

NON-FINANCIAL REPORTING OF CHEMICAL COMPANIES IN THE CZECH REPUBLIC

Simona MUNZAROVA[®], Jana KOSTALOVA[®], Eliska FIALOVA

Faculty of Chemical Technology (FCHT), University of Pardubice, Pardubice, Czech Republic

Received 21 January 2020; accepted 12 September 2021

Abstract. This paper focuses on the issue of non-financial corporate reporting by the Czech chemical companies. Based on the content analysis of the websites and disclosures, it analyses, compares and evaluates the level of web communication of the economic, environmental and social issues of corporate social responsibility of these companies. At first, it presents results of the research comparing the extent of non-financial web communication of selected Czech chemical companies with the Czech leaders in the Czech TOP 100 rankings. These results are then complemented by results of the quantitative research on environmental instruments used by all Czech chemical production companies, that use websites for communication of their activities. The number of companies in the Czech Republic processing non-financial reports is significantly lower than abroad, but it is still growing. Large enterprises pay more attention to non-financial reporting. Rather than including this information in a disclosure, a business website is used as a tool for this communication. The paper brings sectoral perspective into non-financial reporting literature, as attention is paid to the chemical production sector and also complements the knowledge of communication of companies that do not belong to the group of 100 most important companies within the country.

Keywords: reporting, non-financial reporting, corporate social responsibility, sustainability, non-financial reporting standards, chemical industry, Czech Republic.

JEL Classification: M14.

Introduction

For many years, we are witnessing the transformation of major business goals transformed and focused not only on the owners but also on all stakeholders as the impact of business activities is perceived not only in economic, but also in environmental and social areas. The gradually increasing awareness and assumption of responsibility for these impacts of business activities led to the creation of the CSR concept, which requires transparent and ethical behaviour considering the individual stakeholders of the company and the society as a whole. As a result of this altered view, businesses do not focus only on producing financial benefits, but also on a certain beneficial effect for their stakeholders, who, in turn, provide support and, above all, enable the business to grow (De Villiers & Maroun, 2018).

In connection with this concept, there is also a need to inform about the impacts of the company's processes, both positive and negative, and to inform about what responsible activities have been done, how companies deal with the impacts, how they try to prevent or minimize the negative ones. Providing this information could help to build positive reputation that is brought by all stakeholders' perceptions of a company based on assessment of all three dimensions of corporate responsibility over time (Barnett et al., 2006). An important role is played by voluntary reporting of non-financial information to various stakeholders, which enables the company to disseminate information that is not only related to the core business of the company but which can affect both customers but also employees and other stakeholders. The issue of nonfinancial reporting has undergone a dynamic development, with the gradual broadening of information that is monitored by companies and subsequently communicated by various corporate communication tools (Jelinkova et al., 2016). There is also an increase in the willingness of companies to collect and present such information, not only thanks to the emerging legislative rules, but also due to the growing awareness of the importance of CSR activities. On the other hand, the level of adoption of CSR and CSR reporting varies, both globally and in cross-sectoral

*Corresponding author. E-mail: simona.munzarova@upce.cz

Copyright © 2022 The Author(s). Published by Vilnius Gediminas Technical University

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. comparison, or in comparisons based on the size or owner of the organization (KPMG, 2015; 2017).

The stimulus for research summarized in this article is the lower level of reporting of socially responsible behaviour in Eastern Europe businesses including Czech businesses compared to the rest of the world, especially businesses from developed countries (KPMG, 2017). The second reason is the difficulty in strengthening the reputation of the chemical sector in terms of its contribution to sustainable development, to which effective communication through CSR reporting could contribute (Jelinkova et al., 2018). Our research focuses on country with small economy and on sensitive industry, that the chemical industry is in the eyes of stakeholders, at least in environmental area of CSR.

The main goal of the research is to analyze the scope of information presented within the non-financial reports in a selected group of chemical companies with the best Czech companies in the field of non-financial reporting and to compare the situation across the chemical industry in the Czech Republic, just at the moment when the legal regulation on the national level is introduced. Additional aim is to analyze the prefer way of communication of non-financial reports and CSR activities generally to stakeholders.

1. Literature review

There is a significant amount of reports created in the enterprise that differ according to their recipients. These could be classified as external and internal reports. External reports are usually intended to tax office, health and social insurance institutions, banks, statistics office and other institution of government or municipality. In the last years, external reports have been intended also to other stakeholders, i.e. customers, suppliers, local communities, etc. Internal reports are created for management, owners, controlling departments, internal auditors, or employees. Reports could be prepared in standard term or in extraordinary term. There could be partial (i.e. marketing, production reports etc.) or summary reports. The most important view of stratification of reports is based on the content of reports. From the content point of view, reports can include a wide range of information from internal business reporting to information about the organization's sustainable development or CSR activities, provided to internal or external stakeholders according their content. There are available financial and non-financial reports. The main goal of the external financial report is to present true and fair view of financial accounting, internal financial reports serve for management decision making. The goal of non-financial reporting is to present additional information, especially about the company's activities or aspects that have, or could have, an impact on the company's internal or external stakeholders/environment, intended again for external or internal user depending on reports content. Definition of non-financial reporting or information is to some extent unclear and based on vague terms, as discussed by Stolowy and Paugam (2018), who illustrate the heterogeneity in firms reporting practices. Recently, significant attention has been paid to the annual integrated non-financial reports presented in many forms, mainly in the form of disclosures or separate annual reports or on web pages and other social profiles of a company (Kulkarni, 2014; Arvidsson, 2011; Tetrevova, 2018; Chersan et al., 2018).

The need for high-quality processing is the same regardless of the report type. Well-prepared reports should follow certain principles, be complete in content and factual, accurate, understandable, trustworthy, transparent, reliable, neutral, formally compliant, comparable, and the regularity of their publication should be ensured (Global Reporting Initiative [GRI], 2015). In addition to these principles, companies must often comply with legislation, especially regarding externally reported financial reports. The processing of non-financial reports is then mostly a voluntary activity of businesses, for example as a response to a stakeholder's request (customer, investor), or as part of building a positive corporate reputation (Lubis, 2018; Cornejo et al., 2020). It can also be triggered by valid legislation, at both national and international level. At the national level, in the Czech Republic, the obligation to create and present non-financial reports in the financial statements was reflected in the 2016 Accounting Act (No. 563/1991 Sb.) for businesses defined by law, entering into force at the beginning of 2017. This act implemented into the Czech law European Union Directive 2014/95/EU (European Parliament, & Council of the European Union, 2014).

1.1. Communication of CSR and sustainable activities

Definition of CSR has changed over years. In 2001, the European Commission (2001) defined CSR as "voluntary integration of social and environmental considerations into day-to-day corporate operations and interactions with corporate stakeholders", in 2011 as "corporate responsibility for their impact on society" (European Commission, 2011). In 2019, CSR and likewise "Responsible Business Conduct" and "the United Nations' concept of Business and Human Rights" is perceived that companies understand their impacts, both positive and negative, on society and the environment, and prevent, manage and mitigate their negative impacts, including in their global supply chains (European Commission, 2019a). CSR is most often perceived as the consistency of business performance at both economic and environmental and social levels (Tetrevova et al., 2017), representing three basic pillars of sustainability called triple-bottom-line (3P – profit, people, and planet). The pillars are interrelated and the management of activities within these pillars should lead to their balance (Elkington, 1998). Some business activities may be interwoven across a number of areas, and their significance may vary from business to business and over time, too (Hofbruckerova et al., 2016; Tetrevova, 2018).

Similarly, these three pillars form a base for the concept of sustainable development which "meets the needs of the present whilst ensuring future generations can meet their own needs" (European Commission, 2019b). In terms of business size, attention is often paid to large organizations, but as Vazquez-Carrasco and Lopez-Perez (2013), Gallardo-Vazquez and Lizcano-Alvarez (2020) and Csigene-Nagypal (2013) point out, attention should also be paid to SMEs. In addition, according to Halme and Korpela (2013), SMEs can be part of the supply chain of large organizations that may require CSR or sustainable behaviour over its entire length.

From the point of view of both the management of stakeholder relations and the growing importance of CSR and sustainable development, communication of CSR and sustainable activities and indicators plays an important role. Organizations not only focus on the actual benefits of the programs, but they also monitor and share the value of their programs to their stakeholders (Bortree, 2014). Businesses seek different ways to ensure effective CSR communication. It should be noted that it is already unpaid external sources such as references, referrals or word of mouth communications (Aarikka-Stenroos & Makkonen, 2014) that can be the source of positive perception of individual value chain actors. It is also possible to use the PR communication tools of the organization to communicate CSR activities like meetings, events for the employees, corporate guidelines with CSR conduct, internal mail, inhouse newspapers, notice-boards, organization advertisements, web pages, eco-labelling, active publicity - press releases, or conferences, annual reports or independent CSR reports (Jelinkova et al., 2016). Media-based communication is not much used since positive news is not that interesting for the media, and also the media are worried that they might be accused of hidden advertising (Robinson & Eilert, 2018). Other way of communicating the social, environmental, and economic impacts that have been triggered by the enterprise's activities on stakeholders and society as a whole is through non-financial CSR reporting (Szabo, 2016).

1.2. Non-financial reporting

In comparison to financial reporting, non-financial reporting provides a greater amount of qualitative information while quantitative information is expressed both financially and primarily in kind. CSR reporting is a process of creating and maintaining a business-to-stakeholder dialogue, and its content should be presented so as to ensure stakeholder affection or dispel its disagreement with some business activities. Deegan (2014) specifies "social reporting" as providing information about the organization's performance in the social environment that includes interaction with the local community, support to community projects, support to developing countries, health and safety, training and education programs, or environmental performance. Similarly, Islam (2015) adds that the company reports information on the product, employee interests, local community activities, and the environmental impact of business activities. In the past, the most frequent summary non-financial reports were those on the environmental impact of entrepreneurial activities (annual environmental reports) (Cormier & Magnan, 2003). These were replaced by reports on socially responsible behaviour, or sustainability reports, etc. One of the changes that has influenced the development of CSR reporting in recent years was the European Union 2014/95/EU Directive (European Parliament, & Council of the European Union, 2014), as mentioned earlier. This directive turned this voluntary corporate activity into a required one and its impacted has been analyzed my many studies (i.e. Stefanescu et al., 2021; Matuszak & Różańska, 2021). With the introduction of the obligation of financial reporting, the non-financial reporting was divided into:

- Voluntary applies to businesses that, by their size and activity, do not meet the requirements of the amendment. Enterprises create reports as one of the tools of communication with stakeholders, as part of their own PR strategy and use them to reach out to the public.
- Mandatory applies to all large enterprises that are public interest entities and exceed the criterion of an average of 500 employees per financial year for the accounting period. Their non-financial report can be presented separately or be part of an annual report. In terms of content, it must present information about the company's activities, strategy, risks, impacts and non-financial indicators relating to environmental, social and employment areas, respect for human rights and the fight against corruption and bribery (European Parliament, & Council of the European Union, 2014).

Another development stage of reporting is the creation of integrated reporting. Integrated reporting provides an alternative view of the traditional economic perspective of maximizing profits by promoting a business success assessment based on the company's ability to create values sustainably. An integrated report then includes both financial and non-financial information, which is rather brief and with regard to the communication of the outputs achieved (De Villiers & Maroun, 2018; Rupley et al., 2017).

As regards the content of the non-financial report, it is assumed that it will include all business operations as well as individual affiliates, and that the report will present information on significant impacts of the company's activities on society and the environment. In order for a message to be credible, the enterprise should mention the data collection method, set goals, or corporate policy. It is also possible to have the report verified by a third independent party to enhance the report's credibility, and/or use internationally recognized standards in its creation. According to KPMG surveys, the verification shows a growing trend (KPMG, 2015; 2017). The increase of motivation to prepare non-financial reports has been identified (Sorour et al., 2021). From the formal point of view, the report should be appropriately arranged in terms of graphics, including clear navigation, be reasonably long and understandable.

1.3. Standards of non-financial reporting

Businesses can use their own reporting methodology to process their voluntary non-financial reports or they can follow some of the nationally or internationally recognized reporting standards. Following the development of CSR, a large number of standards have been gradually developed to address this issue. The most commonly mentioned are the GRI, United Nations Global Compact, AA 1000 Accountability, the OECD Guidelines for Multinational Enterprises, SA8000:2014, or ISO 26000 (GRI, 2016; United Nations Global Compact, 2014; AccountAbility [AA], 2018; Organisation for Economic Co-operation and Development [OECD], 2011; Social Accountability International, 2014; ISO 26000:2010). Overall, standards recommended for processing non-financial reports are generally similar to each other. There is a difference in the level of detail with which the issue of reporting is addressed and the extent of the individual sub-areas involved, which they recommend to communicate within reports. KPMG (2017) presents a widespread use of standards in practice, 74% of reporting companies use some of the standards to prepare non-financial reports worldwide, 63% of companies use the GRI standards.

The standards could be divided into two groups according to the extent of the non-financial reports. In the first set of standards, including the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the SA8000:2014 standard, only those areas (principles) are defined that recommend standards to be monitored. However, they do not address exactly how the content of individual reports should look like. The second-group standards (AA1000, ISO 26000, EMAS and GRI Guidelines) already define the requirements for the content of reports, the sorting of topics according to their importance, suggest indicators that the company should report, emphasize the involvement of stakeholders and emphasize the need for regular reporting. Cosofret (2020) cofirms the different approach to non-financial reporting, and higlights the lack of international synchronization.

1.4. Trends in non-financial reporting

The newly built legislative framework for non-financial reporting has a significant impact on non-financial information publishing (KPMG, 2015). On the other hand, non-financial reports are becoming a part of the complex communication of corporate activities even with companies that are not required to do so by the aforementioned 2014/95/EU Directive. One of the reasons is the fact that the so-called stakeholder dialogue is increasingly important for more and more stakeholders. Moreover, thanks to this dialogue, the company gets a better view of its

performance, being enabled to clarify its strategy and expectations of its stakeholders. The integrated reporting in business represents a holistic approach for the companies with focus on the process of creating value within the firms. This initiative aims to integrate financial, sustainable and corporate governance reporting (Montesinos & Brusca, 2019; International Integrated Reporting Council, 2013; Sustainability Accounting Standard Board, 2021).

One of the stakeholder groups that is interested in published reports is investors. According to a study by Oxford University (McPherson, 2019), more than 80% of investors use corporate information on environmental, social and management issues to make decisions about investing their funds.

Another trend in CSR and with it in non-financial reporting is greater involvement of employees in deciding on what CSR or sustainable activities the company will engage in. The low unemployment rate and the struggle of businesses for employees with great potential give these people a greater bargaining space. The current generation of millennials expects the business not only to look at its own profit but to be able to give some values back to society as well. It is important for them to be able to take part in making decisions on what projects to focus on and within what activities they will spend their free time. Thus, the enterprise should report its CSR and sustainable activities towards potential or current employees and also conduct ongoing research among its employees to identify what projects and activities should be supported (McClimon, 2019).

The dialogue of the company with its stakeholders does not change only because more and more stakeholder groups are involved, but also by the quality of this dialogue. Trends can be seen in the growing demand for transparency, so that stakeholders have an overview of the all company's activities.

Another trend related to this is measurability. More stakeholders are demanding that the written word be backed up with measurable values. These making it possible to see the development in the area in which the company is engaged. Numeric values and results from different areas are clearer and better for ease of reference. Subsequent linking of non-financial information and values with financial results to the integrated report is also one of the trends in the reporting field (Rupley et al., 2017). However, companies need to be wary, because the greater the amount of information that such a report could contain, the greater its length. In general, the public also more appreciates reports that are not very extensive and can be relatively easy to understand. For ease of reference, interactive or visually attractive features such as infographics or videos can be used in reports to clearly display measurable goals and their fulfilment.

At the same time, a number of studies point out that the level of adoption of CSR varies from organization to organization. As far as the Czech Republic is concerned, there was an increase in the number of Czech companies reporting CSR between 2015 and 2017, by 8% to 51% of organizations. However, the Czech Republic continues to be below the global (72%) and European average (77%) (KPMG, 2015; 2017). Another reason why the level of communication and reporting of CSR or sustainable activities differs could be in the lack of knowledge about non-financial reporting or about proper performance indicators (Wensen et al., 2011).

Differences are also in the adoption of different procedures and the use of different CSR/sustainable tools from the sectoral perspective, where, for example, the manufacturing companies of the metallurgical and construction sectors are more active in the use of CSR/sustainable tools, including reporting, than non-manufacturing enterprises (Graafland et al., 2003; Fernandez-Feijoo et al., 2014). Companies in the chemical sector can be viewed in a similar way, whose activities are often perceived as sensitive due to potentially negative environmental impacts. In the past, the chemical industry was one of the leaders of building the CSR environmental pillar, for example by adopting Responsible Care, implementing ISO 9001 or ISO 14001, etc. However, stringer legislation and compulsory reporting (REACH, integrated pollution register or other integrated reporting systems) push out voluntary reporting.

Businesses understand that publishing such information will improve their public image and increase sales, and financial performance (Landrum & Ohsowski, 2017; Myskova & Hajek, 2019) and they increase this reporting activity (Stolowy & Paugam, 2018; Venturelli et al., 2019). It can be perceived as a prerequisite for sharing benefits of applied CSR concept not only by its stakeholders but also by society as a whole (Tetrevova, 2018). Nevertheless, when strengthening competitiveness and reputation, which is difficult in the industry sector, it is necessary to approach important business stakeholders and find effective ways of reporting and communication (Jelinkova et al., 2018; Kulkarni, 2014).

2. The research methodology

We conducted two sets of empirical analyses using two different samples. In first one, non-financial reporting of two best ranked Czech companies was compared with first four ranked best chemical companies operated in the Czech Republic. Based on results of the first sample analysis, the second large sample of chemical companies was analyzed on non-financial reporting in detail with attention paid to the environmental area of CSR as sensitivity of this industry comes from its potential impacts on the environment. Data, for both of the analyses, were gained on the basis of content analysis of primary resources like web pages, annual reports, and disclosures.

Sample one: companies ranked in the top positions in the CZECH TOP 100 rankings (6 companies), namely:

 ČEZ Group, a.s. (electric power generation and distribution company) ranked first in the "Best Annual Reports" category,

- Agrofert, a.s. (holding company with activities in different sectors) ranked second in the "100 Admired Companies of the Czech Republic" category,
- Linde Gas, a.s., Hartmann Rico, a.s., Bioveta, a.s. and Gumotex, a.s. (these are hereinafter referred to as ch1 to ch4, respectively) ranking first in the common subcategory for chemical, pharmaceutical, rubber and plastics industries in the "100 Admired Companies of the Czech Republic" category.

ČEZ Group, a.s. and Agrofert, a.s., represent Czech leaders in the CSR/sustainability reporting and these were compared with the non-financial reporting of the four highly rated companies of the Czech chemical industry, mentioned above. Set of activities (indicators) were evaluated, of which 5 were economic responsibility indicators, 6 environmental and 10 social responsibility indicators.

Sample two: the set of 3,333 companies doing business in the chemical industry according to the classification of CZ-NACE was analyzed. From these, only those companies were kept that operate in the territory of the Czech Republic, operate in the field of chemistry, have their own production activities and have their own working website in Czech language. This core set comprised 470 companies, with 10% being large companies, 24% medium sized, 32% small and 34% micro businesses. This set was subjected to the above-mentioned analysis of non-financial reporting where the extent of the presented information in relation to the scope of activities in the environmental field of CSR was assessed and the data obtained were processed by descriptive and inferential statistics using the IBM SPSS software. The scope of non-financial reporting was measured with the aid of the average number of activities/tools communicated. Correlation analysis of published CSR and environmental non-financial information was performed.

3. Research results

3.1. Research into the comparison of the Czech best-ranked companies and chemical companies on non-financial reporting

The basic characteristics of companies from the first part of the research in terms of sales, number of employees and the ratio of non-financial information in the disclosures of analysed companies are provided in the following Table 1. The other tables summarize the results of the content analysis of the information provided by the monitored enterprises divided by the CSR areas, which are usually the basis for CSR performance indicators of the enterprises. The results are presented using the binary scale, where 1 means that the information is given either in the disclosure in the form of AR or on the company's website, 0 means the opposite.

The provision of non-financial information in the disclosures of the companies is rather a minor issue. In this context, it is necessary to point out the fact that chemical

Company	ČEZ	Agrofert	ch1	ch2	ch3	ch4
Sales (millions of EUR)	7836	5973	202	169	59	106
Number of employees	26 895	32 963	590	1830	650	1420
Pages of annual report	332	92	54	29	64	42
Pages of non-financial information	10	2	1	0	1	2

Table 1. Basic information about the monitored enterprises (source: authors)

company (ch2) does not include any non-financial information in the compulsory annual report.

Economic area of CSR reporting

Information on the managing bodies of companies can be found in all companies. Information differ in terms of the scope and detail, which is at the highest level at the company ranked first for its AR (ČEZ, a.s.), as well as the means of communication, if not provided by the company in the annual report, then at least on the company's website. As can be seen from Table 2, other evaluated items presented in the annual reports are, except for the presentation of ethical behaviour issues, e.g. in the form of Code of Ethics, also listed on the companies' websites which also contain more information.

In the disclosures, as for the CSR economic area, there is an important presentation of the effort to innovate and continuously improve companies' processes, presentations of customer relations and certification of management systems, e.g. those for quality, environment, occupational health and safety, energy and selected relevant industry certifications for some products. While the least presented are ethical practices introduced, a code of ethics has been introduced in 4 companies. However, ch1 has not done that yet. Three companies have introduced an ethical line and the company ranked first for its AR also employs an ombudsman for ethics.

Environmental area of CSR reporting

As was the case with the economic area, it also applies to this area that if the non-financial is provided with information on the environmental area of CSR in the annual report, then it is also presented on the company's website, which contains more information, see Table 3. Both leaders aim to present more environmental aspects in the disclosure than the best-rated companies of the chemical industry do. The businesses differ according to what kind of environmental aspect they prefer to communicate. Most attention is paid to reducing waste, saving energy and protecting the atmosphere.

Environmental reporting on websites is more pronounced in the area of declaring compliance with environmental legislation and certification according to ISO 14001. Similarly, both leaders and the best-rated Czech chemical company are committed to using BAT and investing in clean technologies and encouraging other entities in the supply chain, or employees, to perform environmental activities.

Company	ČEZ	Agrofert	ch1	ch2	ch3	ch4
Company	AR/website	AR/website	AR/website	AR/website	AR/website	AR/website
Good governance	1/1	1/1	1/0	0/1	1/0	1/0
Relationships within supply chain	1/1	1/1	1/1	0/1	0/1	0/1
Quality Management System	1/1	1/1	1/1	0/1	0/1	1/1
Innovation and improvement	1/1	1/1	1/1	0/1	1/1	1/1
Code of ethics	1/1	1/1	0/0	0/1	0/0	0/1

Table 2. Economy CSR non-financial information (source: authors)

Table 3. Environmental non-financial information (source: authors)

C	ČEZ	Agrofert	ch1	ch2	ch3	ch4
Company	AR/website	AR/website	AR/website	AR/website	AR/website	AR/website
Air protect., emission	1/1	1/1	0/1	0/1	0/0	1/1
Water protection	1/1	1/1	0/1	0/1	0/0	0/1
Noise protection	1/1	0/0	0/0	0/0	0/0	0/0
Energy saving	1/1	1/1	0/1	0/1	0/1	0/1
Waste reduction	0/1	1/1	0/1	0/1	1/1	1/1
Environ. Management System	1/1	1/1	1/1	0/1	0/1	1/1

C	ČEZ	Agrofert	ch1	ch2	ch3	ch4
Company	AR/website	AR/website	AR/website	AR/website	AR/website	AR/website
Education of employees	1/1	1/1	0/1	0/1	1/0	1/1
Employee benefits	1/1	1/1	0/1	0/1	1/1	1/1
Care of employees	1/1	1/1	0/1	0/1	1/0	0/1
Occup. safety and health protect.	1/1	1/1	1/1	0/1	0/0	0/1
Interest in former employees	1/1	0/0	0/0	0/0	0/0	0/0
Interest in future employees	1/1	1/1	0/0	0/1	0/0	0/1
Cooperation with trade unions	1/1	0/0	1/0	0/0	0/0	0/0
Donership	1/1	0/1	0/0	0/1	1/0	1/0
Volunteering	0/1	0/1	1/0	0/1	0/0	0/0
Cooperation with non-profit org.	1/1	0/1	0/0	0/1	1/0	0/0

Table 4. Social non-financial information (source: authors)

Social area of CSR reporting

The main indicators of the social pillar of CSR are primarily the care for employees, namely in the form of further education, benefits, safety at work and support for trade unions (see Table 4). Attention is paid not only to employees, both current and former or potential, but also to local community groups, and in this context, donor or volunteer activities and cooperation with nonprofit organizations are reported. Again, the leader ČEZ lists all these activities in the annual report, except for volunteering, which it reports on the website. As for the chemical enterprises, the least attention is paid to the interest in former or future employees and cooperation with trade unions, while employee benefits are most frequently reported (e.g. employee education).

The annual reports of the analysed companies vary considerably, both in terms of content and design. The representation of non-financial information in the annual reports is significantly lower than its presentation on the company websites. Company ch2 does not include non-financial information in the disclosure at all and, similarly, the best-rated chemical company gives only limited non-financial information in the disclosure, providing information primarily from the economic field. In terms of the content of non-financial information in disclosure, the third and fourth companies of the chemical industry could be therefore ranked higher.

In summary, companies' websites provide a view of businesses that is different from annual reports. They offer significantly more non-financial information from individual CSR areas. However, this information need not be verified by anyone and is usually only a statement by the enterprise about the business activities and the context of the CSR concept. There was an interesting contradiction among chemical companies when the company with the weakest non-financial part of the annual report gives much non-financial information on its website. On the other hand, companies on the other positions present the same amount of non-financial information in the annual report and on the website or less. In summary, companies' websites provide a different view of businesses than annual reports. They offer significantly more non-financial information from individual CSR areas. However, this information are not verified by anyone and usually, it is only a statement by the enterprise about the business activities and the context of the CSR concept. There was an interesting contradiction among chemical companies when the company with the weakest non-financial annual report gives much more non-financial information on its website, and the same contradiction applies to the best ranked company of the chemical industry. On the other hand, companies on the other positions present the same or less amount of nonfinancial information in the annual report compare to their websites.

3.2. Research on non-financial reporting of Czech chemical manufacturing companies

The results of the first research led to more detailed second research into non-financial reporting of the Czech chemical manufacturing companies. Attention was paid to environmental area of CSR. Out of the 470 manufacturing chemical companies that use websites to communicate with their stakeholders only 135 companies (28%) use their websites to present activities or aspects from the environmental area of CSR. 40 companies focus its main process on standard chemistry, 12 on pharmacology, 31 produce paints and lacquers, 13 produce cosmetics, 10 are agrochemical companies, 19 are plastics manufacturing companies and 70 companies are from other chemical fields such as building chemicals, waste processing, etc. In terms of size, they were representatives of all groups, from micro enterprises (14%) to small (23%), medium (38%) enterprises to large enterprises (25%). Compared to the original set, the relative representation of enterprises by size changed in favour of medium and large enterprises.

Out of 135 companies that communicate environmental issues, 67% companies use their websites to present information directly related to CSR, especially medium-sized enterprises and large enterprises. 70% of the companies presented the focus on the environmental pillar of CSR, declaring environmental policy. In particular, it was medium-sized enterprises (38) and large enterprises (29) that communicate this issue on their websites. 65% of the companies declared ISO 140001 certification, only 21% of companies communicate certificate to use the logo Responsible Care (mainly middle sized and large companies), and 20% of the total of 135 assessed enterprises have Eko-kom certificates that proves the collection and recycling of packaging waste is realized by the specialized external company.

Correlation analysis was performed for the abovementioned outputs, which assessed the correlation between individual categories of information, see Table 5. The highest correlation is between reporting on CSR information and environmental policy, which means that when companies report CSR activities, they usually declare their environmental policy. Direct correlation is also between Responsible Care and communication about ISO 14001 certification, environmental policy declarations and the presentation of CSR activities. Since Responsible Care is an initiative of the global chemical industry in the fields of environment, health and safety, ethics to create confidence in the industry, the correlation was expected but not the low number of companies following it. Given large number of certifications of the ISO 14001 type, the correlation is understandable between the occurrence of this certificate and the environmental policy that businesses have to establish when developing an environmental management system certified by ISO 14001. On the other hand, it has to be pointed out, that correlations were expected to be higher. Reason could be that a number of companies place their certificate on their website and do not communicate other information. An indirect correlation was found between Eko-kom certification and environmental policy communication, and between Eko-kom and ISO 14001 certificates. This result can be interpreted as showing that enterprises most often have either Eko-kom certification or ISO 14001 certification.

Most companies publish only required information by law or certification ISO 14001 on their websites. Mainly large companies and holdings communicate and report their CSR aspects and activities via their website. Some companies present a separate CSR report and/or a separate (annual) environmental report; some summarize this information into a single sustainability report.

4. Discussions

This paper focuses on a non-financial corporate reporting presented by chemical companies in the Czech Republic. The number of companies in the Czech Republic processing non-financial reports is significantly lower than abroad mainly in comparison to the west European countries (KPMG, 2015; KPMG, 2017), but it is still growing. It is similar as in other developing countries (Sorour et al., 2021). As discussed earlier, the importance of nonfinancial reporting lies, among other things, in building a positive reputation, which is important not only under conditions but even more in upcoming time of economy crisis we face these days to COVID-19 pandemic.

In relevant studies the impact of mandatory non-financial reporting is discussed. The implications of mandatory non-financial reporting are questioned, there is a concern that companies are only presenting the basic minimum of information, but are not in fact making changes towards greater sustainability and CSR. Sorour et al. (2021) speaks about "political reporting". On the other hand, there are studies which confirm the positive impact of mandatory non-financial reporting on production companies in the industry generally and in the chemical industry (Bucaro et al., 2020; Cefic, 2020).

Other matter of discussion is the way of communication of non-financial information, both voluntary and mandatory, towards stakeholders. There is the trend of integrated reporting (Montesinos & Brusca, 2019), the different way of communication based on the different group of stakeholders is also discussed. Results of our research show that rather than including this information in a disclosure, a business website is used as a tool for this communication. The reason could be viewed in its accessibility, and higher possibility of interaction with the user etc. The relevant studies focused on such comparison are not available so there is area for other detail research.

The research results confirm that higher attention is paid to non-financial reporting in large, often indexed, enterprises. There is possible to expect, based on preview development, the increase of such activities also in SMEs. Querci (2018) confirms this trend and highlights the fact, that their individual impact is limited, but as a group, they have got strong environmental and social impact. It will be useful mainly in situation when at the same time in many cases, many of CSR activities, even if implemented, are not sufficiently communicated and there is a great opportunity for better presentation of these activities.

Table 5. Correlation matrix for the dependence between information provided on corporate websites (source: authors)

Correlation	CSR information	Environ. policy	14001 Certification	Eko-kom	Responsible Care
CSR information	1.000	0.319	0.143	-0.093	0.207
Environmental policy	0.319	1.000	0.160	-0.127	0.258
14001 Certification	0.143	0.160	1.000	-0.156	0.297
Eko-kom	-0.093	-0.127	-0.156	1.000	-0.018
Responsible Care	0.207	0.258	0.297	-0.018	1.000

Conclusions

In the article, the issue of non-financial reporting of companies was presented. The CSR concept helps companies realize and assume the responsibility for the economic, environmental and social impact of their business. If companies accept their responsible role, it is appropriate to consider the gradual implementation of this concept, implementing particular measures to inform their stakeholders through non-financial reports. The article presents rules for processing non-financial reports, while comparing CSR standards that can guide the processing of these reports. Current trends in CSR and non-financial reporting are also presented herein.

The article presents outputs of the research conducted in selected enterprises of chemical industry in the Czech Republic. With these enterprises, non-financial information presented on the companies' websites and in their annual reports were compared. Non-financial information reported by the enterprises was related to economic, environmental and social issues. The quality of individual annual reports and business websites among Czech chemical companies varies considerably. On the other hand, it should be noted that the surveyed companies do present some non-financial information but provide more of them through their website than through an annual report. There are mainly large companies with well-processed outputs of non-financial reporting.

Similar outcomes are also confirmed by second quantitative research across the manufacturing companies of the chemical industry in the Czech Republic. Less than one third of manufacturing chemical companies that use websites to communicate with their stakeholders use these websites also for reporting about activities or aspects from the environmental area or other areas of CSR. Mainly large and medium-sized enterprises, report these issues. Not all CSR activities are reported, the highest position hold environmental management system certificates. It is possible to state that the scope of non-financial information does not cover all areas of CSR activities; the possibilities that both websites and annual reports offer to communicate these activities are not sufficiently exploited by the Czech chemical manufacturing companies.

The limitations of these surveys are the limited number of companies under review in the first sample of the research and focus only on the Czech chemical industry companies. Based on the above data, it is possible to obtain a basic overview on the upper limit of the non-financial information within reporting through above-mentioned primary resources by the Czech chemical companies. For more extensive comparisons, it would be appropriate to carry out assessments and comparisons of businesses, for example, at international level or across different sectors of the economy.

In conclusion, we may state that the significance of non-financial information reporting is becoming increasingly important especially in time of economy recession based on COVID-19 pandemic. In particular, large and

medium-sized enterprises are particularly interested in it, but it can also have a positive impact on small businesses that are or may become part of a large company supply chain and an active approach to CSR could help them win or consolidate their position in the chain. Businesses have a number of ways to communicate non-financial information; however, they have not used this opportunity sufficiently. In particular, enterprises whose impact on society or the environment is perceived by the public very intensively (such as chemical industry enterprises) should introduce monitoring, data collection system, processing and regular preparation of non-financial reports and their presentation to stakeholders as well as continuous forms of presentation of CSR activities, as it can increase their reputation, improve information flow to different stakeholders, increase competitiveness and, last but not least, raise awareness of responsible behaviour in the eyes of investors and the public. Based on the results of the article it is possible to continue in analyses in other business areas, in other regions or countries. It would be useful to continue with other detail analyses of non-financial reporting communication tools, their usage and its impact on stakeholders to bring outputs for future critical discussion of this topic.

References

- Aarikka-Stenroos, L., & Makkonen, H. S. (2014). Industrial buyers' use references, word-of mouth and reputation in complex buying situation. *Journal of Business & Industrial Marketing*, 29(4), 344–352. https://doi.org/10.1108/JBIM-08-2013-0164
- AccountAbility. (2018). AA1000 AccountAbility Principles. https://www.accountability.org/standards/aa1000-accountability-principles/
- Arvidsson, S. (2011). Disclosure of non-financial information in the annual report: A management-team perspective. *Journal* of Intellectual Capital, 12(2), 277–300. https://doi.org/10.1108/14691931111123421
- Barnett, M. L., Jermier, J. M., & Lafferty, B. A. (2006). Corporate reputation: The definitional landscape. *Corporate Reputation Review*, 9(1), 26–38.

https://doi.org/10.1057/palgrave.crr.1550012

- Bortree, D. S. (2014). The State of CSR communication research: A summary and future direction. *Public Relations Journal*, 8(3), 1–8. https://prjournal.instituteforpr.org/wp-content/ uploads/2014BORTREE.pdf
- Bucaro, A. C., Jackson, K. E., & Lill, J. B. (2020). The influence of corporate social responsibility measures on investors' judgments when integrated in a financial report versus presented in a separate report. *Contemporary Accounting Research*, 37(2), 665–695. https://doi.org/10.1111/1911-3846.12542
- Cefic. (2020). Cefic views on the Commission Delegated Regulation on Taxonomy-related disclosures by undertakings reporting non-financial information. https://cefic.org/app/ uploads/2020/09/Cefic-response-to-the-Inception-Impact-Assessment-on-Taxonomy-related-disclosures.pdf
- Chersan, I. C., Ignat, G., Ungureanu, G., Sandu, I., Costuleanu, L., Simeanu, C., & Vintu, C. R. (2018). Assurance of the sustainability reports from the chemical industry. *Revista de Chimie*, 69(3), 636–641. https://doi.org/10.37358/RC.18.3.6165

- Cormier, D., & Magnan, M. (2003). Environmental reporting management: A continental European perspective. *Journal of Accounting and Public Policy*, 22(1), 43–62. https://doi.org/10.1016/S0278-4254(02)00085-6
- Cornejo, C. P., de Quevedo-Puente, E., & Delgado-García, J. B. (2020). Reporting as a booster of the corporate social performance effect on corporate reputation. *Corporate Social Responsibility and Environment Management*, 27(3), 1252–1263. https://doi.org/10.1002/csr.1881
- Cosofret, B. D. (2020). The integrated reporting and its adoption perspectives in the European Union. In Basiq International Conference: New Trends in Sustainable Business and Consumption (pp. 388–394). Messina, Italy.
- Csigene-Nagypal, N. (2013). Corporate social responsibility of Hungarian SMEs with good environmental practices. *Journal for East European Management Studies*, *19*(3), 327–347. https://doi.org/10.5771/0949-6181-2014-3-327
- Deegan, C. (2014). *Financial accounting theory*. McGraw-Hill Education.
- De Villiers, C., & Maroun, W. (Ed.) (2018). Sustainability accounting and integrated reporting (1st ed.). Routledge. https://doi.org/10.4324/9781315108032-1
- European Parliament, & Council of the European Union. (2014). Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain undertakings and groups. https://eur-lex.europa.eu/ eli/dir/2014/95/oj
- Elkington, J. (1998). Cannibals with forks: The triple bottom line of 21st century business. New Society Publishers. https://doi.org/10.1002/tqem.3310080106
- European Commission. (2001). *Green Pare: Promoting a European Framework for Corporate Social Responsibility*. Office for Official Publications of the European Communities.
- European Commission. (2011). Communication from the commission to the European economic and social committee and the committee of the regions A renewed EU strategy 2011–14 for Corporate Social Responsibility. https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52011DC0681&from=CS
- European Commission. (2019a). Commission Staff Working document – Corporate social responsibility, responsible business conduct, and business and Human Rights: Overview of progress. https://ec.europa.eu/docsroom/documents/34482
- European Commission. (2019b). Sustainable development. http://ec.europa.eu/trade/policy/policy-making/sustainabledevelopment/
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Commitment to corporate social responsibility measured through global reporting initiative reporting: Factors affecting the behavior of companies. *Journal of Cleaner Production*, 81, 244–254. https://doi.org/10.1016/j.jclepro.2014.06.034
- Gallardo-Vazquez, D., & Lizcano-Alvarez, J. L. (2020). CSR-related competitiveness and legitimacy in MSMEs. *Economics and Sociology*, 13(1), 52–73. https://doi.org/10.14254/2071-789X.2020/13-1/4
- Global Reporting Initiative. (2015). Empowering Sustainable Decisions Our five-year focus 2015–2020. https://csrjournal.com/ wp-content/uploads/2015/06/GRI-Five-year-focus-2015.pdf
- Global Reporting Initiative. (2016). *GRI: 2016*. https://www.globalreporting.org/standards/gri-standards-download-center/?g=e10f8b5a-6775-40da-afbf-4b3cdc1df635
- Graafland, J., Van Den Ven, B., & Stoffele, N. (2003). Strategies and instruments for organising CSR by small and large businesses in the Netherlands. *Journal of Business Ethics*, 47(1), 45–60. https://doi.org/10.1023/A:1026240912016

- Halme, M., & Korpela, M. (2013). Responsible innovation toward sustainable development in Small and Medium-Sized enterprises: A resource perspective. *Business Strategy and the Environment*, 23(8), 547–566. https://doi.org/10.1002/bse.1801
- Hofbruckerova, Z., Halfarova, P., & Divinova, T. (2016). Analysis of activity of metallurgical companies in the field of corporate social responsibility. In 25th International Conference on Metallurgy and Materials (pp. 1808–1812). Ostrava, Tanger. https://www.confer.cz/metal/2016/read/2056-analysis-of-activity-of-metallurgical-companies-in-the-field-of-corporatesocial-responsibility.pdf
- International Integrated Reporting Council. (2013). The International Framework. https://integratedreporting.org/the-iirc-2/
- Islam, M. A. (2015). Social compliance accounting: Managing legitimacy in global supply chains. Springer.
- International Organization for Standartization. (2015a). *Quality* Management Systems – Requirements (ISO 9001:2015(en)). https://www.iso.org/obp/ui/#iso:std:iso:9001:ed-5:v1:en
- International Organization for Standartization. (2015b). Environmental Management Systems – Requirements with guidance for use (ISO 14001:2015(en)). https://www.iso.org/obp/ ui/#iso:std:iso:14001:ed-3:v1:en
- International Organization for Standartization. (2010). *Guidance* on Social Responsibility (ISO 26000:2010(en)). https://www. iso.org/obp/ui/#iso:std:iso:26000:ed-1:v1:en
- Jelinkova, M., Lostakova, H., & Pakostova, E. (2018). Tools for creating positive reputation with customers for chemical industrial enterprises. In 10th International Scientific Conference Business and Management 2018 (pp. 427–435). Vilnius. https://doi.org/10.3846/bm.2018.47
- Jelinkova, M., Munzarova, S., Lostakova, H. (2016). Internet CSR presentation and its importance for increasing corporate reputation in the area of ferrous metallurgy. In 25th International Conference on Metallurgy and Materials (pp. 1829–1837). Ostrava, Tanger. https://www.confer.cz/metal/2016/read/2012internet-csr-presentation-and-its-importance-for-increasingcorporate-reputation-in-the-area-of-ferrous-metallurgy.pdf
- KPMG. (2015). The KPMG Survey of Corporate Responsibility Reporting 2015, No 132962. Haymarket Network Ltd.
- KPMG. (2017). The KPMG Survey of Corporate Responsibility Reporting 2017, No 134802. https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/10/kpmg-survey-of-corporateresponsibility-reporting-2017.pdf
- Kulkarni, A. R. (2014). A review of concept and reporting of non-financial initiatives of business organisations. *Procedia Economics and Finance*, 11, 33–41. https://doi.org/10.1016/S2212-5671(14)00173-7
- Landrum, N. & Ohsowski, B. (2017). Identifying worldviews on corporate sustainabality: A content analysis of corporate sustainability reports. *Business Strategy and the Environment*, 27(1), 128–151. https://doi.org/10.1002/bse.1989
- Lubis, A. (2018). Corporate social responsibility in health sector: A case study in the government hospitals in Medan, Indonesia. *Business: Theory and Practice*, *19*, 25–36. https://doi.org/10.3846/btp.2018.04
- Matuszak, Ł., & Różańska, E. (2021). Towards 2014/95/EU directive compliance: The case of Poland. Sustainability Accounting, Management and Policy Journal, 12(5). https://doi.org/10.1108/SAMPJ-02-2020-0042
- McClimon, T. J. (2019). Five Corporate Social Responsibility Trends to watch in 2019. American Express. https://www.conference-board.org/blog/corporate-citizenship/CSR-Trends-2019

- McPherson, S. (2019). Corporate responsibility: What to expect in 2019. Forbes. https://www.forbes.com/sites/susanmcpherson/2019/01/14/corporate-responsibility-what-to-expectin-2019/
- Montesinos, V., & Brusca, I. (2019). Non-financial reporting in the public sector: Alternatives, trends and opportunities. *Revista de Contabilidad – Spanish Accounting Review*, 22(2). https://doi.org/10.6018/rcsar.383071
- Myskova, R., & Hajek, P. (2019). Relationship between corporate social responsibility in corporate annual reports and financial performance of the US companies. *Journal of International Studies*, *12*(1), 269–282.

https://doi.org/10.14254/2071-8330.2019/12-1/18 Organisation for Economic Co-operation and Development.

- (2011). OECD Guidelines for Multinational Enterprises. OECD Publishing. https://doi.org/10.1787/9789264115415-en
- Querci, E. (2018). Sustainability performance of SMEs: The approach to non-financial reporting. In 6th International Academic Conference on Strategica Challenging the Status Quo in Management and Economics (pp. 1008–1017). Romania, Bucharest.
- Robinson, S., & Eilert, M. (2018). The role of message specificity in corporate social responsibility communication. *Journal of Busines Research*, 90, 260–268.

https://doi.org/10.1016/j.jbusres.2018.05.028

Rupley, H., Brown, D., & Marschall, S. (2017). Evolution of corporate reporting: From stand-alone corporate social responsibility reporting to integrated reporting. *Research in Accounting Regulation*, *29*(2), 172–176.

https://doi.org/10.1016/j.racreg.2017.09.010

Social Accountability International. (2014). Social Accountability 8000 International standard (SA8000:2014). https://sa-intl. org/wp-content/uploads/2020/02/SA8000Standard2014.pdf

- Sorour, M. K., Shrives, P. J., El-Sakhawy, A. A., & Soobaroyen, T. (2021). Exploring the evolving motives underlying corporate social responsibility (CSR) disclosures in developing countries: The case of "political CSR" reporting. Accounting, Auditing & Accountability Journal, 34(5), 1051–1079. https://doi.org/10.1108/AAAJ-07-2019-4080
- Stefanescu, C. A., Tiron-Tudor, A., & Moise, E. A. (2021). EU non-financial reporting research – insights gaps, patterns and future agenda. *Journal of Business Economics and Management*, 22(1), 257–276.

https://doi.org/10.3846/jbem.2020.13479

Stolowy, H., & Paugam, L. (2018). The expansion of non-financial reporting: An exploratory study. *Accounting and Business Research*, 48(5), 525–548.

https://doi.org/10.1080/00014788.2018.1470141

Sustainability Accounting Standard Board. (2021). SASB Standards connect business and investors on the financial impacts of sustainability. https://www.sasb.org/about/

- Szabo, D. G. (2016). *Mandatory corporate social responsibility reporting in the EU* (1st ed.). Boomuitgevers.
- Tetrevova, L., Vavra, J., Bednarikova, M., Munzarova, M., & Kostalova, J. (2017). *Corporate social responsibility in socially sensitive sectors*. Grada Publishing.
- Tetrevova, L. (2018). Communication CSR in high profile industries: Case study of Czech chemical industry. *Inžinerinė Ekonomika – Engineering Economics*, 29(4), 478–487. https://doi.org/10.5755/j01.ee.29.4.19199
- United Nations Global Compact. (2014). *Guide to Corporate Sustainability*. https://www.unglobalcompact.org/docs/publications/UN_Global_Compact_Guide_to_Corporate_Sustainability.pdf
- Vazquez-Carrasco, R., & Lopez-Perez, M. E. (2013). Small & medium-sized enterprises and Corporate Social Responsibility: A systematic review of the literature. *Qual Quant*, 47, 3205–3218. https://doi.org/10.1007/s11135-012-9713-4
- Venturelli, A., Caputo, F., Leopizzi, R., & Pizzi, S. (2019). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: A cross country analysis. *Social Responsibility Journal*, 15(4), 409–423. https://doi.org/10.1108/SRJ-12-2017-0275
- Wensen, K. van, Broer, W., Klein, J., & Knopf, J. (2011). *The state* of play in sustainability reporting in the EU. Research Study. https://www.somo.nl/wp-content/uploads/2011/04/The-State-of-Play-in-Sustainability-Reporting-in-the-European-Union. pdf

APPENDIX

Notations

Abbreviations

CSR - Corporate Social Responsibility

SME - Small and Medium Enterprise

PR – Public Relations

GRI - Global Reporting Initiative

UN - United Nations

OECD – Organisation for Economic Co-operation and Development

ISO - International Organization for Standardization

EMAS – Eco-Management and Audit Scheme (EU programme)

REACH – Registration, Evaluation, Authorisation and Restriction of Chemical Substances

AR - Annual Report

BAT - Best Available Techniques