

2014 EMAN Conference
“From Sustainability Reporting to Sustainability Management Control”
27-28 March 2014
Rotterdam, The Netherlands

Access to this paper is restricted to registered delegates of the EMAN 2014 Conference.

ISBN: 9789056770006

Environmental reporting and sustainability reporting in chemical industry in the Czech Republic

J. Hyršlová, M. Hájek, and L. Vnoučková

University of Economics and Management, Narozni 2600/9a, 158 00 Prague 5, Czech Republic

Czech University of Life Sciences Prague, Kamycka 1176, 165 21 Prague 6, Czech Republic

E-mail: hajek@fld.czu.cz

Abstract: The paper deals with the issues of environmental reporting and sustainability reporting. It discusses basic approaches to the concept of sustainability and sustainability reporting. The paper includes the basic results of research which focused on environmental reporting and sustainability reporting of organization registered in the Association of Chemical Industry in the Czech Republic. The aim of the research was to analyse the existing corporate approaches to reporting with a focus on key stakeholders, their information needs and the content of reports. Attention was also paid to the importance of reporting to the credibility of the organization.

I. INTRODUCTION

Business in accordance with the concept of sustainable development requires changes in all business processes and the entire system of corporate management. It is necessary to set objectives and target values which the company wants to achieve and which will mean that the company has achieved sustainability. It is necessary to implement in business practice a number of measures and procedures in order to comply with corporate sustainability goals. Business in accordance with the principles of sustainable development (sustainable business) is characterized by the fact that the company is on the way towards sustainability; sustainability is the ultimate goal strived for by the company (see e.g. [1]). The concept is based on the premise that achieving success of the company in the long term needs to balance its economic, environmental and social performance [2], which is consistent with the interests of stakeholders; important aspect here is a continuous dialogue with stakeholders. The company voluntarily assumes greater commitments beyond the framework of the current legislation, having a continuous dialogue with stakeholders and informing transparently these stakeholders on the achieved results.

Corporate sustainability management (CSM) seeks to interlink environmental and social aspects with economic management and competitiveness on the one hand and, on the other hand, it strives to integrate environmental information and information on the social impact of business with information on economic performance in order to serve in support of decision-making processes in the company with the aim of corporate sustainability. CSM is so very closely linked with external communication (external reporting) on sustainable development of the company. The aim of this paper is to present the current state of environmental reporting or sustainability reporting in chemical industry companies registered in the Association of Chemical Industry in the Czech Republic. It focuses on the form and content of

reporting, the importance of the different stakeholders in this process and the benefits of environmental communication, or communication on corporate sustainability for the competitiveness and the credibility of the company.

II. MATERIAL AND METHODS

The paper is supported by the analysis of secondary and primary data sources. Firstly, the content analysis of secondary sources was used to compile theoretical background of the paper. Secondly, the basic results of the research focused on the current state of environmental and sustainability reporting in chemical companies in the Czech Republic are presented.

The research was conducted in February 2014. The aim of the research was to determine the current state of environmental reporting, or sustainability reporting in chemical companies associated in the Association of Chemical Industry in the Czech Republic. To determine the primary information, electronic inquiring was used. In total, 85 organizations were addressed. Of that, 38 organizations got involved in the research; therefore, with the return having reached 45%. The inquired sample represents manufacturing organizations (63%) as well as organizations involved in trade and provision of services. Of the total number of 38 organizations, 9 organizations fall into the category of small businesses, 15 organizations fall into the category of medium-sized enterprises and 12 organizations belong to the category of large enterprises. 74% of organizations have reported profit in the long run.

The data was gathered through a quantitative survey using a questionnaire technique of data collection which respected the ethical aspects of research (Act No. 101/2000 Coll., on Personal Data Protection). The data and information presented in this paper are the first approach to the theme in the Czech Republic. Deeper analyses and more specific research will follow.

The questionnaires were completed by managers on the middle and top management level. Questions used special terms generally known by middle and top managers. The terms which may be possibly misunderstood were explicitly defined. The survey contained closed and open questions; questions with more possible answers were used. The statistical tools used for the data analysis were chosen based on the type of the question (descriptive statistics, and contingency tables, absolute and relative frequency). To evaluate the data, the MS Excel was used.

III. THEORY

Information on sustainable development is one of the key preconditions for economic prosperity of businesses. It is obvious, for example, from pressure exerted by investors. It can be stated that sustainability reporting has a positive effect especially on large companies, because these large companies usually have a great impact and therefore they face greater stakeholder scrutiny and pressure [3]. Disclosures of information related to corporate sustainability have not only external effects but also impacts on the internal management and decision-making processes, which leads to reduced costs and lower consumption of material and energy. The positive impact on corporate economics is reflected in the improvement of innovation activities [4] and competitiveness. Sustainability reporting is an important factor contributing to the corporate sustainability [5].

The aim of sustainability reporting is to provide universal tools for communication of information with regard to the current needs of society, with the possibility of implementing various changes in future periods without disrupting the overall information value [6]. Versatility is considered a very important factor. On the other hand, it is possible to extend the general rules for the important specifics of the monitored sector, in this case the chemical industry.

Most commonly used for sustainability reporting is the methodology of Global Reporting Initiative (GRI). Despite the fact that individual aspects may be applicable in different sectors, it is necessary to take into account the criteria that are sector-specific. The GRI methodology deals in detail with the important sectors such as electric utilities, financial services, mining and metals, oil and

gas. The area of "Chemicals" is further included in more detailed specification [7], where relations of indicators in this area are described in more detail. This area is intended for companies that primarily produce industrial chemicals and basic chemicals.

It is known that in the chemical industry the foundations were laid for corporate social responsibility (CSR). In the Czech Republic, this voluntary initiative is used in the chemical industry not less than 20 years. It is possible to confirm the benefits due to the fact that CSR enables companies to go above government requirements and the companies must openly communicate their results to the public [8]. Important as well is the impact on competitiveness, not only at the company level, but also at the national level [9]. In this context, it is important to highlight the relationship between sustainable development (corporate sustainability) and CSR. It can be stated that sustainability and CSR gradually converge [10] and currently these trends are consistent. So, if we discuss sustainable development, CSR is also included in the discussion.

With regard to CSR and other similar trends we can note the ongoing trend towards integrated reporting, which integrates information on corporate sustainability with traditional financial reporting. In this context it should be noted that reporting on corporate sustainability encompasses all three pillars. If not, only partial aspects of sustainability are concerned and reporting cannot be called sustainability reporting [6].

IV. RESULTS OF RESEARCH AND DISCUSSION

In the area of sustainability reporting, the stakeholder considered by respondents to be the most relevant are local authorities; 78% of respondents ticked off this stakeholder as important (see Table 1). The major stakeholders with which it is necessary to communicate include owners (ticked off by 73% of respondents) and customers (ticked off by 72% of respondents). The least significant stakeholder perceived by respondents are non-governmental organizations focusing on environmental protection (15% of respondents ticked off these organizations as entirely unimportant stakeholder) and competitors.

TABLE 1: IMPORTANCE OF INDIVIDUAL STAKEHOLDERS

Stakeholders	Absolute frequencies					Relative frequencies					MOD	AVG	STD
	1	2	3	4	5	1	2	3	4	5			
Employee	2	3	8	15	6	6%	9%	23%	44%	18%	4	3.59	1.08
Customers	1	2	6	13	10	3%	6%	19%	41%	31%	4	3.91	1.03
Suppliers	1	3	11	15	3	3%	9%	33%	46%	9%	4	3.48	0.91
Competitors	2	9	12	9	0	6%	28%	38%	28%	0%	3	2.88	0.91
Owners	2	3	4	11	13	6%	9%	12%	33%	40%	5	3.91	1.21
Creditors	4	6	3	16	4	12%	18%	9%	49%	12%	4	3.30	1.26
Insurance companies	3	4	3	11	12	9%	12%	9%	33%	37%	5	3.76	1.32
Local authorities	2	1	4	13	13	6%	3%	13%	39%	39%	-	4.03	1.10
Media	4	3	10	13	3	12%	9%	30%	40%	9%	4	3.24	1.15
NGO	5	7	10	9	2	15%	21%	31%	27%	6%	3	2.88	1.17
Local community	2	5	2	18	6	6%	15%	6%	55%	18%	4	3.64	1.14
General public	2	3	9	13	6	6%	9%	27%	40%	18%	4	3.55	1.09

Note: 1 = no consequence; 5 = of great importance; MOD = modus; AVG = average; STD = standard deviation

Source: Authors

Environmental reporting or corporate sustainability reporting may, in the opinion of the respondents, affect the competitiveness of the company (see Table 2). It contributes positively to the reputation of the company (this contribution is considered significant by 87% of respondents) and is an important part of the corporate communication towards external stakeholders (83% of

respondents). The respondents perceive also a positive effect on the attractiveness of the company as an employer (this contribution of reporting is perceived by 69% of respondents). On the contrary, the respondents do not perceive the contribution of reporting for the area of acquiring new customers or markets.

TABLE 2: BENEFITS FOR CORPORATE COMPETITIVENESS

Factors of competitiveness	Absolute frequencies					Relative frequencies					MOD	AVG	STD
	1	2	3	4	5	1	2	3	4	5			
Supply chain management	3	3	11	7	4	11%	11%	39%	25%	14%	3	3.21	1.17
Innovation	2	5	11	10	1	7%	17%	38%	35%	3%	3	3.10	0.98
Productivity	3	4	12	5	3	11%	15%	44%	19%	11%	3	3.04	1.13
Differentiation	1	1	11	11	5	3%	3%	38%	38%	18%	-	3.62	0.94
Reputation	0	1	3	11	14	0%	3%	10%	38%	49%	5	4.31	0.81
Employer attractively	2	1	6	13	7	7%	3%	21%	45%	24%	4	3.76	1.09
Market-position	4	6	13	6	0	14%	21%	44%	21%	0%	3	2.72	0.96
Communication	1	0	4	13	11	3%	0%	14%	45%	38%	4	4.14	0.92
Costumer value	2	0	14	11	1	7%	0%	50%	39%	4%	3	3.32	0.86
Profit	2	4	11	8	3	7%	14%	39%	29%	11%	3	3.21	1.07

Note: 1 = no consequence; 5 = of great importance; MOD = modus; AVG = average; STD = standard deviation

Source: Authors

97% of companies issue periodic reports that include environmental information or information on corporate sustainability. In terms of form, companies use various report types (some companies issue more report types):

- 53% of respondents incorporate the information on approach to environmental protection and social aspects of business activities in the annual financial report (the obligation to issue an annual financial report is laid down by the Act No. 563/1991 Coll., on Accounting). In the opinion of the respondents, such information is paid adequate attention in the report.
- 50% of respondents are involved in the Responsible Care initiative and thus have a system of communication in matters of health, safety and environmental protection with the stakeholders created. They also make available to the public their

environmental policy as well as quality policy and occupational health and safety policy.

- 29% of respondents release separate corporate environmental reports.
- only 1 company informs on corporate sustainability in a separate report (sustainability report).

Of great importance to the creation of the system of communication and its effective operation are, in particular, information needs of stakeholders. 46% of respondents confirmed to monitor information needs; 71% of them regularly (repeatedly) monitor information needs and adapt the disclosed data to those needs. More than half of the entire studied set (54%), however do not monitor the information needs of stakeholders. Based on this we can deduce that these companies only fulfil reporting obligations ensuing from the law or from the involvement in voluntary initiatives or they produce one-

way communication without the knowledge of the information needs of relevant stakeholders.

In the area of reporting, the respondents respect primarily the information needs of local authorities (77% of respondents), which they consider to be the most relevant stakeholder. The respondents confirmed to take into account also the information needs of owners (65% of respondents) and customers (62% of respondents).

According to the respondents, attention within the framework of reporting should be primarily paid to information on corporate economic (financial) performance and environmental performance. The results show that the reports are primarily focused on the issues of economic performance; companies use for communication mainly annual financial reports, where information on environmental performance and social aspects of the business is only complementary. In the case of reports issued in connection with the involvement in the Responsible Care initiative or separate environmental reports the companies act in accordance with the recommendations under the RC initiative or they have their own report structure created. The main communication channels are company websites, on which reports are made available to users. 27% of respondents also release reports in printed form. The most common frequency of publication of reports is once a year.

RC reports and separate environmental reports are issued by companies on the basis of company management decision (i.e. obligation comes from involvement in voluntary initiatives); only 5 respondents confirmed that the company started to publish reports based on the requirements of external stakeholders (local authorities). Users of these voluntary reports are primarily employees, owners, customers, local authorities and the public (near the company).

68% of respondents have confirmed that a properly established system for communication with external stakeholders on the issues of corporate sustainability enhances the credibility of the company and consider environmental reports or sustainability reports to be an adequate form of this communication.

V. CONCLUSION

The focus of the research was to present the current state of environmental reporting or sustainability reporting in chemical industry companies, which are registered in the Association of Chemical Industry in the Czech Republic.

The companies are aware of the fact that within the framework of external environmental communication or communication on the corporate sustainability there should be satisfied information needs of relevant stakeholders. The most relevant stakeholders considered by the companies are local authorities; a significant role is also played by owners and customers. These stakeholders should be provided with relevant information. The results

of the research show, however, that more than half of respondents of the entire inquired group do not monitor the information needs of stakeholders.

Companies use for communication mainly periodic reports. Information on the environmental performance and social aspects of business activities is most often included in annual financial reports, whose priority objective is to inform on the economic (financial) performance of the company. Environmental and social information form only supplementary information; they are not integrated in corporate economic performance. Half of the respondents are involved in the Responsible Care initiative of the world chemical industry; in relation to this initiative, companies have a system of communication with relevant stakeholders created. Some companies use separate environmental reports; the reports include primarily information on environmental aspects and impacts without a link to the economic performance of the company.

Businesses perceive the importance of communication for the reputation of the company and its positive effect on the attractiveness of the company as an employer and, under the current conditions, they produce mostly one-way communication, which is primarily focused on the economic performance (annual financial report). If the information on the environmental aspects and impacts, or on the area of occupational health and safety are reported, they are part of separate reports not integrated in corporate economic performance.

REFERENCES

- [1] T. Dyllick and K. Hockerts, "Beyond the business case for corporate sustainability," *Business Strategy and the Environment*, vol. 11, no. 4, pp. 130-141, 2002.
- [2] H. Rahardjo et al., "Factors that determines the success of corporate sustainability management," *Journal of Management Research*, vol. 5, no. 2, Apr. 2013.
- [3] P. J. Gallo and J. L. Christensen, "Firm size matters: an empirical investigation of organizational size and ownership on sustainability related behaviours," *Business & Society*, vol. 50, pp. 315-349, Mar. 2011.
- [4] H. E. J. Bos-Brouwers, "Corporate sustainability and innovation in SMEs: Evidence of themes and activities in practice," *Business Strategy and Environment*, vol. 19, pp. 417-435, Jun. 2009.
- [5] R. Losano and D. Huisingh, "Inter-linking issues and dimensions in sustainability reporting," *Journal of Cleaner Production*, vol. 19, pp. 99-107, Jan.-Feb. 2011.
- [6] R. Hahn and M. Kühnen, "Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research," *Journal of Cleaner Production*, vol. 59, pp. 5-21, Nov. 2013.
- [7] GRI, *Sustainability topics for sectors: what do stakeholders want to know*, GRI Research and Development Series: 155, 2013, pp. 27-29.
- [8] P. Glavič and R. Lukman, "Review of sustainability terms and their definitions," *Journal of Cleaner Production*, vol. 15, pp. 1875-1885, Feb. 2007.
- [9] I. Boulouta and C. N. Pitelis, "Who needs CSR? The impact of corporate social responsibility on national competitiveness," *Journal of Business Ethics*, vol. 119, pp. 349-364, Feb. 2014.
- R. Hahn, "Integrating corporate responsibility and sustainable development: a normative-conceptual approach to holistic management thinking," *Journal of Global Responsibility*, vol. 2, pp. 8-22, Jan. 2011.

