company's environment. The first group contains legal, political, social, and economic factors. In turn, internal factors concern, for example, the industry in which a given company operates or the culture of the organization.

High-quality disclosures are typically presented by large companies and environmentsensitive sectors [29]. These certainly include the energy sector. Moreover, many authors Energies **2022**, 15, 7667 6 of 32

agree that "it is particularly important to understand what drives energy companies towards responsible corporate behaviour, given that the energy sector is central to achieving key sustainable development goals" [30]. Although many different issues in N-FRs have been addressed by researchers, there are still few publications on the N-FR practices of companies in the energy sector. Recently, various aspects of non-financial disclosures in the energy industry have been explored by [30–36]. For example, Pätäri et al. [31] looked at how companies in the energy industry invest in CSR, and what the impact is of those investments on corporate financial performance (CFP) (and vice versa). Shahbaz et al. [32] provided empirical evidence on the relationship between management board attributes and CSR commitment, as well as between the CSR commitment and performance of companies in the global energy sector. In their turn, Latapi et al. [30] interviewed toplevel managers of Scandinavian energy companies to identify and categorize the drivers behind the implementation of the CSR framework. They also defined the characteristics of a "responsible energy company". The relationship between the ESG disclosures and goodwill of companies in the energy sector was analyzed by Constantinescu [33]. In their turn, Rutkowska-Ziarko and Markowski studied the downside risk of Polish energy companies using accounting and market metrics [36].

The current reporting trend suggests that a company can compete successfully if it is capable of capturing and communicating the links between financial and non-financial business indicators. A study by Beretta et al. [7] found that the voluntary disclosure of non-financial information increases transparency, improves reputation and brand value, builds goodwill, increases share prices and reduces the cost of capital. The effect of financial performance on the adoption of a CSR concept in companies in the energy sector was studied by Klaudacz-Alessandri and Cygańska [35], who analyzed a sample of 219 companies worldwide. They found "statistically significant relationships between financial performance and the implementation of CSR strategies by companies in the energy sector." For example, the Return on Assets measure (ROA) and the Earnings Before Interest and Taxes measure (EBIT) were significantly higher among companies implementing the CSR strategy [35]. Karaman et al. [34] "examined the relationship between four aspects of CSR practice: CSR activities; CSR reporting; adherence to GRI guidelines in preparing CSR reports; and verification of the credibility of CSR reports through external assurance". The study sample consisted of 2244 observations of energy companies from all over the world.

Another noteworthy paper was published by Agudelo et al. [37]. The objective of their extensive literature review was to identify and categorize factors, or drivers, that inspire energy companies to adopt a CSR strategy. The team's analysis looks at all academic publications focusing on CSR in the energy sector from 1990 to 2018, available in four academic databases. The authors [37] list the drivers that inspire energy companies to adopt CSR, emphasizing that their approaches to its implementation may be reactive or proactive. They divide the factors into "Internal Drivers", which include business strategy, corporate culture or cost savings and profitability, and "External Drivers", such as competitiveness, legislative and regulatory frameworks and stakeholder engagement and satisfaction. These two factor groups are connected by "Connecting drivers", defined as branding reputation, reporting and disclosure, as well as social license to operate [37].

In Poland, the first survey looking at the application of CSR among 53 energy companies was carried out by the Energy Regulatory Office [38]. Its objective was to understand the current level of companies' involvement in activities that are in keeping with the CSR concept. Among other things, the surveyed entities were asked about issues related to the definition of the CSR concept in the company and the inclusion of specific CSR measures in the company's operations, in relation to energy consumers and employees on the one hand, and to the local community and natural environment on the other. The follow-up report was published in 2010. The results of the survey indicate that the definition has been adopted among companies in the energy industry [38,39].

The results of studies on CSRRs or IRs by energy companies in Poland have been published by Chojnacka [8]; Bak [10]; Piłacik [18]; Szczepankiewicz and Mućko [40]; Ferens [41],

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to name a few. Szczepankiewicz and Mućko [40] noted that the analysis of CSRRs and IRs published by Polish companies indicates a similar structure, but a more thorough investigation shows that the content of the reports varies greatly. For example, companies in the same business pay varying degrees of attention to the same issue. Chojnacka's [8] analysis of the reports published by companies in the energy sector in Poland confirms the varied levels of CRSRs. In Chojnacka's opinion, the variation is a consequence of the missing model layout and lack of general guidelines on the content. Furthermore, the descriptive nature of the report makes consistency more difficult to achieve. She concludes that to ensure an appropriate level of communication with potential stakeholders, companies should take efforts to adhere to appropriate templates of the documents published by them [8]. In her turn, Piłacik [18] examined the experiences of Polish energy companies in reporting environmental indicators prepared according to GRI guidelines. Her findings indicate that only three companies from her study group prepare CSR reports in line with GRI G4 guidelines. Since they are available in the basic version, only one environmental indicator is presented, i.e., the one related to the organization's significant impact on animate and inanimate natural systems, including soil, atmosphere, water and ecosystems. In addition, Piłacik's study highlights a number of issues, the most pressing of which is the reports' incomparability due to diverse data formats and missing references to previous years [18]. Bak [10] analyzed Poland's four leading energy companies, focusing on key aspects of CSR. The analysis captured several common features in the published reports, i.e., the formulation of sustainable development strategies aimed at a number of common objectives, such as energy security, customer satisfaction, employee well-being and building positive relations with social and business stakeholders. In addition, companies implement policies and instructions to define and maintain a code of ethics to be followed in relationships between customers and employees, or engage in programs and initiatives protecting the environment. Ferens [41], having analyzed the reports of the four largest energy companies in Poland, claims that non-financial information affects selected quality characteristics of the activity report, such as: usefulness, transparency, discernibility, consistency, timeliness, comparability and reliability.

A comparison of the non-financial disclosures of companies from different sectors (food, construction, chemical, energy, paper, and wood processing) shows that the largest quantity of non-financial information (including that necessary to assess a company's environmental and social performance, such as environmental and social Key Performance Indicators (KPIs), or information on environmental protection initiatives) is published by companies from the chemical and energy sectors. In the other industries, most companies present only a selection of non-financial information, which does not allow stakeholders to properly assess the impact of their activities on the natural, social and business environment [42,43].

If followed properly, the information obligation improves market transparency, which in turn builds trust in the market among investors. As a result, N-FRs becomes more important for issuers of securities seeking funding from a wide range of investors, and for investors who may invest their funds in a wide range of entities (financial instruments) [14].

The studies cited above refer to the small extent of CSR reporting in terms of processes; therefore, it is difficult to assess the evolution of this issue over the last decade. Moreover, the factors that could possibly influence the process have not been identified so far. One factor that may have influenced the content of reports was the COVID-19 pandemic. As noted by V. Berreta et al. [7], in response to the events caused by the pandemic ongoing since 2020, companies have updated their sustainability strategies and related objectives, paying particular attention to the emerging expectations of stakeholders and the needs of local communities. They have also updated their reporting processes to include new and relevant ESG issues [7]. This suggests the need for a cross-cutting study looking at N-FRs as a process.

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4. Research Methodology and Data

4.1. Sample Selection

The research problem is part of non-financial reporting and concerns the assessment of information contained in N-FRs submitted by companies from the energy sector in Poland. The study population was a group of 12 companies that entered a competition for the Best CSR Report (now called the sustainable development competition) in the years 2011–2021. The competition has been organized in Poland since 2007 and its objective is to recognize the companies whose reports most accurately present their impact on the environment and society. The initiative aims at popularizing the CSR idea, sustainable development, environmental protection and social involvement. It is open for business companies and organizations that publish reports on their activities in these areas [44]. The selection of the above group of companies for the study was inspired by the fact that the energy sector plays a key role in the implementation of sustainable development goals. Moreover, by narrowing the study group to those companies that entered the said competition, the authors could reasonably assume that the reports selected for analysis were of the highest quality in terms of form and content.

The authors are aware that the selection of a sample limited only to energy sector companies in Poland may result in the capture of an incomplete picture of the problem under investigation (see conclusions of [44–47]). However, the authors' intention is to show a model of disclosures presented in non-financial reports only in the energy sector in Poland, as well as provide reporting recommendations for these selected companies.

4.2. Data Collection

The study was carried out in two stages. The first stage included collecting the reports of Polish energy companies, their preliminary review, thier division according to the main characteristics (reporting year, report form, number of competition editions, etc.), and coding. In the second stage, the authors examined, among other things, the information contained in the non-financial reports, and checked whether or not the report content had been audited. Such a design of the study made it possible to assess the quality and to determine the evolutionary progress of the analyzed reports. The time window of the study covers 10 years of N-FRs, i.e., from 2010 to 2020.

4.3. Data Analysis

The project involved a case study based on a content analysis of individual reports. This research method is the most frequently used in the area of CSR reporting. The authors analyzed the content of reports according to specific criteria, using analytical units, i.e., words, sentences, and pages. The method always gives the same results in repeated tests. Studies of this type can be quickly and easily replicated [40,43]. The study results are presented using the basic tools of descriptive statistics. The authors also identified factors from the economic environment that affect the content of N-FRs submitted by companies from the energy sector in Poland.

4.4. Data Description

The study sample consisted of 42 reports, including 33 CSRRs and 9 IRs, submitted for the Best CSR Report Competition between 2011 and 2021 by the largest companies in the energy sector. The reports of these companies are available from the competition's official website (www.raportyspoleczne.pl, accessed on 30 September 2021). A general overview of energy companies participating in the Best CSR Report Competition is presented in Table 1.

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Table 1. General overview of energy companies participating in the Best CSR Report Competition.

Edition	Number of Entrants from the Energy Sector	Company Name	Number of Editions Attended by the Company	Was the Company's Report Awarded/Mentioned in the Open Category?
2011	1	RWE Polska	1	-
		ENEA S.A.	1	-
2012	4	Energa Group	1	-
2012	4	Fortum Power and	1	_
		Heat Polska	1	
		Tauron Polska Energia S.A.	1	-
0010		RWE Polska	2	-
2013	2	Tauron Polska Energia	2	Yes
		S.A.	2	ies
		ENEA S.A.	2	-
		Tauron Polska Energia	3	Yes
2014	5	S.A. *		ies
		RWE Polska	3	- -
		Energa Group EDF Polska	2	Yes
			1	-
		EDF Polska	2	-
		Energa Group	3	-
2015	6	Tauron Polska Energia S.A. *	4	-
		ENEA S.A.	3	-
		RWE Polska	4	-
		PGE Polska Grupa Energetyczna	1	-
		ENEA S.A.	4	-
		Tauron Polska Energia		
2016	5	S.A. *	5	-
		Energa Group	4	-
		EDF Polska	3	-
		PGE Polska Grupa	2	-
		Energetyczna		
		Energa Group	5	-
	_	GPEC Group	1	-
2017	5	ENEA S.A.	5	-
		Tauron Polska Energia S.A. *	6	-
		Polenergia S.A.	1	-
		Tauron Polska Energia		
		S.A.	7	-
		Energa Group	6	-
2018	6	ENEA S.A.	6	-
		PGE Polska Grupa Energetyczna	3	-
		Veolia Energia Polska	1	-
		ZPUE Spółka Akcyjna	1	-
		ENEA S.A.	7	-
2019	3	Energa Group	7	Yes
		PGE Polska Grupa	4	_
		Energetyczna	4	-

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Edition	Number of Entrants from the Energy Sector	Company Name	Number of Editions Attended by the Company	Was the Company's Report Awarded/Mentioned in the Open Category?
		ENEA S.A.	8	-
2020	2020 5	Tauron Polska Energia S.A.	8	Yes
		Energa Group	8	-
		Veolia Energia Polska	2	-
		Polenergia S.A.	2	-
		ENEA S.A.	9	-
2021 4	Tauron Polska Energia S.A.	9	-	
		Polenergia S.A.	3	-
		PKP Energetyka	1	-

^{*} Report removed from the website. Source: own research.

The number of competition editions attended varied from company to company. The most active company was ENEA S.A. who participated in as many as 9 editions. Other frequent participants included: Tauron Polska Energia S.A. (9 editions), Energa Group (8 editions), RWE Polska (5 editions), PGE Polska Grupa Energetyczna (4 editions), Polenergia S.A. and EDF Polska (3 editions) and Veolia Energia Polska (2 editions).

The remaining four companies (Fortum Power and Heat Polska, GPEC Group, ZPUE Spółka Akcyjna and PKP Energetyka) attended the competition only once. Importantly, on a few occasions in the analyzed period (2010–2020) the winner of the competition was a company from the energy sector. Specifically, the best social report awards went to Tauron Polska Energia S.A. and Energa Group. The former won 3 editions of the competition (2013, 2014, and 2020), and the latter won twice (2014 and 2019).

Details in terms of the volume of the report, the percentage of non-financial data and an indication whether an external auditor verified the report are all presented in Table 2.

Table 2. Overview of analyzed CSRRs and IRs of companies operating in the energy sector (2011–2021 edition).

Company Name	Report for Year	Type of Report	Volume (Pages)	Percent of Pages with Non-Financial Data	GRI Standard
Fortum Power and Heat Polska	2011	CSRR	84	94	GRI 3.1
RWE Polska RWE Polska	2010	CSRR	50	96	GRI 3.1 GRI 3.1
RWE Polska	2012 2013	CSRR CSRR	107 60	98 98	GRI 3.1 GRI 3.1
RWE Polska	2014	CSRR	33	97	GRI 3.1
EDF Polska EDF Polska	2013 2014	CSRR CSRR	78 78	100 100	GRI 3.1 GRI 3.1
EDF Polska ZPUE Spółka	2015	CSRR	90	99	GRI 4.0
akcyjna	2017	CSRR	112	100	GRI 4.0
GPEC Group	2016	IR	43	23	GRI 4.0

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Table 2. Cont.

Company Name	Report for Year	Type of Report	Volume (Pages)	Percent of Pages with Non-Financial Data	GRI Standard
Tauron Polska Energia S.A.	2011	CSRR	51	84	GRI 3.1
Tauron Polska Energia S.A.	2012	CSRR	104	98	GRI 3.1
Tauron Polska Energia S.A.	2016–2017	IR	316	76	GRI 4.0
Tauron Polska Energia S.A.	2018–2019	IR	518	74	GRI 4.0
Tauron Polska Energia S.A	2020	IR	523	78	GRI 4.0
Polenergia S.A.	2016	CSRR	72	99	GRI 4.0
Polenergia S.A.	2019	CSRR	136	99	GRI 4.0
Polenergia S.A.	2020	IR	154	99	GRI 4.0
PKP Energetyka	2020	CSRR	100	100	GRI 4.0
Veolia Energia Polska	2017	CSRR	56	100	GRI 4.0
Veolia Energia Polska	2019	CSRR	54	98	GRI 4.0
ENEA S.A.	2011	CSRR	93	99	GRI 3.1
ENEA S.A.	2013	CSRR	81	99	GRI 3.1
ENEA S.A.	2014	CSRR	60	100	GRI 3.1
ENEA S.A.	2015	CSRR	82	100	GRI 4.0
ENEA S.A.	2016	CSRR	116	100	GRI 4.0
ENEA S.A.	2017	CSRR	117	100	GRI 4.0
ENEA S.A.	2018	CSRR	105	100	GRI 4.0
ENEA S.A.	2019	CSRR	123	100	GRI 4.0
ENEA S.A.	2020	IR	235	76	GRI 4.0
PGE Polska Grupa Energetyczna	2013–2014	CSRR	114	96	GRI 3.1
PGE Polska Grupa Energetyczna	2015	IR	154	88	GRI 4.0
PGE Polska Grupa Energetyczna	2017	IR	167	88	GRI 4.0
PGE Polska Grupa Energetyczna	2018	IR	187	89	GRI 4.0
Energa Group	2011	CSRR	115	98	GRI 3.1
Energa Group	2013	CSRR	229	99	GRI 3.1
Energa Group	2014	CSRR	139	100	GRI 3.1
Energa Group	2015	CSRR	176	99	GRI 4.0
Energa Group	2016	CSRR	180	99	GRI 4.0
Energa Group	2017	CSRR	221	99	GRI 4.0
Energa Group	2018	CSRR	263	99	GRI 4.0
Energa Group	2019	CSRR	281	99	GRI 4.0

Source: own research.

The authors analyzed all CSRRs and IRS—6057 pages in total. A total of 42 reports were analyzed in the study sample. A preliminary analysis of all reports (33 CSR reports and 9 integrated reports) led to the following conclusions:

- (1) all reports for the years 2011–2014 were prepared in accordance with GRI 3.1, and those published for 2015 and later were prepared in accordance with GRI 4;
- (2) non-financial information is presented on 3937 pages (65%), whereas the remaining pages contain financial information.

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The longest CSRR (281 pages) was submitted by Energa Group in 2019. Conversely, the shortest CSRR was submitted by RWE Polska for 2010 (50 pages). The average length of the CSRRs between 2010 and 2020 was 114 pages. Interestingly, the reports of all companies grew longer each year. For instance, Energa Group's CRSR grew from 115 pages in 2011 to 281 pages in 2019. The growth rate of other companies' CSRRs was somewhat lower.

The longest IR (523 pages) was submitted by Tauron Polska Energia S.A. in 2020, while GPEC Group's IR in 2016 was the shortest. The average length of the IRs was 255 pages. Additionally, the IRs of all companies grew longer each year. For example, Tauron Polska Energia S.A.'s IR for 2016–2017 was 316 pages, as opposed to 523 pages in 2020. The length of the IRs by the other companies grew at a similar rate.

The vast majority of the analyzed CSRRs contain non-financial data only (see Table 2 for reports with non-financial content of 99% to 100%). Most of those reports were submitted by EDF Polska, ENEA S.A., Energa Group, Polenergia S.A. and PKP Energetyka. Conversely, the non-financial data content in the reports by Tauron Polska Energia S.A. and by PGE Polska Grupa Energetyczna varies from 74% to 98%, and from 88% to 96%, respectively. The remaining content of the reports includes financial data, which is quite typical for IRs and reflects their structure and nature. The only exception is a report by the GPEC Group. It is only 43 pages long, and the non-financial data content is just 23% (10 pages).

Carrying out the above (preliminary) analysis allowed us to partially answer the research question 1: What did the main elements of non-financial reports in the energy sector companies in Poland look like in the study period (volume and percentage of non-financial data, information on relationships with stakeholders, and a declaration of ethics)?

5. Empirical Research Results

Since the analyzed reports cover a rather large range of topics and the analysis looked at many different aspects of the reports, the results of the study are presented in three separate sections.

The first section discusses non-financial report disclosures addressing the following topics: the reporting entity's relationship with stakeholders, the organization's approach to ethics, and the report's revision by an external party.

The second section of the findings describes the reporting entity's (1) EMS, (2) QMS, (3) ERMS, and (4) CGP.

The last section evaluates the quality of information contained in non-financial reports in those four areas in the context of selected criteria.

5.1. Analysis of Stakeholder Relations, Declaration of Ethics, and External Verification of the Report

The starting point for the research was to conduct an overview of the energy companies' reports in terms of stakeholder relations, ethical compliance, and external revision. For this purpose, basic descriptive data were used. The results of the overview of this are presented in Table 3.

Table 3. The results of overview of the energy companies' reports in terms of stakeholder relations, ethical compliance and external revision.

Company Name	Report for Year	Number of Stakeholder Categories	Declaration of Ethics	External Verification of the Report
Fortum Power and Heat Polska	2011	6	None	No
RWE Polska	2010	6	Code of Ethics	No
RWE Polska	2012	10	Code of Ethics	No
RWE Polska	2013	10	Code of Ethics	No
RWE Polska	2014	12	Code of Ethics	No

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Table 3. Cont.

Company Name	Report for Year	Number of Stakeholder Categories	Declaration of Ethics	External Verification of the Report
EDF Polska	2013	No data	Code of Ethics	No
EDF Polska	2014	No data	Code of Ethics	No
EDF Polska	2015	7	Code of Ethics	No
ZPUE Spółka akcyjna	2017	8	Code of Ethics	No
GPEC Group	2016	No data	None	No
Tauron Polska Energia S.A.	2011	3	None	Full verification
Tauron Polska Energia S.A.	2012	4	Code of Ethics	Full verification
Tauron Polska Energia S.A.	2016–2017	10	Code of Ethics	Full verification
Tauron Polska Energia S.A.	2018–2019	10	Code of Ethics	Full verification
Tauron Polska Energia S.A	2020	14	Code of Ethics	Full verification
Polenergia S.A.	2016	10	Code of Ethics	No
Polenergia S.A.	2019	14	Code of Ethics	No
Polenergia S.A.	2020	9	Code of Ethics	No
PKP Energetyka	2020	19	Code of Ethics	Full verification
Veolia Energia Polska	2017	No data	Code of Ethics	No
Veolia Energia Polska	2019	4	Code of Ethics	No
ENEA S.A.	2011	15	None	No
ENEA S.A.	2013	18	Code of Ethics	No
ENEA S.A.	2014	18	Code of Ethics	No
ENEA S.A.	2015	18	Code of Ethics	No
ENEA S.A.	2016	18	Code of Ethics	No
ENEA S.A.	2017	18	Code of Ethics	No
ENEA S.A.	2017	18	Code of Ethics	No
ENEA S.A. ENEA S.A.	2018	18	Code of Ethics	No
ENEA S.A.	2020	18	Code of Ethics	Full verification
PGE Polska Grupa Energetyczna PGE Polska Grupa	2013–2014	14	Code of Ethics	No
Energetyczna	2015	14	Code of Ethics	Full verification
PGE Polska Grupa Energetyczna	2017	14	Code of Ethics	Full verification
PGE Polska Grupa Energetyczna	2018	14	Code of Ethics	Full verification
Energa Group	2011	13	Code of Ethics	No
Energa Group	2013	16	Code of Ethics	Full verification
Energa Group	2014	16	Code of Ethics	Full verification
Energa Group	2015	16	Code of Ethics	Full verification
Energa Group	2016	16	Code of Ethics	No
Energa Group	2017	27	Code of Ethics	No
Energa Group	2018	27	Code of Ethics	Full verification
Energa Group	2019	27	Code of Ethics	Full verification

Source: own research.

The concept of CSRRs, or IRs, is very closely related to the dialogue between the reporting entity and its stockholders, shareholders, potential investors, and other stakeholder groups. Disclosures related to that dialogue are crucial in the context of assessing the quality of CSRRs and IRs [48–52].

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In the analyzed collection of CSRs and integrated reports (Table 3), eight key stakeholder groups and 29 stakeholder categories were identified among companies from the energy sector: (1) employees (full-time employees, potential employees, trade unions, labor inspectors); (2) investors (strategic investor, corporate investors, private investors, Warsaw Stock Exchange (WSE), brokerage houses, banks); (3) suppliers (key and other suppliers) and subcontractors; (4) clients/customers (corporate customers, private customers, business partners); (5) society (European Union, public administration, local communities, residents and social leaders); (6) media, universities and researchers; (7) technical and industry organizations; and (8) natural environment (environmental Non-Governmental Organizations and authorities, State Forests Authority).

Some companies define their stakeholders quite broadly. For example, in 2010, ENEA S.A. identified 6 stakeholder categories, but from 2013 on it has been disclosing 18 categories. Similarly, in their first report, other companies disclosed 0–6 stakeholder categories, which later grew to 32 categories. This means that over time, those companies have made attempts at identifying and analyzing their stakeholders. In 2015–2020, 84% companies provided more detailed descriptions of the dialogue and other actions taken vis-à-vis various stakeholder groups.

All companies described the key objectives of their stakeholder activities. None of the companies presented the added value for stakeholders resulting from the pursuance of the company's business objectives. This may indicate that none of the companies actually identified the needs of its stakeholders, and the effects (added value) that can be enjoyed by the stakeholders and the company if those needs are responded to. A detailed analysis of the reports by companies gives one an impression that half of them merely complied with the obligation to disclose GRI 4 information, and the dialogue with certain stakeholder groups was little more than meeting the obligation stipulated in GRI 4.

In total, 38 out of 42 analyzed reports (91%) for the period 2010–2020 contain a declaration stating that the reporting company follows a code of ethics and has implemented an anti-corruption system. The four exceptions were the reports by Fortum Power and Heat Polska (2011 edition), GPEC Group (2016 edition), Tauron Polska Energia S.A. (2011 edition), and ENEA S.A. (2011 edition). Since 2016, all companies have declared that they follow codes of ethics and principles of anti-corruption. This then gives us the answer to the second part of research question 1.

The study also looked at the report revision process. The authors checked whether a given report was verified by an independent third party, e.g., a statutory auditor, an internal auditor, an external auditor, an independent expert or a body authorized to verify N-FRs. This allowed us to answer research question 4: Has the content of the investigated non-financial reports been verified externally?

The analysis shows that only 14 out of 42 analyzed reports (33%) were reviewed by a third party (e.g., an auditing company or a statutory auditor). For instance, all reports submitted to the best report competition by Tauron Polska Energia S.A. were externally reviewed. Other companies had their CSRRs and/or IRs reviewed externally in certain years only (five reports by Energa Group, three reports by PGE Polska Grupa Energetyczna and one report each by ENEA S.A. and PKP Energetyka S.A.).

Most of the analyzed reports were not reviewed until 2018, which is related to the introduction of the provisions of the Directive 2014/95/EU. Since its introduction, approximately 300 of the largest companies in Poland have been obliged to report non-financial information. In addition, the Directive requires that an independent entity (auditing company) should verify whether a non-financial statement has been submitted. Only one company from the study group (Polenergia S.A.) did not have its reports reviewed. All other non-financial statements after 2018 were reviewed by an independent entity. The companies Tauron Polska Energia S.A., and to some extent PGE Polska Grupa Energetyczna (2015–2017) and Energa Group (2013–2015), chose to have their reports reviewed before 2018, despite the absence of an obligation to do so. Therefore, it should be stated that the

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introduction of the provisions of the Directive influenced the verification of non-financial reports of the investigated companies, which is a response to research question 5.

According to the Act on Statutory Auditors, attestation (certification) services are intended to make information highly or moderately credible. In particular, this applies to financial and non-financial information, systems, processes, as well as aspects of the behavior or attitudes of certain entities, based on evidence obtained in the course of the relevant procedures, which serves as a basis for the assessment of the reviewed subject matter to be presented in the auditor's report [49]. Importantly, however, full-scale audit is not required in the case of non-financial reports. Therefore, subjecting non-financial data to a full-scale audit is a choice rather than a necessity, and depends on the decision of the entity's management [15,50–52]. In most cases, reports are reviewed in order to ascertain (in the form of a statement) whether non-financial data have been disclosed.

5.2. Analyses of Environmental Management System, Quality Management System, Enterprise Risk Management System, and Corporate Governance Principles

The provisions of Directive 2014/95/EU indicate that the non-financial report must address aspects of the EMS, QMS, ERMS, and CGPs. Therefore, the authors reviewed reports in this area. At the same time, it made it possible to answer research question 2: Did the non-financial reports of the investigated companies contain a description of Environmental Management Systems, Quality Management Systems, Enterprise Risk Management Systems, and the Principles of Corporate Governance?

Table 4 presents a preliminary overview of the energy companies' reports in terms of disclosures on EMS, QMS and ERMS.

Table 4. The results of the preliminary overview of the energy companies' reports in terms of disclosures on EMS, QMS, ERMS and CGPs.

Company name	Report for Year	Environmental Management System	Quality Management System	Risk Management System	Corporate Governance Principles
Fortum Power and Heat Polska	2011	Yes	Yes	No	No
RWE Polska RWE Polska RWE Polska RWE Polska	2010 2012 2013 2014	Yes Yes Yes	No No No	No No No	No No No
EDF Polska EDF Polska EDF Polska	2014 2013 2014 2015	Yes Yes Yes Yes	No No No No	No No No No	No No No No
ZPUE Spółka akcyjna	2017	Yes	No	No	Yes
GPEC Group	2016	Yes	Yes	No	No
Tauron Polska Energia S.A.	2011	Yes	Yes	Yes	No
Tauron Polska Energia S.A.	2012	Yes	Yes	Yes	No
Tauron Polska Energia S.A.	2016–2017	Yes	Yes	Yes	Yes
Tauron Polska Energia S.A.	2018–2019	Yes	Yes	Yes	Yes
Tauron Polska Energia S.A	2020	Yes	Yes	Yes	Yes

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Table 4. Cont.

Company name	Report for Year	Environmental Management System	Quality Management System	Risk Management System	Corporate Governance Principles
Polenergia S.A.	2016	Yes	Yes	Yes	Yes
Polenergia S.A.	2019	Yes	Yes	Yes	Yes
Polenergia S.A.	2020	Yes	Yes	Yes	Yes
PKP Energetyka	2020	Yes	No	Yes	Yes
Veolia Energia Polska	2017	Yes	Yes	Yes	No
Veolia Energia Polska	2019	Yes	Yes	Yes	No
ENEA S.A.	2011	Yes	Yes	Yes	No
ENEA S.A.	2013	Yes	Yes	Yes	No
ENEA S.A.	2014	Yes	Yes	Yes	No
ENEA S.A.	2015	Yes	Yes	Yes	No
ENEA S.A.	2016	Yes	Yes	Yes	Yes
ENEA S.A.	2017	Yes	Yes	Yes	Yes
ENEA S.A.	2018	Yes	Yes	Yes	Yes
ENEA S.A.	2019	Yes	Yes	Yes	Yes
ENEA S.A.	2020	Yes	Yes	Yes	Yes
PGE Polska Grupa Energetyczna	2013–2014	Yes	Yes	Yes	No
PGE Polska Grupa Energetyczna	2015	Yes	Yes	Yes	Yes
PGE Polska Grupa Energetyczna	2017	Yes	Yes	Yes	Yes
PGE Polska Grupa Energetyczna	2018	Yes	Yes	Yes	Yes
Energa Group	2011	Yes	Yes	Yes	No
Energa Group	2013	Yes	Yes	Yes	No
Energa Group	2014	Yes	Yes	Yes	No
Energa Group	2015	Yes	Yes	Yes	No
Energa Group	2016	Yes	Yes	Yes	Yes
Energa Group	2017	Yes	Yes	Yes	Yes
Energa Group	2018	Yes	Yes	Yes	Yes
Energa Group	2019	Yes	Yes	Yes	Yes

Source: own research.

The question of environmental management should address measurable and quantifiable objectives, taking into account the benefits for society and the company itself. Environmental protection in the energy industry is strictly monitored and highly regulated. As the authors' analysis shows, all the reports address the issue of environmental management in accordance with GRI.

Based on the analysis of the reports for the period 2010–2020, it can be concluded that all the analyzed energy companies described their EMS. In their reports, companies most often presented aspects addressed in regulations 1 to 3. Only some companies presented in their reports environmental issues covered by more than three ISO standards. In the field of environmental management, the most frequently mentioned ISOs are:

- ISO 17025—General requirements for the competence of testing and calibration laboratories is the main ISO standard used by testing and calibration laboratories;
- ISO 22300 is an international standard developed by ISO/TC 292 Security and resilience. This document defines terms used in security and resilience standards;
- ISO 26000 was last reviewed and confirmed in 2021. It is intended to assist organizations in contributing to sustainable development;

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• ISO 31000 is a standard relating to risk management. It provides principles and generic guidelines on managing risks faced by organizations;

• ISO 50001 provides a practical way to improve energy use, through the development of an energy management system (EnMS).

The environmental management system is part of the overall QMS in the organization. Its goal is to supervise and assess the environmental impact of the organization's activities [50,52]. It can be considered as a set of tools that support the implementation of the environmental policy and consequently mitigate the negative environmental impacts in a manner that most accurately meets the needs of the organization and the environment.

Based on the analysis of the reports for the 2010–2020 period (Table 4), it can be concluded that 36 out of the 42 analyzed reports contained a description of the quality management system. In their reports for 2011 to 2015, energy companies most often present quality management aspects addressed in one to two regulations. Since 2016, many companies have presented in their reports environmental issues covered by more than three ISO standards.

The most frequently mentioned quality management ISOs include:

- ISO 9001 is defined as the international standard that specifies requirements for a quality management system (QMS);
- ISO 18001 is one of the International Standard for Occupational Health and Safety Management Systems;
- ISO 27001 is the international standard for information security. It sets out the specification for an information security management system (ISMS);
- ISO 31000 is a standard relating to risk management. It provides principles and generic guidelines on managing risks faced by organizations;
- ISO 37001 concerns anti-bribery management systems. This standard sets out the requirements for the improvement of an anti-bribery management system (ABMS);
- ISO 45001 is a standard for management systems of occupational health and safety (OH&S), which was published in March 2018.

Table 5 presents the ISO standards used to describe the EMS and QMS in the analyzed energy companies over the last five years (2016–2020)

Table 5. ISO standards used to describe EMS and QMS in energy companies (2016–2020).

Company Name	Norms
Fortum Power and Heat Polska	ISO 14001
RWE Polska	No data
EDF Polska	ISO 9001, ISO 14001
ZPUE Spółka Akcyjna	ISO 9001, ISO 14001, ISO 45001
GPEC Group	ISO 9001, ISO 14001
Tauron Polska Energia S.A.	ISO 14001, ISO 26000
Polenergia S.A.	ISO 14001, ISO 18001, ISO 26000
PKP Energetyka	No data
Veolia Energia Polska	ISO 9001, ISO 14001, ISO 17025, ISO 27001, ISO 37001, ISO 45001, ISO 50001
ENEA S.A.	ISO 9001, ISO 14001, ISO 18001, ISO 26000, ISO 45001
PGE Polska Grupa Energetyczna	ISO 14001
Energa Group	ISO 14001, ISO 22300, ISO 26000, ISO 27001, ISO 37001, ISO 50001
Source: own research.	

Source: own research.

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Given the need to respond to business risks that threaten the achievement of the organization's economic and social goals, ERMS becomes one of the key elements incorporated by businesses in their operations. ERMS consists in the continuous identification, analysis and evaluation of risks, simultaneously with operating activity, whilst maintaining an acceptable risk level. Ultimately, the organization determines its response to the risks it has identified. Possible responses include mitigation, transferring the risk to another entity (usually an insurer), accepting the risk, or avoiding doing anything that generates the risk. ERMS comprises five key elements [53]: (1) internal environment system, (2) information and communication system (3) risk identification and assessment, as well as risks response, (4) control activities, and (5) monitoring and assessment of RMS.

The study showed that 32 out of the 42 analyzed N-FRs contained a description of an ERMS. These were the reports published by Tauron Polska Energia S.A., Polenergia S.A., Veolia Energia Polska, Enea S.A., PGE Polska Grupa Energetyczna and Energa Group. Only five entities (Fortum Power and Heat Polska, RWE Polska, EDF Polska, ZPUE Spółka akcyjna and GPEC Group) did not mention ERMS in their reports. The fact that most companies do include a description of risk management practices in the N-FRs indicates that stakeholders expect to receive such information. Given that risk is an inseparable part of business, a description of one's ERMS in an N-FR may increase stakeholders' confidence in the reporting entity. The addition of such information may also help the users of N-FRs to make more informed decisions.

CGPs were also included in the analyzed reports. They are a set of legal and economic rules and operating procedures followed in order to ensure a sound relationship between the company and its various stakeholder groups [51,54]. The current model of corporate governance reporting by energy companies listed on the Polish stock exchange, defined in Best Practice for GPW Listed Companies 2016 [55], is based on six corporate governance components. The structure of this document includes the following reporting areas: (1) management board and supervisory board, (2) general meeting and shareholder relations, (3) disclosure policy and investor communications, (4) internal systems and functions, (5) remuneration, and (6) conflict of interest and related party transactions.

The scope of information disclosed as part of each component reflects the recommendations and principles to which a listed company should refer in its annual report, and specifically in the Corporate Governance Statement, as a component of the company's annual IRs. The study demonstrated that 20 out of the 42 analyzed reports list CGPs implemented by the reporting entity. These include reports submitted by the following companies: ZPUE Spółka akcyjna, Tauron Polska Energia S.A., Polenergia S.A., PKP Energetyka, ENEA S.A., PGE Polska Grupa Energetyczna and Energa Group. CGPs were described in the reports of the analyzed companies from 2016 onwards. The change was inspired by the introduction of the new Best Practice for GPW Listed Companies 2016. Earlier reports by the aforementioned companies did not address the topic in question due to insufficient practice and regulations in this regard.

5.3. Assessment of the Quality of Information on Environmental Management Systems, Quality Management Systems, Enterprise Risk Management Systems, and Corporate Governance Principles

Due to the requirements of Directive 2014/95/EU concerning the obligation to disclose information in the area of the EMS, QMS, ERMS, and CGPs, an assessment was carried out in this range. It allowed the authors to answer research question 3: What was the quality of information about the above systems?

The complexity and specific nature of the issue in question required an appropriate set of criteria to assess the quality of the information presented in the analyzed N-FRs. The qualitative criteria, listed in the Conceptual Framework of the International Financial Reporting Standards (IRFS), could not be applied in full. In light of the above assumptions, the two primary qualitative characteristics are relevance and faithful representation. There are also four supplementary characteristics: verifiability, comparability, timeliness and comprehensibility. The above criteria refer to financial statements and the data contained

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therein. Therefore, given the different nature of non-financial information, they could not be fully applied. For example, relevance (understood as usefulness) is usually considered in the context of providing a basis for decisions made by current and potential investors, lenders and other creditors [51,54]. Therefore, an assessment based on this criterion is highly subjective and tailored to the needs of its users. An assessment in terms of faithful representation, verifiability and timeliness is equally challenging due to the non-financial nature of the information in question. Therefore, "comprehensibility" was the only characteristic from the IFRS's conceptual assumptions adopted as a criterion for assessing the content of the non-financial statements.

In addition, the authors adapted three of the six criteria proposed by Sydserff and Weetman [56], who identified areas for evaluating specific parts of a text on the basis of linguistic theories [48,54,56]. These include: (1) topicality, (2) intertextuality, i.e., cross-references within the text, and (3) specificity. In our study, we also looked at the reports' comprehensibility for stakeholders, which is a primary assessment criterion.

In the opinion of the authors, the above criteria can be effectively used in the assessment, which is why they were selected for the study. The study used the Delphi method, considered to be the most effective and meaningful from the perspective of critical user of information. The method involves a multi-faceted look at the information, understanding its formal features as well as its content and determining those of key importance at a given moment and in view of specific needs [48,56].

The authors assessed the reports using this method coupled with a five-point scale:

- 1—definitely not;
- 2—not;
- 3—difficult to say;
- 4—yes;
- 5—definitely yes.

In this way, the authors assessed the information content of the reports in qualitative terms. The analysis can be considered semi-objective with elements that objectify the assessment, such as disclosure indices, the amount or scope of disclosures, and textual analysis [48]. The assessment scale is explained in Table 6.

Table 6. Description of the scale used to measure information quality according to the adopted criteria.

Criterion	Score						
Cincilon	1	2	3	4	5		
Comprehensibility	The text is incomprehensible/unclear to the reader, the report contains numerous passages where industry jargon is used; some words of foreign origin are incomprehensible to the reader; there are no visuals or numerical data	Only 25% of the text is comprehensible/clear to the reader; some paragraphs are unclear to the reader; industry jargon is common; scarce use of visuals and numerical data	A half of the text is comprehensible/clear to the reader; there is some industry jargon and foreign-sounding words borrowed from other languages that are not entirely clear to the reader; the text is illustrated with few visuals and supplemented with small amounts of numerical data	Most (75%) of the text is comprehensible/clear to the reader; incomprehensible words are used only occasionally; the text is illustrated with visuals and supplemented with numerical data	The text is fully (100%) comprehensible/clear to the reader; it is richly illustrated with visuals; numerical data are available in a large quantity		

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Table 6. Cont.

Cuitouion	Score						
Criterion	1	2	3	4	5		
Topicality	Descriptions are off-topic and address multiple issues; there are numerous digressions deviating from the issue in question; the narrative regularly deviates from the topic, exploring areas that are unrelated to the issue in question	Descriptions address the topic at only 25%; there are digressions unrelated to the issue in question; the narrative frequently deviates from the topic, exploring areas that are unrelated to the issue in question	Descriptions address the topic at 50%; some digressions are only indirectly related to the issue in question, although in some cases this is justified; the narrative occasionally does deviate from the topic, exploring areas that are indirectly related to the issue in question	Descriptions address the topic in 75%; there are few digressions and they are related to the issue in question, although in some cases this is justified; the narrative rarely deviates from the topic, exploring areas that are indirectly related to the issue in question	Descriptions address the topic 100% of the time; there are no digressions and the narrative does not deviate from the topic		
Intertextuality (cross-references between financial and non-financial information on the one hand, and other information in the text on the other), =	Information does not relate in any way to information presented in other parts of the report; no references to other parts; the text is incoherent	Information is indirectly linked to information presented in other parts of the report; no references to the content in other parts of the report; the text is not very coherent	In some areas information is directly linked to the content of other parts of the report, whereas elsewhere the links are only indirect; due to the lack of regular cross-references, the coherence of the text is difficult to determine	Generally, information is directly linked to other parts the report; there are regular cross-references to other parts of the text; the text is coherent	Information is always directly linked to other parts of the report; there are numerous cross-references to other parts of the text; the text is highly coherent		
Specificity	The text is very general, does not contain the required information; no numerical data	The text is rather general; information is superficial; numerical data are scarce	The text partially describes the required issues, but it still lacks detail; to some extent, numerical data are arithmetic expressions of the issue in question	The text is detailed; all the required issues are described; relevant numerical data are quoted at length	The text is very detailed; all the required issues are carefully described; relevant and detailed numerical data are available		

Source: by the authors.

The analyzed non-financial reports of energy companies were evaluated using a five-point scale, according to four criteria: (1) comprehensibility, (2) topicality, (3) intertextuality, and (4) specificity.

The analysis and evaluation of the reports allows one to conclude that the integrated reports contain a wider range of non-financial data, and offer a greater degree of detail. In addition, integrated reports are more comprehensive, transparent, and understandable than CSR reports. The length of the analyzed CSR reports ranged from 31 to 281 pages. The integrated reports were longer, ranging from 43 to as many as 523 pages. Importantly, however, some CSR reports were also very thorough, and their quality was comparable to that of integrated reports (e.g., Energa Group's CSR reports 2018 and 2019). The authors also noted that year after year the reports were longer, which may indicate that these companies were preparing to publish integrated reports in the future.

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The reports were evaluated in four thematic areas: (1) EMS, (2) QMS, (3) ERMS or ERMS and (4) CGPs. Table 7 summarizes the evaluation of EMSs.

Table 7. Assessment of the EMS information included in energy companies' non-financial reports.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Fortum Power and Heat Polska	2011	4	4	2	4
RWE Polska	2010	4	3	2	3
RWE Polska	2012	4	4	2	4
RWE Polska	2013	4	4	2	4
RWE Polska	2014	4	4	1	2
EDF Polska	2013	4	3	1	4
EDF Polska	2014	4	3	1	4
EDF Polska	2015	4	3	2	4
ZPUE Spółka akcyjna	2017	4	4	1	5
GPEC Group	2016	4	2	1	3
Tauron Polska	2011	4	3	3	5
Energia S.A.		-	· ·	J	
Tauron Polska Energia S.A.	2012	4	3	3	5
Tauron Polska	2016-2017	5	4	4	5
Energia S.A. Tauron Polska		_			_
Energia S.A.	2018–2019	5	4	4	5
Tauron Polska Energia S.A	2020	5	4	4	5
Polenergia S.A.	2016	3	2	2	3
Polenergia S.A.	2019	3	2	2	3
Polenergia S.A.	2020	5	4	3	5
PKP Energetyka	2020	4	4	1	4
Veolia Energia Polska	2017	4	3	1	2
Veolia Energia Polska	2019	4	3	2	2
ENEA S.A.	2011	4	4	2	4
ENEA S.A.	2013	4	4	2	4
ENEA S.A.	2014	4	4	1	4
ENEA S.A.	2015	4	4	1	4
ENEA S.A.	2016	4	4	1	4
ENEA S.A.	2017	4	4	1	4
ENEA S.A.	2018	4	4	1	4
ENEA S.A.	2019	$\overset{1}{4}$	4	1	4
ENEA S.A.	2020	5	5	$\stackrel{\scriptstyle 1}{4}$	5
	2020			<u> </u>	
PGE Polska Grupa Energetyczna	2013–2014	4	4	2	2
PGE Polska Grupa Energetyczna	2015	5	5	4	5
PGE Polska Grupa	2017	5	5	4	5
Energetyczna			-	-	C
PGE Polska Grupa Energetyczna	2018	5	5	4	5
Energa Group	2011	4	4	2	4
Energa Group	2013	4	4	2	4
Energa Group	2014	4	4	1	4
Energa Group	2015	5	5	2	5
Energa Group	2016	5	5	2	5
Energa Group	2017	5	5	2	5
Energa Group	2018	5	5	2	5
Litter Group	2019	5	5	2	5

Source: own research.

The analysis demonstrated that EMSs were presented in a way that is understandable to the reader, although some of the surveyed entities (e.g., GPEC Group and EDF Polska) occasionally deviated from the topic. Information on environmental management clearly

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lacks detail (Veolia Energia Polska and PGE Polska Grupa Energetyczna 2013–2014). The greatest weakness of the report is the missing link between the presented non-financial and financial information (intertextuality), which is caused by the fact that the indicators describing environmental issues are descriptive rather than quantified. Therefore, it is difficult to link them directly to the data presented in financial statements. The reports of PGE Polska Grupa Energetyczna for 2016–2020 and Tauron Polska Energia S.A. scored the highest in this respect.

As different energy companies use different ISO standards to describe their respective EMSs, a comparative assessment of their reports is rather challenging.

Based on the study, the authors give recommendations for energy companies listed on the Polish stock exchange in the area of reporting environmental management information. For details, see Figure 1.

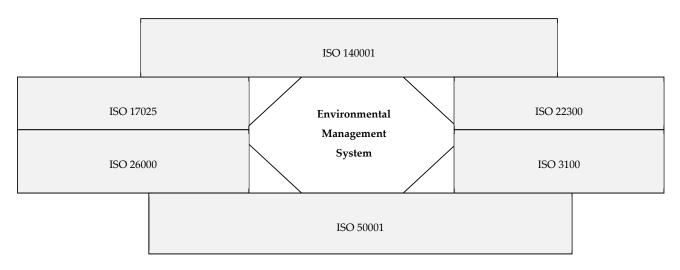


Figure 1. Author's recommendations for energy companies listed on the Polish stock exchange in the area of reporting environmental management information. Source: the authors.

The next step in the study was to assess the quality of reporting information in terms of the QMS. Table 8 presents a summary of the findings in this regard.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Fortum Power and Heat Polska	2011	4	4	1	4
RWE Polska	2010	1	1	1	1
RWE Polska	2012	1	1	1	1
RWE Polska	2013	1	1	1	1
RWE Polska	2014	1	1	1	1
EDF Polska	2013	1	1	1	1
EDF Polska	2014	1	1	1	1
EDF Polska	2015	1	1	1	1
ZPUE Spółka akcyjna	2017	1	1	1	1
GPEC Group	2016	5	5	3	5

Table 8. Assessment of the QMS information included in energy companies' non-financial reports.

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Table 8. Cont.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Tauron Polska Energia S.A.	2011	4	4	2	4
Tauron Polska Energia S.A.	2012	4	4	2	4
Tauron Polska Energia S.A.	2016–2017	5	5	4	5
Tauron Polska Energia S.A.	2018–2019	5	5	4	5
Tauron Polska Energia S.A	2020	5	5	4	5
Polenergia S.A.	2016	4	4	2	4
Polenergia S.A.	2019	5	5	2	5
Polenergia S.A.	2020	5	5	3	5
PKP Energetyka	2020	1	1	1	1
Veolia Energia Polska	2017	5	5	1	4
Veolia Energia Polska	2019	5	5	2	4
ENEA S.A.	2011	4	4	2	4
ENEA S.A.	2013	4	4	2	4
ENEA S.A.	2014	4	4	1	4
ENEA S.A.	2015	5	5	1	5
ENEA S.A.	2016	5	5	1	5
ENEA S.A.	2017	5	5	1	5
ENEA S.A.	2018	5	5	1	5
ENEA S.A.	2019	5	5	1	5
ENEA S.A.	2020	5	5	3	5
PGE Polska Grupa Energetyczna	2013–2014	5	5	2	5
PGE Polska Grupa Energetyczna	2015	5	5	3	5
PGE Polska Grupa Energetyczna	2017	5	5	3	5
PGE Polska Grupa Energetyczna	2018	5	5	3	5
Energa Group	2011	4	4	2	4
Energa Group	2013	4	4	2	4
Energa Group	2014	4	4	2	4
Energa Group	2015	5	5	2	5
Energa Group	2016	5	5	2	5
Energa Group	2017	5	5	2	5
Energa Group	2018	5	5	2	5
Energa Group	2019	5	5	2	5

Source: own research.

The analysis of the reports in the area of QMSs allows one to conclude that they are largely comprehensible to the reader, and the descriptions are relevant. The highest score was awarded to the reports of PGE Polska Grupa Energetyczna. They are comprehensible, accurate, intertextual, and specific. The reports of four companies—RWE Polska, EDF Polska, ZPUE Sp. akcyjna and PKP Energetyka—did not address the issue in question. As in the case of the QMSs, cross-references to the financial sections of the report are missing, which is due to the descriptive nature of the area covered. Since different entities rely on different regulations, it is difficult to analyze the reports comparatively. The authors are of the opinion that the unification of reporting on QMSs would make it possible to do so.

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Based on the study, the authors give recommendations for energy companies listed on the Polish stock exchange in the area of reporting quality management information. For details, see Figure 2.

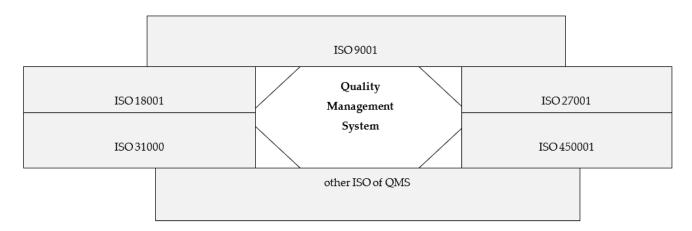


Figure 2. Author's recommendations for energy companies listed on the Polish stock exchange in the area of reporting QMS information. Source: the authors.

The analysis was completed with the assessment of the ERMS used by energy companies in Poland. The summary of the assessment is presented in Table 9.

Table 9. Assessment of the ERMS information included in energy companies' non-financial reports.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Fortum Power and Heat Polska	2011	1	1	1	1
RWE Polska	2010	1	1	1	1
RWE Polska	2012	1	1	1	1
RWE Polska	2013	1	1	1	1
RWE Polska	2014	1	1	1	1
EDF Polska	2013	1	1	1	1
EDF Polska	2014	1	1	1	1
EDF Polska	2015	1	1	1	1
ZPUE Spółka akcyjna	2017	1	1	1	1
GPEC Group	2016	1	1	1	1
Tauron Polska Energia S.A.	2011	4	4	2	4
Tauron Polska Energia S.A.	2012	4	4	2	4
Tauron Polska Energia S.A.	2016–2017	5	5	4	5
Tauron Polska Energia S.A.	2018–2019	5	5	4	5
Tauron Polska Energia S.A	2020	5	5	4	5

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Table 9. Cont.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Polenergia S.A.	2016	4	4	2	4
Polenergia S.A.	2019	5	5	4	5
Polenergia S.A.	2020	5	5	4	5
PKP Energetyka	2020	5	5	1	5
Veolia Energia Polska	2017	4	4	1	4
Veolia Energia Polska	2019	4	4	2	4
ENEA S.A.	2011	4	4	2	4
ENEA S.A.	2013	4	4	2	4
ENEA S.A.	2014	4	4	1	4
ENEA S.A.	2015	4	4	1	4
ENEA S.A.	2016	5	5	1	5
ENEA S.A.	2017	5	5	1	5
ENEA S.A.	2018	5	5	1	5
ENEA S.A.	2019	5	5	1	5
ENEA S.A.	2020	5	5	4	5
PGE Polska Grupa Energetyczna	2013–2014	4	4	2	4
PGE Polska Grupa Energetyczna	2015	5	5	3	5
PGE Polska Grupa Energetyczna	2017	5	5	3	5
PGE Polska Grupa Energetyczna	2018	5	5	3	5
Energa Group	2011	4	4	2	4
Energa Group	2013	4	4	2	4
Energa Group	2014	4	4	2	4
Energa Group	2015	5	5	2	5
Energa Group	2016	5	5	2	5
Energa Group	2017	5	5	2	5
Energa Group	2018	5	5	2	5
Energa Group	2019	5	5	2	5

Source: own research.

The analysis of reports in terms of the description of the ERMS shows that most companies described this issue in a very detailed and understandable way. No information on risk management was found in the reports of five companies (Fortum Power and Heat Polska, RWE Polska, EDF Polska, ZPUE Sp. Akcyjna and GPEC Group). It is also not possible to compare reports due to the use of different standards for description; therefore, it is advisable to standardize risk management reporting in the entity. Based on the study, the authors give recommendations for energy companies listed on the Polish stock exchange in the area of reporting ERMS information. For details, see Figure 3.

The last area evaluated against the selected criteria was CGPs, which had not been addressed before the introduction of the Best Practice for GPW Listed Companies 2016. Thus, reports for years prior to 2016 did not contain a description of this issue, although corporate governance practices may have been applied earlier, as some requirements in this regard were introduced by Directive 2014/95/EU. In the analyzed reports, the issue in question is presented in an understandable and detailed manner. The lack of cross-references to financial data is the only drawback here. Detailed results of the assessment of CGPs in the analyzed energy companies are presented in Table 10.

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Internal environment system of RMS

(organizational structure, delegation of authority, professional competence, and respecting ethical values)

Risk identification and assessment

(the mission, establishing objectives and tasks, monitoring and evaluating their achievement and completion, identification of internal and external risk factors, identification of market chances, and risk analysis and assessment)

Risks response

(risk response and remedial measures)

Risk Management System (COSO II and ISO 31000)

Control activities

(control procedures, accounting principles, documenting the control system and supervision, detailed control mechanisms for operations, allocation of responsibilities, verification, supervision, authorization, uninterrupted operations, protection of resources, IT system

Information and communication system

(current information, internal communication, and external communication)

Monitoring risk management system

(self-assessment of internal control system and of risk management, evaluation through internal audits, obtaining confirmation of the condition of ERMS)

Figure 3. Author's recommendations for energy companies listed on the Polish stock exchange in the area of reporting RMS information. Source: the authors.

Table 10. Assessment of CGPs information included in energy companies' non-financial reports.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
Fortum Power and Heat Polska	2011	1	1	1	1
RWE Polska	2010	1	1	1	1
RWE Polska	2012	1	1	1	1
RWE Polska	2013	1	1	1	1
RWE Polska	2014	1	1	1	1
EDF Polska	2013	1	1	1	1
EDF Polska	2014	1	1	1	1
EDF Polska	2015	1	1	1	1

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Table 10. Cont.

Company Name	Report for Year	Comprehensibility	Topicality	Intertextuality	Specificity
ZPUE Spółka akcyjna	2017	4	4	1	4
GPEC Group	2016	4	4	2	4
Tauron Polska Energia S.A.	2011	1	1	1	1
Tauron Polska Energia S.A.	2012	1	1	1	1
Tauron Polska Energia S.A.	2016–2017	5	5	2	5
Tauron Polska Energia S.A.	2018–2019	5	5	2	5
Tauron Polska Energia S.A	2020	5	5	2	5
Polenergia S.A.	2016	4	4	1	4
Polenergia S.A.	2019	5	5	2	5
Polenergia S.A.	2020	5	5	4	5
PKP Energetyka	2020	5	5	1	5
Veolia Energia Polska	2017	1	1	1	1
Veolia Energia Polska	2019	1	1	1	1
ENEA S.A.	2011	1	1	1	1
ENEA S.A.	2013	1	1	1	1
ENEA S.A.	2014	1	1	1	1
ENEA S.A.	2015	1	1	1	1
ENEA S.A.	2016	5	5	1	5
ENEA S.A.	2017	5	5	1	5
ENEA S.A.	2018	5	5	1	5
ENEA S.A.	2019	5	5	1	5
ENEA S.A.	2020	5	5	4	5
PGE Polska Grupa Energetyczna	2013–2014	1	1	1	1
PGE Polska Grupa Energetyczna	2015	5	5	4	5
PGE Polska Grupa Energetyczna	2017	5	5	4	5
PGE Polska Grupa Energetyczna	2018	5	5	4	5
Energa Group	2011	1	1	1	1
Energa Group	2013	1	1	1	1
Energa Group	2014	1	1	1	1
Energa Group	2015	1	1	1	1
Energa Group	2016	4	4	2	4
Energa Group	2017	5	5	2	5
Energa Group	2018	5	5	2	5
Energa Group	2019	5	5	2	5

Source: own research.

Based on the study, the authors give recommendations for energy companies listed on the Polish stock exchange in the area of reporting CG information. For details, see Figure 4.

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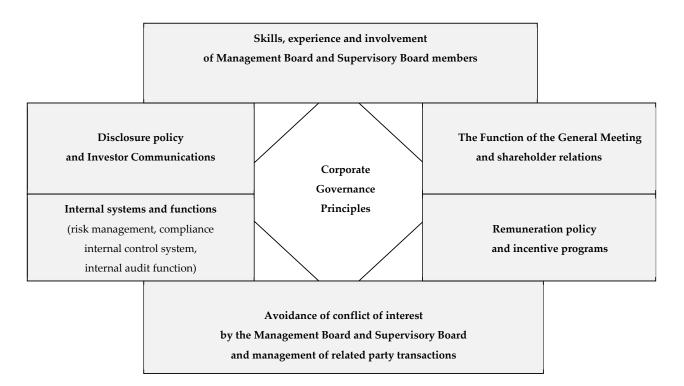


Figure 4. Author's recommendations for energy companies listed on the Polish stock exchange in the area of reporting CG information. Source: the authors.

6. Conclusions and Prospects for Future Research Directions

The analysis of the 42 N-FRs published between 2010 and 2020 by Polish energy companies listed on the Polish stock exchange (GPW) made it possible to achieve the objective of the article, which was to show the practical aspects of N-FRs and to assess the quality of reports submitted by companies in the Polish energy sector, as well as to answer the five research questions presented in the paper. The first research question was: What did the main elements of non-financial reports in the energy sec-tor companies in Poland look like in the study period (volume and percentage of non-financial data, information on relationships with stakeholders, and a declaration of ethics)? The conducted research allowed us to conclude that all reports for the years 2011–2014 were prepared in accordance with GRI 3.1, and those published for 2015 and later were prepared in accordance with GRI 4. Non-financial information is presented on 3937 pages (65%), whereas the remaining pages contain financial information. The reports included eight key stakeholder groups and 29 stakeholder categories. In total, 91% of the analyzed reports for the period 2010–2020 contained a declaration stating that the reporting company follows a code of ethics and has implemented an anti-corruption system. Moreover, since 2016, all companies have declared that they follow codes of ethics and principles of anti-corruption. Unfortunately, one gets the impression that half of the analyzed reports merely complied with the obligation to disclose GRI 4 information, and the actual dialogue with certain stakeholder groups was little more than meeting the obligation stipulated in GRI 4.

Research question 2 was: Did the non-financial reports of the investigated companies contain a description of Environmental Management Systems, Quality Management Systems, Enterprise Risk Management Systems, and the Principles of Corporate Governance? We found out that all the analyzed energy companies described their EMS. Moreover, 36 out of the 42 analyzed reports contained a description of the quality management system. The study showed that 32 out of the 42 analyzed N-FRs contained a description of an ERMS. Only 20 out of the 42 analyzed reports list CGPs implemented by the reporting entity. We also managed to establish the quality of information about the above systems (research question 3). Taking into account the qualitative features of comprehensibility, topicality,

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intertextuality and specificity, we assessed the non-financial reports of energy companies. The reports were evaluated in four thematic areas: (1) EMS, (2) QMS, (3) ERMS or ERMS and (4) CGPs.

The analysis and evaluation of the reports allow one to conclude that EMS was the most frequently addressed topic in the analyzed reports. Most probably, the underlying reason is the global doctrine of sustainable development, with environmental protection as one of its core principles. Given the nature of their operations, companies in the energy sector may be seen as strongly impacting the environment. Hence, the N-FRs present detailed information in this regard. Based on the results of the study, the authors conclude that IRs are superior in terms of both the information's quality and its quantity. In terms of such criteria as the comprehensibility of the content, the topicality and the degree of detail, IRs scored higher than CSRRs. Importantly, however, some of the CSRRs are very thorough and their quality is high, which may suggest that the form of presentation of non-financial information will change in the future. It is likely that in future reporting periods, the authors will present non-financial information in IRs.

The greatest weakness of the analyzed N-FRs is the lack of cross-references between the descriptions of the EMS, QMS, ERM and CGPs on the one hand, and the financial part of the report on the other. Furthermore, hardly any data are quantified. In addition, the non-financial information is narrative (descriptive), and the accompanying charts and images are largely inconsistent with the financial performance of the reporting entity.

Another major weakness of the non-financial reports is the fact that different reporting companies rely on different sets of regulations, standards, and rules. This is due to the lack of unified requirements governing the preparation of N-FRs, or uniform standardization applicable to all entities. Such fragmentation makes it impossible to compare the reports against each other from the point of view of quality and content. The problem can be solved by the introduction of standardized reporting models for each of the various thematic sections. Thus, the authors propose original recommendations for energy companies listed on the Polish stock exchange in the area of reporting about the following systems:

- The EMS system, emphasizing the need to include the following standards used in the energy sector—ISO 14001, ISO 22300, ISO 31000, ISO 50001, ISO 17025, ISO 26000;
- The QMS system, recommending the description of standards used in the energy sector, such as ISO 9001, ISO 27001, ISO 45000, ISO 18001, ISO 31000 and other ISO standards applicable to Quality Management Systems;
- The ERMS system, taking into account the guidelines on the internal environment system of ERMS, control activities, the information and communication system, risk response and risk identification and assessment;
- The CG system, indicating the need to include in the description of this issue areas such as (1) the skills and experience of the management board and supervisory board members, (2) the remuneration policy and incentive programs, (3) shareholder relations, (4) the avoidance of conflicts of interest by the management board and supervisory board, (5) internal systems and functions, as well as (6) disclosure policy and investor communications

In order to standardize the principles and enable the comparative evaluation of reports, it is recommended that the above recommendations be used in future reporting by energy companies.

The study also helped us to check whether the given reports were verified by an independent third party (research question 4). According to our study, only 14 out of 42 analyzed reports (33%) were reviewed by a third party (e.g., an auditing company or a statutory auditor). Most of the analyzed reports were not reviewed until 2018, which is related to the introduction of the provisions of Directive 2014/95/EU. Therefore, it should be stated that the introduction of the provisions of the Directive influenced the verification of non-financial reports of the investigated companies, which is a response to research question 5: Has the introduction of the provisions of Directive 2014/95/EU influenced the verification of non-financial reports of energy companies in Poland?

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The authors are of the opinion that the COVID-19 pandemic, which has been going on for more than two years, will increase the share of non-financial reports subjected to external review. It is likely that the driving factor in this regard will be the intensification of business risks during the pandemic, and thus the reduced stakeholder confidence in the information presented by energy companies. Therefore, it is hoped that in the forthcoming reporting years, companies will be more willing to purchase audit services in order to demonstrate that their non-financial reports are reliable.

The authors believe that the analysis carried out on the practical aspects of N-FRs, and the assessments of the quality of reports submitted by companies in the Polish energy sector, are pioneering, which unfortunately limits the possibility to discuss this topic and refer to relevant research. However, the conducted literature review allows us to indicate the background of the conducted research.

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References

 Directive 2014/95/EU. 2014. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095 (accessed on 25 November 2021).

- 2. European Commission. Available online: https://ec.europa.eu/growth/industry/sustainability/corporate-social-responsibility_pl (accessed on 20 September 2021).
- 3. O'Dwyer, B.; Owen, D.; Unerman, J. Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. *Account. Organ. Soc.* **2011**, *36*, 31–52. [CrossRef]
- 4. Federation of European Accountants. EU Directive on Disclosure of Non-Financial and Diversity Information the Role of Practitioners in Providing Assurance. Audit & Assurance. 2015. Available online: https://www.accountancyeurope.eu/wp-content/uploads/1512_EU_Directive_on_NFI.pdf (accessed on 30 June 2021).
- KPMG. The Road Ahead. The KPMG Survey of Corporate Responsibility Reporting 2017. 2017. Available online: https://assets. kpmg.com/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporateresponsibility-reporting-2017.pdf (accessed on 15 June 2021).
- 6. Artienwicz, N.; Bartoszewicz, A.; Cygańska, M.; Wójtowicz, P. Kształtowanie Wyniku Finansowego w Polsce: Teoria-Praktyka-Stan Badan; Wydawnictwo IUS Publicum: Kraków, Poland, 2020.
- 7. Beretta, V.; Demartini, M.C.; Lico, L.; Trucco, S.A. Tone Analysis of the Non-Financial Disclosure in the Automotive Industry. Sustainability 2021, 13, 2132. [CrossRef]
- 8. Chojnacka, E. Raportowanie danych w obszarach środowiskowym i społecznym w publicznych spółkach sektora energetycznego. *Pr. Nauk. Uniw. Ekon. We Wrocławiu* **2014**, 329, 45–53. [CrossRef]
- 9. Kowal, B.; Kustra, A. Sustainability reporting in the energy sector. E3S Web Conf. 2016, 10, 00129. [CrossRef]
- Bąk, S. Realizacja koncepcji społecznej odpowiedzialności w polskich przedsiębiorstwach energetycznych. In Współczesne Problemy Ekonomii–Między Teorią a Praktyką Gospodarczą w Aspekcie Różnorodności; Romanowska, M., Ed.; Polskie Towarzystwo Ekonomiczne: Częstochowa, Poland, 2017; pp. 130–142.
- 11. Ministerstwo Energii. Krajowy Plan na rzecz Energii i Klimatu na lata 2021–2030 Założenia i cele oraz Polityki i Działania. 2019. Available online: https://www.gov.pl/web/aktywa-panstwowe/krajowy-plan-na-rzecz-energii-i-klimatu-na-lata-2021-2030-przekazany-do-ke (accessed on 12 October 2021).
- 12. Ogrodnik, P. Standardy stosowane w raportowaniu niefinansowym przez polskie spółki z sektora odzież i obuwie, notowane na rynku podstawowym Giełdy Papierów Wartościowych w Warszawie. Stud. I Pr. Kol. Zarządzania I Finans. 2019, 173, 59–76. [CrossRef]
- 13. Act of 29 September 1994 on Accounting (Journal of Laws of 2021, Item 217, 2105, 2106). Available online: https://www.global-regulation.com/translation/poland/2985938/act-of-29-september-1994-on-accounting.html (accessed on 9 October 2022).
- 14. Pachucki, M.; Plutecki, A. *Jak Prawidłowo Wypełniać Obowiązki Informacyjne*; Poradnik dla emitentów; Komisja Nadzoru Finansowego: Warsaw, Poland, 2018.

Energies **2022**, 15, 7667 31 of 32

15. Bartoszewicz, A.; Rutkowska-Ziarko, A.D. Practice of Non-Financial Reports Assurance Services in the Polish Audit Market-The Range, Limits and Prospects for the Future. *Risks* **2021**, *9*, 176. [CrossRef]

- 16. Act of 11 May 2017 on Statutory Auditors, Audit Firms, and Public Supervision (Journal of Laws of 2017, Item 1089). Available online: https://www.pibr.org.pl/assets/file/2481,Ustawa_uobr_11.05.2017_EN.pdf (accessed on 9 October 2022).
- 17. Lament, M. Standardy raportowania niefinansowego w podmiotach społecznie odpowiedzialnych w Polsce. *Mark. I Rynek.* **2017**, 11, 298–310.
- 18. Piłacik, J. Raportowanie wskaźników środowiskowych według wytycznych Global Reporting Initiative na przykładzie polskich spółek branży energetycznej. *Pr. Nauk. Uniw. Ekon. We Wrocławiu* **2017**, 470, 85–96. [CrossRef]
- 19. Halkos, G.; Nomikos, S. Corporate social responsibility: Trends in global reporting initiative standards. *Econ. Anal. Policy* **2021**, 69, 106–117. [CrossRef]
- 20. Biernacki, P. Wyzwania raportowania niefinansowego. In *Raportowanie Niefinansowe. Wartość dla Spółek i Inwestorów*; Sroka, R., Ed.; Stowarzyszenie Emitentów Giełdowych GES oraz EY: Warsaw, Poland, 2017; pp. 9–13.
- 21. Rasche, A. Toward a model to compare and analyse accountability standards—The case of the UN Global Compact. *Corp. Soc. Responsib. Environ. Manag.* **2009**, *16*, 192–205. [CrossRef]
- 22. Prado-Lorenzo, J.M.; Gallego-Alvarez, I.; Garcia-Sanchez, I. Stakeholder engagement and Corporate Social Responsibility Reporting: The ownership structure effect. *Corp. Soc. Responsib. Environ. Manag.* **2009**, *16*, 94–107. [CrossRef]
- 23. Global Reporting Initiative. Available online: https://www.globalreporting.org/standards/ (accessed on 15 October 2021).
- 24. Michalczuk, G.; Konarzewska, U. Standarization of Corporate Social Responsibility reporting using the GRI framework. *Optimum. Econ. Stud.* **2020**, *1*, 74–88. [CrossRef]
- 25. Brown, H.S.; De Jong, M.; Lessidrenska, T. The rise of the Global Reporting Initiative: A case of institutional entrepreneurship. *Environ. Politics* **2019**, *18*, 182–200. [CrossRef]
- 26. Czaja-Cieszyńska, H. Standardy GRI-kierunek dla raportowania na rzecz zrównoważonego rozwoju w organizacjach pozarządowych w Polsce. Stud. I Pr. Kol. Zarządzania I Finans. SGH 2018, 164, 49–61. [CrossRef]
- 27. O'Dwyer, B.; Owen, D.L. Assurance statement practice in environmental, social and sustainability reporting: A critical evaluation. *Br. Account. Rev.* **2005**, 37, 205–229. [CrossRef]
- 28. Różańska, E. Integracja standardów raportowania społecznej odpowiedzialności przedsiębiorstw. *Stud. Oeconomica Posnaniensia* **2015**, *3*, 167–177.
- 29. Brammer, S.; Pavelin, S. Factors influencing the quality of corporate environmental disclosure. *Bus. Strategy Environ.* **2008**, 17, 120–136. [CrossRef]
- 30. Latapí, M.; Jóhannsdóttir, L.; Davíðsdóttir, B. The energy company of the future: Drivers and characteristics for a responsible business framework. *J. Clean. Prod.* **2021**, *288*, 125634. [CrossRef]
- 31. Pätäri, S.; Arminen, H.; Tuppura, A.; Jantunen, A. Competitive and responsible? The relationship between corporate social and financial performance in the energy sector. *Renew. Sustain. Energy Rev.* **2014**, *37*, 142–154. [CrossRef]
- 32. Shahbaz, M.; Karaman, A.S.; Kilic, M.; Uyar, A. Boardattributes, CSR engagement, and corporate performance: What is the nexus in the energy sector? *Energy Policy* **2020**, *143*, 111582. [CrossRef]
- 33. Constantinescu, D.; Caraiania, C.; Lungua CIMititeana, P. Environmental, social and governance disclosure associated with the firm value. Evidence from energy industry. *Account. Manag. Inf. Syst.* **2021**, 20, 56–75.
- 34. Karaman, A.S.; Orazalim, N.; Uyar, A.; Shahbaz, M. CSR achievement, reporting, and assurance in the energy sector: Does economic development matter? *Energy Policy* **2021**, *149*, 112007. [CrossRef]
- 35. Klaudacz-Alessandri, M.; Cygańska, M. Corporate Social Responsibility and Financial Performance among Energy Sector Companies. *Energies* **2021**, *14*, 6068. [CrossRef]
- 36. Rutkowska-Ziarko, A.; Markowski, L. Accounting and Market Risk Measures of Polish Energy Companies. *Energies* **2022**, *15*, 2138. [CrossRef]
- 37. Agudelo, M.A.L.; Johannsdottir, L.; Davidsdottir, B. Drivers that motivate energy companies to be responsible. A systematic literature review of Corporate Social Responsibility in the energy sector. *J. Clean. Prod.* **2019**, 247, 119094. [CrossRef]
- 38. Urząd Regulacji Energetyki. Available online: https://www.ure.gov.pl/pl/urzad/informacje-ogolne/aktualnosci/3218 ,Spoleczna-odpowiedzialnosc-przedsiebiorstw-energetycznych.html (accessed on 18 October 2021).
- 39. Figaszewska, I.; Dobroczyńska, A.; Dębek, A. *Społeczna Odpowiedzialność Przedsiębiorstw w świetle Badań Ankietowych*; Raport; Urząd Regulacji Energetyki: Warsaw, Poland, 2009.
- 40. Szczepankiewicz, E.I.; Mućko, P. CSR Reporting Practices of Polish Energy and Mining Companies. *Sustainability* **2016**, *8*, 126. [CrossRef]
- 41. Ferens, A. Informacje niefinansowe w sprawozdawczości spółek branży energetycznej. *Pr. Nauk. Uniw. Ekon. We Wrocławiu* **2019**, 63, 7–18. [CrossRef]
- 42. Szadziewska, A.; Spigarska, E.; Majerowska, E. The disclosure of non-financial information by stock-exchange-listed companies in Poland, in the light of the changes introduced by the Directive 2014/95/EU. *Zesz. Teor. Rachun.* 2018, 99, 65–95. [CrossRef]
- 43. Gamerschlag, R.; Möller, K.; Verbeeten, F. Determinants of voluntary CSR disclosure: Empirical evidence from Germany. *Rev. Manag. Sci.* **2010**, *5*, 233–262. [CrossRef]
- 44. Raporty Zrównoważonego Rozwoju. Available online: http://raportyzr.pl/informacje-o-konkursie/ (accessed on 3 November 2021).

Energies **2022**, 15, 7667 32 of 32

45. Striukova, L.; Unerman, J.; Guthrie, J. Corporate reporting of intellectual capital: Evidence from UK companies. *Br. Account. Rev.* **2008**, *40*, 297–313. [CrossRef]

- 46. Unerman, J. Methodological issues-Reflections on quantification in corporate social reporting content analysis. *Account. Audit. Account. J.* **2000**, *13*, 667–681. [CrossRef]
- 47. Freeman, E. Strategic Management: A Stakeholder Approach; Pitman Publishing: Boston, MA, USA, 1984.
- 48. G4 Sustainability Reporting Guidelines. 2013. Available online: https://www.globalreporting.org/information/g4/Pages/default.aspx (accessed on 20 July 2022).
- 49. Mućko, P. Jakość sprawozdań narracyjnych i jej determinanty–przegląd literatury. *Stud. I Pr. Kol. Zarządzania I Finans.* **2018**, 165, 155–170. Available online: https://ssl-kolegia.sgh.waw.pl/pl/KZiF/czasopisma/zeszyty_naukowe_studia_i_prace_kzif/Documents/09_Mucko_165.pdf (accessed on 14 June 2022). [CrossRef]
- 50. Szczepankiewicz, E.I. Identification of Going-Concern Risks in CSR and Integrated Reports of Polish Companies from the Construction and Property Development Sector. *Risks* **2021**, *9*, 85. [CrossRef]
- 51. Szczepankiewicz, E.I.; Błażyńska, J.; Zaleska, B. Comply or Explain Principle in the Context of Corporate Governance in Companies Listed at the Warsaw Stock Exchange. *Eur. Res. Stud. J.* **2021**, 24, 281–310. [CrossRef]
- 52. Szczepankiewicz, E.I.; Loopesko, W.E.; Ullah, F. A Model of Risk Information Disclosures in Non-Financial Corporate Reports of Socially Responsible Energy Companies in Poland. *Energies* **2022**, *15*, 2601. [CrossRef]
- 53. Szczepankiewicz, E.I. Selected issues in effective implementation of the integrated risk management system in an organization. *Finans. Rynk. Finans. Ubezpieczenia* **2011**, 49, 153–162. Available online: https://wneiz.pl/nauka_wneiz/frfu/49-2011/FRFU-49-1 53.pdf (accessed on 21 July 2022).
- 54. Błażyńska, J. Non-financial reporting pursuant to the SIN standard at the WSE. *Pr. Nauk. Uniw. Ekon. We Wrocławiu u* **2020**, *64*, 7–18. [CrossRef]
- 55. WSE. Best Practice for GPW Listed Companies, Dobre Praktyki Spółek Notowanych na GPW 2021; Giełda Papierów Wartościowych (WSE): Warszawa, Poland, 2021.
- 56. Sydserff, R.; Weetman, P. A Texture Index for Evaluating Accounting Narratives: An Alternative to Readability Formulas. *Account. Audit. Account. J.* 1999, 12, 459–488. [CrossRef]