

## Conference Paper

# Adoption of Sustainable Accounting Practices Among Croatian SME's

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## Abstract

Small and medium-sized enterprises (SMEs) are of great importance to the Croatian economy. As recently as 2015, 99.7 percent of total registered companies in Croatia were SMEs, accounting for 54 percent of total revenues and collectively exhorting great impact on the society, the national economy, and the environment. Regarding socio-economic representation, they are the key players in achieving sustainability. Considering the fact that sustainability accounting plays a pivotal role in every economy, it is essential to understand how smaller business entities are taking actions on adopting sustainable practices and their corresponding sustainable accounting tasks. It is therefore the objective of this paper to analyze the current awareness, needs, and existing approach to sustainable accounting and reporting practices of SMEs in Croatia and identify the main knowledge gaps between the current and the optimal situation. For the purposes of this analysis, a survey was conducted on a sample of 42 respondents between February and March of 2018. The results show that the level of awareness among SMEs regarding socially responsible reporting is particularly low in Croatia, mostly due to the lack of SME's field-related knowledge, skills, and experience, as well as the unfamiliarity with reporting advantages. Finally, this paper provides an overview of the lack of knowledge in order to identify the competence and skills needed to successfully implement non-financial reporting among small and medium enterprises.

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## 1. Introduction

Sustainability -- not only as a catchphrase, but rather as a paradigm shift -- has percolated through all pores of academia and touched even the unlikeliest of disciplines: accounting. While financial and cost accounting have become a staple in the contemporary learning gospel, sustainable accounting is slowly finding its way in the professional mainstream, its pace and intensity of adoption largely dependent on the host country and its attitude towards accounting practices in general.

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As the youngest member of the European Union, Croatia afforded an audacious prospect for the authors to examine the rate of adoption of sustainable accounting practices in the domestic economy. While this research forms part of a larger transnational study on sustainable accounting in the EU, the specific objective of this article was to analyze the current awareness, needs, and existing approach to sustainable accounting and reporting practices among micro-, small-, and medium- business entities in Croatia. Small and medium enterprises (SMEs) make up the bulk of this sector. This study is a first-of-its-kind on a national scale and was designed to raise the level of awareness among accounting and finance professionals regarding the possibilities offered outside of the domain of conventional accounting. Even though this pioneering effort stands on its own merit, it is not without weaknesses; the number of respondents is relatively low and while the findings are conclusive, increasing the number of responses may further strengthen the recommendations for policy actions.

The article is structured as follows: Section one introduces the topic of sustainable accounting practices, Section two provides a general literature overview, while Section three offers the backdrop for Croatia and its current economic situation. Section four briefly discusses the methodology used by the authors whereas Section five delivers the findings and the corresponding discussion. Finally, Section six concludes.

## 2. Literature Review

Conventional accounting, as instructed in schools and practiced by professionals, encompasses two distinct strands: financial and managerial (cost) accounting. While the former gathers information connected to the business activities and financial position of the organization and prepares it for presentation to external users, the latter is mainly concerned with facilitating managerial decision-making to develop, communicate, and implement strategy by internal users of the organization [1]. Cost accounting evolved from financial accounting through a series of adaptations in order to assist with management control and emphasize performance reporting [2].

Placing the environment at the center of accounting scholarship and practice -- by introducing accountability, transparency, and sustainability in the mainstream business parlance -- was a challenge first embraced by Gray [3]. His entrenchment in a "deep green" position spurred the conceptual development of environmental accounting [4, 5], evolving later into sustainability accounting where the emphasis is put on the integration of social, environmental, and economic facets of organizational activities [6, 7]. As evidenced in the literature, interpretations of sustainable accounting range from „an

empty buzzword blurring the debate; a broad umbrella term bringing together existing approaches; an overarching measurement and information management concepts, and; a pragmatic, goal driven, stakeholder engagement process` [8].

With respect to Croatia, research on sustainability accounting and reporting has only recently attracted the interest of both academics and practitioners. Nevertheless, a study by Krivačić [9] demonstrates that quality of sustainability information reported in accordance with the GRI Guidelines is `relatively good". Due to the nature of the Croatian economy and its heavy dependence on the tourism and hospitality sector, it is not surprising that a large portion of the current body of research on sustainability concerns exactly this sector [10, 11].

The results of empirical research carried out by Cifrić [12] show that the majority of the respondents believe the top environmental problems in Croatia are: inappropriate disposal of municipal waste, accumulated hazardous waste and food contamination, and the bottom three are drinking water pollution, river, lake and sea pollution and forest noise.

The principal benefits of sustainability accounting according to Fülöp and Hódi Hernádi [13] are summarized in Table 1 as important contributing factors to the development and implementation of sustainability strategies.

Those advantages have been recognized by Croatian companies who have decided to implement sustainable accounting in practice. According to research carried out by Vrdoljak Raguž and Hazdovac [14], 20 percent of respondents assert that companies in which they are working, conduct socially responsible business in practice. Part of their research conclusion is that there are indications of Corporate Social Responsibility implementation in Croatia, but at the same time there is no strategy on which such businesses may be based.

### **3. Examining Sustainability Accounting and Reporting Importance: Croatia vs. EU**

#### **3.1. Economic backdrop and institutional framework in Croatia**

Small and medium enterprises comprise the core of the Croatian economy. Their significance is particularly recognized through their share in employment, total income and exports in the national account. There were 106,221 active micro-, small- and medium-sized enterprises in Croatia in 2015, making up 99.7 percent of total registered companies in the country and accounting for 54 percent of total revenues. Only two

TABLE 1: The benefits of operating sustainability accounting systems.

Corporate benefits	Micro- and macro-environmental benefits
Presents the impact of sustainability performance on balance sheet earnings	Satisfies the information needs of external users
Maps cost - saving opportunities, revenues and financial advantages originating from sustainability - oriented operation	Makes better relationships with the stakeholders
Evaluates, handles and reduces social and environmental risks, liabilities',cost and expenses	Ensures and improves the legitimacy, credibility and the reputation of the company
Creates more favorable conditions in the course of economic or investment negotiations, widens the range of potential investors	The public recognizes corporate accountability, transparency and trustworthiness in social and environmental issues, thus improving the company's general acceptance
Helps to determine the cost of production as well as set the price of a product more accurately	Facilitates the comparability of the company's sustainability performance to other companies or industrial sectors
Support establishing cleaner production projects, the evaluation of investments (by mapping the social and environmental effects of investment decisions)	Promotes the application and improvement of sustainability accounting by acquiring knowledge on the best practices
Facilitates the appearance on the list of 'eco'suppliers	Contributes to sustainable development on a corporate, national and global level.
Facilitates tracing energy and material flows more accurately, contributing to increased resource efficiency	

Source: [13]

years prior, 100,841 SMEs were registered nationally, showing an increase of 5 percent, within the period. Table 2 illustrates the trend of growth and decline in the number of enterprises (and % change), employed persons, and total revenues and expenditures, respectively, for the period from 2013 to 2015.

Several measures designed to encourage the development of small- and medium-sized enterprises are currently active in Croatia. These include, but are not limited to, lending to small business entities under favorable conditions and subsidizing interest on borrowed loans, lending for business start-ups, support for increasing employment, promoting entrepreneurship and fostering the development of women's entrepreneurship and youth entrepreneurship, providing support for research, development and application of innovations and the introduction of modern technologies, etc.

The Sustainable Development Strategy [17] was adopted by the Croatian Parliament with the main goal of achieving balance between the requirements of improving the quality of life (economic component), attaining social well-being and peace for all (social component) and protecting the environmental components as a natural resource upon which present and future generations depend. Despite the introduction and

TABLE 2: Economic development metrics, 2013-2015.

Year	Size	Number of enterprises	Number of enterprises %	Number of persons in paid employment	Total revenues, in mil. HRK	Total expenditures, in mil. HRK
2013	Large	350	0,3%	265.816	293.227	288.580
	Medium	1.268	1,3	150.605	112.309	111.816
	Small	99.573	98,4	414.507	206.905	204.601
	<b>Total</b>	<b>101.191</b>	<b>100</b>	<b>830.928</b>	<b>612.441</b>	<b>604.997</b>
2014	Large	354	0,3	265.816	290.663	278.779
	Medium	1.221	1,2	150.605	112.320	114.684
	Small	102.895	98,5	414.507	215.817	211.421
	<b>Total</b>	<b>104.470</b>	<b>100</b>	<b>830.928</b>	<b>618.790</b>	<b>604.884</b>
2015	Large	348	0,3	258.400	294.438	281.933
	Medium	1.192	1,1	147.250	119.100	114.778
	Small	105.029	98,6	432.934	226.110	220.243
	<b>Total</b>	<b>106.569</b>	<b>100</b>	<b>838.584</b>	<b>639.648</b>	<b>616.954</b>

Source: [15, 16]

implementation of many new measures, the strategic goals have not yet been fully realized.

Another important document, the Environment Report of the Republic of Croatia [18] is a fundamental record depicting the situation of the environment in the country. It documents the relevant information and approximations based on official state bodies data, scientific and professional institutions and other stakeholders responsible for monitoring the condition of the individual components of the environment (air, nature, etc.) or sectors (energy, agriculture, etc.). According to this Report, although substantial positive changes in legislation have been made in the area of planning and protection of space and the environment, the objectives of systematic sustainable management of space have not yet been met. There is still uneven development in the region, and the goals of polycentric development of Croatia remain unfulfilled. There are also significant demographic, socio-economic, educational and other inter-regional disparities at the county level. While the share of artificial surfaces in the total surface area of Croatia is only 3.35 percent, the process of uneven spatial distribution of the population of Croatia continues with an increasingly pronounced spatial polarization, which is reflected in the process of centralization and urbanization, with the consequence of increasing intensification in the larger cities, leaving the rural areas [18].

### 3.2. Identifying sustainability accounting and reporting strategies and policies for SMEs at the EU level

Major legislative guidelines for sustainability practices are included in the Directive 2014/95/EU [19] of the European parliament and of the Council about non-financial reporting. EU rules on non-financial reporting only apply to large public-interest companies with more than 500 employees. This covers approximately 6,000 large companies and groups across the EU, including listed companies, banks, insurance companies, and other companies designated by national authorities as public-interest entities.

Under Directive 2014/95/EU, large companies have to publish reports on the policies they implement in relation to:

- environmental protection
- social responsibility and treatment of employees
- respect for human rights
- anti-corruption and bribery
- diversity on company boards (in terms of age, gender, educational and professional background)

The above Directive gives companies significant flexibility to disclose relevant information in the way they consider most useful. Companies may use international, European or national guidelines to produce their statements; for instance, they can rely on the UN Global Compact [20], the OECD guidelines for multinational enterprises [21], and the ISO 26000 social responsibility guidance [22].

As required by Directive 2014/95/EU, the European Commission published guidelines 2017/C 215/01 to help companies disclose relevant non-financial information in a more consistent and more comparable manner [23]. While, these guidelines are not mandatory and companies may decide to use international, European or national guidelines according to their own characteristics or business environment, they are nevertheless step in the right direction. In line with these guidelines, the European Commission also published COM 97 Action Plan: Financing for Sustainable Growth [24] in order to „reorient capital flows towards sustainable investment; manage financial risks stemming from climate change, environmental degradation and social issues; and foster transparency and long termism (..)“ [21].

In Croatia, non-financial reporting is addressed by art. 2, 21, 38, and 39 of the Law on Accounting [25] and refers to the EU Directive. Only large companies are obliged to

implement non-financial reporting, while small and medium companies use sustainable accounting reporting on a voluntary base.

### 3.3. Identifying existing sustainability accounting and reporting practices

The EU directive provides only a legal framework for its implementation and is therefore necessary to include relevant standards, scheme and examples of good practice, such as accounting (USALI, USAR, USFRS and IFRS) and ISO standards (14000ff and 26000), EMAS (EcoManagement and Audit Scheme), UN Global Compact, OECD Guiding Principles on Business and Human Rights, GRI (Global Reporting Initiative) and other recognized international frameworks [26].

Leaders of good practice are mostly large foreign companies that transfer their knowledge and practices into their national subsidiaries or branches [27]. Several associations promoting sustainability operate in Croatia, such as the Croatian Business Council for Sustainable Development, Croatian Association of Employers, Sustainability Association of VVE and Global Compact Croatia.

The DOP Index Questionnaire was completed by 112 companies in 2017, showing an increase of 37 percent when compared to 2016 and improving the implementation of sustainable business practices in Croatia.

## 4. Data and Methodology

In order to identify the competence and skills needed to successfully implement non-financial reporting at small and medium enterprises across Croatia, a survey designed to measure the awareness levels of SMEs in relation to sustainability accounting was conducted during a two-month period (February-March) in 2018. The survey was carried out by means of a structured questionnaire, where all participants were chosen randomly, while the survey results were collected both online and in person. Out of 300 distributed questionnaires in Croatia, 42 were returned with valid results (14% response rate). A major limitation of the survey was the short time available for data collection.

The survey was designed to extract information that would correctly depict the current state of sustainability accounting and reporting practices in Croatia. The questionnaire itself consists of 5 sections (Profile; Institutional; Regulatory; Social, Environmental) with 38 questions in total. The structure of the questionnaire was developed following a preliminary survey among a smaller sample of entrepreneurs asked to identify the

areas where they believe their competencies could gain the most from improvement. With regards to question types employed in the survey, there were 5 open-ended, 22 multiple-choice, 5 dichotomous, and 6 Likert-scale questions. In order to check if the questions correctly captured all of the available responses, most of the multiple questions contained the additional option of selecting 'Other' which allowed the respondents some freedom to provide their own qualitative answers that they considered could give a better or more precise answer than the one already suggested. Since some of the questions allowed for multiple answers, a number of tables report higher number of responses than the overall number of respondents involved.

The statistical analysis provided in this work is mainly based on descriptive statistics given the cross-sectional nature of the data and the relatively small sample size. All of the calculations presented in the following tables belong to the authors.

## 5. Results and Discussion

Evidently, sustainability accounting and reporting is a useful tool that provides a framework and guidelines for monitoring and evaluating the organization's performance and its impact on society and environment. Socially responsible accounting can help the organization improve processes and systems, attract capital, induce stakeholder engagement, provide more competitive advantage and build reputation and trust of customers and employees.

### 5.1. Profile

The main objective of the questions delivered in the first section was to outline the profile of the average respondent of the survey. The first question asked for the current job title of the respondents, and as visible in Figure 1, the three most frequent answers were CEO, Administrator, and Consultant.

The second question inquired about the highest qualification obtained by the respondents, with 58.97 percent reporting a postgraduate degree, and another 25.64 percent reporting an undergraduate degree. In short, the majority of the respondents (84.61%) are well-educated, indicating a possible skewness of the population sample, as visible in Table 3.

The third and fourth questions served to identify the years of experience outside and within the company, respectively.



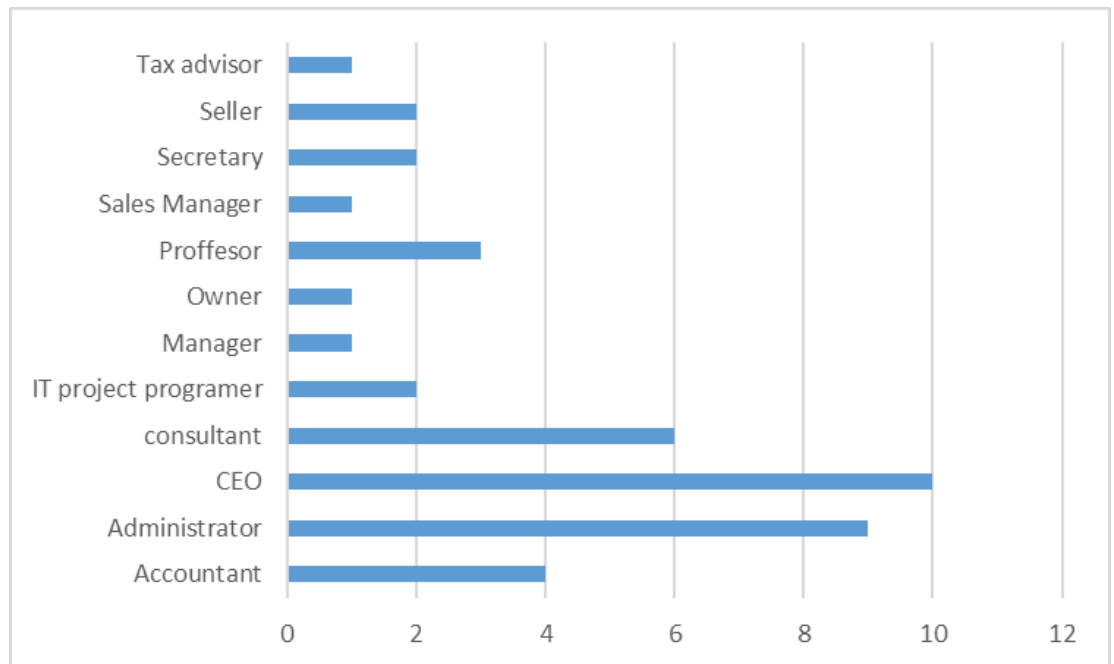


Figure 1: Job title of respondents.

TABLE 3: Educational level of respondents.

Highest qualification obtained	Frequency	Valid Percent	Cumulative Percent
Vocational school	1	2.44	2.44
High school	6	14.63	17.07
Undergraduate	10	24.39	41.46
Postgraduate	23	56.10	97.56
Other (please specify)	1	2.44	100.00
Total	39	100.00	100.00

Source: Authors' own work

TABLE 4: Work experience of respondents outside of current company.

Years of experiece outside company	Frequency	Valid Percent	Cumulative Percent
<0	9	23.08	23.08
1-5	9	23.08	46.15
5-10	11	28.21	74.36
10-15	3	7.69	82.05
15-20	5	12.82	94.87
>20	2	5.13	100.00
Total	39	100.00	100.00

Source: Authors' own work

The fifth question deals with the size of the company in terms of employees, seen in Table 6.

TABLE 5: Work experience of respondents within current company.

Years of experience within company	Frequency	Valid Percent	Cumulative Percent
<0	2	5.13	5.13
1-5	18	46.15	51.28
5-10	5	12.82	64.10
10-15	9	23.08	87.18
15-20	4	10.26	97.44
>20	1	2.56	100.00
Total	39	100.00	

Source: Authors' own work

TABLE 6: Company size in terms of employees.

Number of employees	Frequency	Valid Percent	Cumulative Percent
<10 (micro)	12	27.91	27.91
10-49 (small)	25	58.14	86.05
49-249 (medium)	4	9.30	95.35
>250	2	4.65	100.00
Total	39	100.00	

Source: Authors' own work

The sixth question, shown in Table 7, inquires about the sectors from which respondents originate.

TABLE 7: Company sector.

Sector	Frequency	Valid Percent	Cumulative Percent
Manufacturing	2	4.88	4.88
Retail	4	9.76	14.63
Services	28	68.29	82.93
Other	7	17.07	100.00
Total	41	100.00	

Source: Authors' own work

It is important to note that the last question in this section asked the respondents to reveal their location. Given that the survey was distributed in Croatian only, it represented an eliminatory question. All of the respondents, 100 percent reported Croatia as their location.

## 5.2. Institutions

The second section deals with institutional/organizational issues related to sustainability accounting. The first question examines whether the respondents are aware of sustainability reporting definitions, as per Table 8.

TABLE 8: Awareness of sustainability reporting definitions.

Sustainability reporting awareness	Frequency	Valid Percent	Cumulative Percent
Not at all	21	60.00	60.00
Fairly	12	34.29	94.29
Fully	2	5.71	100.00
Total	35	100.00	

Source: Authors' own work

Question two inquires about the potential social and environmental impact of the respondent's company. Table nine shows that most companies -- 62.86 percent of them -- consider their company's impact on the environment and society as minimal, while 28.57 percent see it as moderate.

TABLE 9: Social and environmental impact of company.

Sustainability reporting awareness	Frequency	Valid Percent	Cumulative Percent
None	3	8.57	8.57
Minimal	22	62.86	71.43
Moderate	10	28.57	100.00
Significant	0	0	100.00
Total	35	100.00	

Source: Authors' own work

Questions three to seven are dichotomous, requiring only binary answers, and are therefore grouped in Table 10. Although more than half of the respondents (57.14%) report working for a company which has a sustainability policy, only 3 of them report having a dedicated person in its personnel in charge of sustainability initiatives.

With regards to the type of stakeholders, respondents specified customers and community (2 responses each) as the stakeholders with whom their companies engage in dialogue, while employees, friends and support agencies were also indicated as stakeholders (1 response each). None of the respondents identified structured pressure groups or NGOs, insurers, or the media as stakeholders with whom their company engaged. As far as sustainability management systems being used, 2 respondents

TABLE 10: Examining various sustainability aspects in the company.

Year	Answers	Frequency	Valid Percent	Cumulative Percent
Does company have sustainability policy?	Yes	20	57.14	57.14
	No	15	42.86	
Is there a dedicated person/staff in charge of sustainability initiatives?	Yes	3	15.79	15.79
	No	16	84.21	
Does company produce a sustainability report?	Yes	2	5.88	5.88
	No	32	94.12	
Does company engage in dialogue on sustainability matters with stakeholders?	Yes	5	14.71	14.71
	No	29	85.29	
Does company have any sustainability management system?	Yes	5	14.71	14.71
	No	29	85.29	

Source: Authors' own work

reported using ISO 14000 as environmental management standard, while one respondent each identified ISO 26000 corporate responsibility and OHSAS 18001 occupational health as sustainability management systems already in use by their company.

When delving deeper into the reasons that drive the promotion of sustainability practices, Table 11 reveals a number of interesting findings. First, legal compliance -- both EU and national - has been identified as the strongest driver promoting sustainability practices in the company, with more than half of the companies (54.84% in both cases) recognizing them as such. Environmental burden reduction has been identified as a moderate driver (58.06%), with ethics and money saving being slightly less popular choices among the respondents (54.84% each).

The following question aims to identify the barriers precluding producing sustainability reports in the company, summarized in Table 12. Among the highest barriers is the lack of expertise, skills, and time (30.00%), whereas the lack of expertise by employees (63.33%) is considered a moderate barrier. Respondents claim that the lack of understanding or information on sustainability risks and benefits, along with legal/regulatory complexity are not considered as barriers by the respondents (0%).

The most useful benefit in the service of developing and implementing socially responsible business principles in everyday practice is the exchange of good practices with other European countries. If we take into account the implementation of socially responsible business on a company level, then we may conclude it should be

TABLE 11: Drivers promoting sustainability practices in the company.

Drivers	High		Moderate		Low		None		Total
	Freq.	Valid %	Freq.	Valid %	Freq.	Valid %	Freq.	Valid %	
Ethics	13	41.94	17	54.84	1	3.23	0	0	31
Environmental protection	14	45.16	15	48.39	1	3.23	1	3.23	31
EU compliance	17	54.84	14	45.16	0	0	0	0	31
National law compliance	17	54.84	11	35.48	3	9.68	0	0	31
Envir. fee burden reduction	5	16.13	18	58.06	4	12.90	4	12.90	31
Good publicity	11	35.48	15	48.39	5	16.13	0	0	31
Money saving	12	38.71	17	54.84	2	6.45	0	0	31
Stakeholder pressure	3	9.68	16	25.81	8	25.81	4	12.90	31
Competitive advantage	10	32.26	15	48.39	4	12.90	2	6.45	31

Source: Authors' own work

TABLE 12: Barriers precluding producing sustainability reports in the company.

Barriers	High		Moderate		Low		None		Total
	Freq.	Valid %	Freq.	Valid %	Freq.	Valid %	Freq.	Valid %	
Lack of awareness by managers.	4	13.33	12	40.00	12	40.00	2	6.67	30
Lack of interest by employees	2	6.67	19	63.33	6	20.00	3	10.00	30
Lack of understanding or info on sustainability risks / benefits	6	20.69	14	48.28	9	31.03	0	0	29
Legal & regulatory complexity	8	26.67	18	60.00	4	13.33	0	0	30
Lack of expertise, skills & time	9	30.00	19	63.33	2	6.67	0	0	30
Lack of financial resources and high implementation time	7	24.14	15	51.72	4	13.79	3	10.00	29
No demand from customers	8	26.67	16	53.33	4	13.33	2	6.67	30
Does not create competitive advantage	7	24.14	18	60.00	4	13.33	1	3.33	30

Source: Authors' own work

implemented into companies' business strategies while bearing in mind the interests and needs of different stakeholders.

### 5.3. Regulatory environment

The third section deals with issues regarding regulations -- the first two questions in Table 13 specifically address the stringency of Croatia's environmental and social regulations, respectively. Interestingly, most respondents perceive environmental regulations to be lax (53.33%) while social regulations to be moderate (63.33%).

TABLE 13: Assessment of stringency of environmental and social regulations.

Type of regulatory stringency	Lax		Moderate		Stringent		Total
	Frequency	Valid %	Frequency	Valid %	Frequency	Valid %	
Environmental	16	53.33	13	43.33	1	3.33	30
Social	10	33.33	19	63.33	1	3.33	30

Source: Authors' own work

The following question, shown in Table 14, asks the respondents to identify which regulations/taxes affect the company. This question allowed for more than one answers, accounting for the high number of answers received (67). Not surprisingly, the regulations most affecting the company identified by the respondents were workplace, occupational health and safety standards, with 26.87 percent. Since no climate change levies have been introduced to Croatia, no respondents recognized it as a regulation potentially affecting the company.

TABLE 14: Identification of regulations/taxes which affect the company.

	Frequency	Valid Percent	Cumulative Percent
Waste management	3	4.48	4.48
Water discharge	2	2.99	7.46
Oil storage	3	4.48	11.94
Environmental taxes	8	11.94	23.88
Landfill tax	7	10.45	34.33
Climate change levy (CCL)	0	0	34.33
Workplace, occupational health and safety	18	26.87	61.19
Product safety	7	10.45	71.64
Equal employment opportunity	6	8.96	80.60
Human rights, anti-corruption and anti-bribery	7	10.45	91.04
None of the above	6	8.96	100.00
Total	67	100.00	

Source: Authors' own work

The fourth question asks whether the company has ever received a complaint, been prosecuted, or subject to any type of enforcement action for an environmental and/or

social offence problem, with answers summarized in Table 14. Since almost all (96.67%) answered no, it can be deduced that either the companies are fully compliant with environmental and social standards, or their surroundings are simply not sufficiently evolved to recognize potential breaches and report on them.

TABLE 15: Complaints or enforcement actions for environmental and/or social problems.

Complaints or enforcements	Frequency	Valid Percent	Cumulative Percent
Yes, environmental	0	0	0
Yes, social	1	3.33	3.33
No	29	96.67	100.00
Total	30	100.00	

Source: Authors' own work

The final question asks the respondents to identify which statement best applies to their company. The answers can be found in Table 15. Regrettably, a large minority of the respondents (43.33%) was not able to identify themselves with none of the statements offered to them, indicating very low awareness levels of sustainability issues, notwithstanding those pertinent directly to their company.

TABLE 16: Most applicable statements regarding respondents' companies.

The company:	Frequency	Valid Percent	Cumulative Percent
Has difficulties in complying with sustainability legislation	0	0.00	0.00
Complies with sustainability legislation but does not wish to go beyond these requirements	7	23.33	23.33
Is complying with sustainability legislation and is contemplating doing more	4	13.33	36.66
Is going beyond the requirements of the sustainability legislation but environmental concerns are not one of its priorities	4	13.33	49.99
Is going beyond the requirements of the sustainability legislation and environmental concerns are among the firm's priority objectives	2	6.67	56.67
None of the above	13	43.33	100.00
Total	30	100.00	

Source: Authors' own work

### 5.4. Social issues

Section four delves deeper into social issues relevant for companies. The first question asked the respondents to identify the most applicable statements regarding employer-employee relationships, and remuneration and flexible working hours come out on top,

with 20.83 percent and 22.22 percent, respectively. Furthermore, Table 16 shows that trade union relationships, surprisingly, are not an issue companies report on, since no respondents identified it as such.

TABLE 17: Most applicable statements regarding respondents' companies.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Flexible working hours and family-friendly leave	15	20.83	20.83
Facilities (childcare services, canteen, sports room, etc.)	3	4.17	25.00
Soft loans	3	4.17	29.17
Health and safety programs	3	4.17	33.33
Trips and events	13	18.06	51.39
Trade union relationships	0	0	51.39
Social dialogue, respect for the right of workers	12	16.67	68.06
Remuneration	16	22.22	90.28
None of the above	7	9.72	100.00
Total	72	100.00	

Source: Authors' own work

Question two regards training and education as a social area in which companies report. In Table 17 it is evident that occupational training, development and education for employees is identified as an important social issue by the respondents (44.23%). Nevertheless, 9.62 percent reported none of the above issues as worthy of reporting on.

TABLE 18: Training and education.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Occupational training, development and education for employees	23	44.23	44.23
Equal opportunities and access to training and development	12	23.08	67.31
Regular performance and career development services	9	17.31	84.62
Communication and training on human rights policies, anti-corruption and bribery policies	3	5.77	90.38
None of the above	5	9.62	100.00
Total	52	100.00	

Source: Authors' own work

The third question investigates diversity and opportunity, with answers presented in Table 18. Companies in Croatia take stock of and report on employment diversity with regards to gender, age, and minority, as well as gender equality, with 43.18 percent



and 38.64 percent, respectively, in part due to legal requirements to disclose such information, forcing the employers' hand to raise their awareness level on the issue.

TABLE 19: Diversity and equal opportunity.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Employment diversity (gender, age, minority)	19	43.18	43.18
Gender equality (salary, remuneration and promotion)	17	38.64	81.82
Hire disabled, detainees and internees	2	4.55	86.36
None of the above	6	13.64	100.00
Total	44	100.00	

Source: Authors' own work

The next question required the respondents to identify local community issues which their companies report on. Table 19 provides the answers, with donations for research, education, and healthcare and supply of goods and services free of charge for social activities being the two most popular measures with 19.61 percent each. It is regrettable that 23.53 percent of the respondents did not identify a single local community initiative to report on.

TABLE 20: Local communities.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Donation (education, research, healthcare...)	10	19.61	19.61
Donating employee time and/or expertise to do volunteering to do volunteering work in the community	5	9.80	29.41
Collaboration with the educational bodies (grants, research funding, internships, events, sponsorship)	7	13.73	43.14
Supply of goods and services free of charge for social activity	10	19.61	62.75
Entertainment, restorations, and exhibitions	7	13.73	76.47
None of the above	12	23.53	100.00
Total	51	100.00	

Source: Authors' own work

Question five examines product responsibility, as shown in Table 20. Again, a significant number of respondents (29.55%) report on conducting surveys in order to measure customer satisfaction. Nevertheless, the same number of respondents (29.55%) reports doing nothing at all with respect to this issue, effectively showing that awareness levels need to be increased at the expense of total ignorance and/or indifference to the issue of sustainability.

TABLE 21: Product responsibility.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Advertisement messages containing social value	8	18.18	18.18
Survey measuring customer satisfaction	13	29.55	47.73
Assessing health and safety impacts on products and services	2	4.55	52.27
Special products or services dedicated for the disadvantaged	4	9.09	61.36
Suggestions by the client companies	4	9.09	70.45
None of the above	13	29.55	100.00
Total	44	100.00	

Source: Authors' own work

Finally, the last question considers suppliers as an important stakeholder group in sustainability accounting. Table 21 exhibits the answers -- health and safety at work are an issue most companies report on (19.23%), mainly spurred by legislative requirements. Another measure companies report on is regular working time, again as a compliance measure towards the government (17.31%). Still, some companies report no measures with respect to their suppliers (17.31%).

TABLE 22: Suppliers.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Risk of forced, compulsory, and/or child labor	3	5.77	5.77
Human rights criteria	8	15.38	21.15
Health and safety at work	10	19.23	40.38
Salary in accordance with legal or industry minimum wage	5	9.62	50.00
Regular working time	9	17.31	67.31
Criteria for impacts on society	4	7.69	75.00
Social certifications	4	7.69	82.69
None of the above	9	17.31	100.00
Total	30	100.00	

Source: Authors' own work

## 5.5. Environmental issues

The last section of the questionnaire deals with environmental issues. Table 22 provides the answers to the first question which asks about materials as a sustainability area in which companies report. The answers are evenly split among those that reduce the use of materials and use recycled materials and those who create more environmentally

friendly products on the one side (24.24% each) and a large portion of companies that do nothing regarding the materials that they use (45.45%).

TABLE 23: Materials.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Reducing the use of materials to use recycled materials	8	24.24	24.24
Making the production, use, and disposal of products more environmentally friendly (easier to maintain, repair, or use)	8	24.24	48.48
Life cycle assessment	2	6.06	54.55
None of the above	15	45.45	100.00
Total	33	100.00	

Source: Authors' own work

The second question inquires about energy as a sustainability area in which companies report. Not surprisingly, the answers shown in Table 23 confirm that companies resort to the most cost-effective methods available, such as reducing energy consumption (25%) and using natural light whenever possible.

TABLE 24: Energy (mainly including lighting, heating, and production equipment).

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Using reminders and promotional materials to raise awareness of switching off and good practice	6	15.00	15.00
Initiatives to reduce energy consumption (energy saving bulbs, daylight sensors, timers and movement sensor lights)	10	25.00	40.00
Using natural light when possible (clean windows and skylights, opening all blinds, arranging desks near windows)	13	32.50	72.50
Having more switches that are clear labelled (more control)	2	5.00	77.50
None of the above	9	22.50	100.00
Total	40	100.00	

Source: Authors' own work

Question number three explores heating as a sustainability area in which companies report. Contrary to the finding above with regards to using the most cost-effective methods of sustainability, Table 24 displays raising awareness of air conditioning and electric heating being very expensive as the most popular choice (26.92%), closely followed by regularly checking and maintaining the heating system and AC units (25.00%). Even though there are some cost-cutting measures available to choose from in the

questionnaire, such as decreasing heat losses or reducing heating consumption, only 13.46 percent and 17.31 percent of the respondents, respectively, have selected them.

TABLE 25: Heating.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Initiatives to reduce heating consumption (eg. Thermostats, radiator valves, zone control and timer, not heating empty building, not blocking heat emitters)	9	17.31	17.31
Decrease heat losses (eg. double glazing, insulation, separate areas with different temperatures, heaters only work when doors closed)	7	13.46	30.77
Raise awareness of how expensive air conditioning and electric heaters	14	26.92	57.69
Regularly check and maintain the heating system and air conditioning units	13	25.00	82.69
Using clean/renewable energy (eg. wood biomass boiler, solar system, etc)	2	3.85	86.54
None of the above	7	13.46	100.00
Total	52	100.00	

Source: Authors' own work

The fourth question deals with production equipment as a sustainability area in which companies report. Again, cost effectiveness comes on top with 34.48 percent of all responses being that turning off idling machinery is a sustainability measure. Regular checks and maintenance are also often employed, with 22.41 percent of respondents identifying it as a cost-effective measure. Table 25 provides the remaining options selected by the respondents.

TABLE 26: Production equipment.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Turn off machinery that is idling and switch it off when not in use	20	34.48	34.48
Switches are labelled and staff are trained in the correct procedures for operating machinery so they know what they can turn off	5	8.62	43.10
Optimum settings for equipment are used	5	8.62	51.72
Installing a higher efficiency equipment	8	13.79	65.52
Regular checks and maintenance of equipment	13	22.41	87.93
None of the above	7	12.07	100.00
Total	58	100.00	

Source: Authors' own work

Question five examines waste as another sustainability measure on which companies report. Reducing and reusing again come out on top with 21.21 percent of respondents

selecting it, followed by recycling of materials (15.15%) and making recycling bins widely available with 16.67 percent. If considered together, recycling in all its forms is definitely the most popular sustainability measure for managing waste as per Table 26.

TABLE 27: Waste.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Initiatives to reduce waste (responsible printing and photocopying, recycled cartridges, use less, re-usable/returnable packaging)	14	21.21	21.21
Use items as many times as possible	11	16.67	37.88
Recycle what you can (electrical equipment, oil, batteries, furniture)	10	15.15	53.03
Sell your scrap material to another company	4	6.06	59.09
Recycling bins widely available and labelled clearly	11	16.67	75.76
Educate staff about plans and recycling	8	12.12	87.88
Put posters up as a reminder to follow good practice	2	3.03	90.91
None of the above	6	9.09	100.00
Total	66	100.00	

Source: Authors' own work

When transport and greenhouse gases are concerned, as in Question six and Table 27, encouraging the use of public transport and share rides is the most popular sustainability measure (18.52%), closely followed by regular vehicle servicing (16.67%). Yet, the same number of respondents (18.52%) answered that their companies report on none of the measures offered in the questionnaire.

Finally, the last question examines overall measures that companies undertake in order to improve their sustainability, enumerated in Table 28. While SMEs are slowly raising their levels of awareness with regards to the environmental impact of their products, services and business operations (23.08%), a large share of them (43.59%) still does nothing, indicating that there is not yet a critical mass that would push the Croatian economy into a higher plain of sustainable existence.

## 6. Conclusion

The most useful benefit in the service of developing and implementing socially responsible business principles in everyday practice is the exchange of good practices with other European countries. If one takes into account the implementation of socially responsible business on a company level, then it may be concluded that sustainability should be implemented into companies' business strategies while bearing in mind the interests and needs of different stakeholders.

TABLE 28: Transport and greenhouse gases.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Encourage staff and visitors to use public transport or share rides (e.g. cycle to work scheme)	10	18.52	18.52
Improved route planning for visits and deliveries	5	9.26	27.78
Use tele/video conferencing when possible	7	12.96	40.74
Reduction of delivery frequencies and use of correct vehicle for the job	5	9.26	50.00
Considering space, fuel efficiency, reliability and exhaust emissions when purchasing vehicles and converting existing vehicles to cleaner fuels	6	11.11	61.11
Regular vehicle servicing to reduce emissions (lower emissions result in lower road tax and company car tax)	9	16.67	77.78
Initiatives to reduce emission of greenhouse gases beyond the legal obligations	2	3.70	81.48
None of the above	10	18.52	100.00
Total	54	100.00	

Source: Authors' own work

TABLE 29: Overall.

Company reports on:	Frequency	Valid Percent	Cumulative Percent
Screening new suppliers using environmental criteria	4	10.26	10.26
Incorporating sustainability goals into supply-chain relationship	0	0	10.26
Incentives to business partners to adapt sustainability business practices	5	12.82	23.08
Including sustainability performance indicators in employee evaluations	4	10.26	33.33
Developing products and services that reduce or prevent environment damage	9	23.08	56.41
None of the above	17	43.59	100.00
Total	39	100.00	

Source: Authors' own work

Social responsibility has proven to be an extremely important factor in company development which has had a positive impact on the community's wellbeing. Continuous investments into socially responsible businesses should be the backbone of each company due to the benefits they bring. Clients and consumers are recognizing and appreciating socially responsible projects, which is confirmed by excellent sales results and feedback from the market.

The first part of the research represents general information about SMEs that participated in the survey. Based on the results, it could be concluded that the level

of awareness of sustainability reporting is very low in Croatia, with SMEs requiring additional education and help in comprehending the magnitude of this issue.

Educational programs and trainings on sustainable accounting area are underrepresented, while most of the existing ones are intended for big companies who are already obliged to report and comply by law. Research has shown that most of the respondents are not familiar with the definition of corporate social responsibility at all. Moreover, a very high percentage of SMEs do not publish sustainability reports and are very reactive in acceptance, and promotion of, sustainability measures.

The report has shown that the biggest barrier to implement sustainability report practices is the lack of expertise, skills and time of SMEs. The results of the survey have proven that people are not aware of terms related to sustainability accounting and do not have skills or expertise to implement reporting processes in their companies. In addition, taking into consideration that most of the respondents think that their companies exert minimum social or environmental impact, it could be concluded that there is a vast lack of knowledge on the opportunities each company could undertake in order to contribute to the society or enhance its own approach to the environment.

Another worrying factor is related to the fact that the respondents consider Croatian regulations to be moderate or weak; hence, it is necessary to raise awareness about socially responsible business for SMEs in order to understand the advantages of reporting.

Finally, it could be concluded that the level of SMEs awareness on the socially responsible reporting is particularly low in Croatia, mostly due to the lack of SMEs' field-related knowledge, skills, and experience, as well as the unawareness of the reporting advantages. Therefore, it is necessary to create a new approach to socially responsible reporting, specially developed for SMEs and their organizational capacities.

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## References

- [1] Horngren, C. T., Datar, S. M., and Rajan, M. (2012). *Cost Accounting: A Managerial Emphasis*. 14th ed. New Jersey: Prentice Hall.
- [2] Fleischman, R. K., and Tyson, T. N. (1998). The Evolution of Standard Costing in the U.K. and U.S.: From Decision Making to Control. *ABACUS*, 34(1), pp. 92-119.
- [3] Gray, R. (1992). Accounting and Environmentalism: An Exploration of the Challenge of Gently Accounting for Accountability, Transparency, and Sustainability. *Accounting Organizations and Society*, 17(5), pp. 399-425.
- [4] Gray, R. (1993). *Accounting for the Environment*. London: Paul Chapman.
- [5] Gray, R., and Bebbington, J. (2000). Environmental accounting, managerialism, and sustainability: Is the planet safe in the hands of business and accounting?. *Advances in Environmental Accounting and Management*, Svezak 1, pp. 1-44.
- [6] Schaltegger, S., Bennett, M., and Burritt, R. (2006). *Sustainability Accounting and Reporting*. Dordrecht: Springer.
- [7] Thomson, I. H. (2007). Mapping the terrain of sustainability accounting. U: J. Unerman, J. Bebbington & B. O'Dwyer, ur. *Sustainability Accounting and Accountability*. Abingdon: Routledge, pp. 19-37.
- [8] Schaltegger, S. & Burritt, R.L. (2010). Sustainability Accounting and Reporting: Fad or Trend?. *Accounting, Auditing, & Accountability*. Vol.23. No.7. pp. 829-846.
- [9] Krivačić, D. (2017). Sustainability Reporting Quality: The Analysis of Companies in Croatia. *Journal of Accounting and Management*, 7(1), pp. 1-14.
- [10] Peršić, M., Janković, S., and Vejzagić, V. (2010). *Challenges of Environmental Accounting in Tourist Destination as a Trend of Sustainable Development*. Zagreb, MATE, ZSEM & SSRNet, pp. 639-650.
- [11] Osmanagić Bedenik, N., Prebežac, D., Strugar, I., and Kojić, V. (2017). Nefinancijsko izvještavanje u hotelskim poduzećima u Hrvatskoj. Zagreb: Naklada Veble
- [12] Cifrić, I. (2005). Ekološka zabrinutost. Percepcija ekoloških problema kao zabrinjavajućih. *Socijalna ekologija: časopis za ekološku misao i sociologijska istraživanja okoline*, 14(1-2), pp. 1-28.
- [13] Fülöp, G. and Hódi Hernádi, B. (2013). *Sustainability Accounting: A Success Factor in Corporate Sustainability Strategy*. Riga, University of Latvia.
- [14] Vrdoljak Raguž, I., and Hazdovac, K. (2014). Društveno odgovorno poslovanje i hrvatska gospodarska praksa. *Oeconomica Jadertina*, 4(1), pp. 40-58.
- [15] Financijska agencija - Fina. (2019). [www.fina.hr](http://www.fina.hr)



- [16] Hrvatska gospodarska komora -- HGK. (2019). [www.hgk.hr](http://www.hgk.hr)
- [17] Hrvatski sabor. (2009). *Strategija održivog razvoja Republike Hrvatske*, Zagreb: Narodne novine 30/2009.
- [18] Agencija za zaštitu okoliša. (2014). *Izvješće o stanju okoliša u Republici Hrvatskoj (razdoblje od 2009. do 2012.)*, Zagreb: Agencija za zaštitu okoliša.
- [19] European Parliament and Council of the European Union. (2014). *Directive 2014/95/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups*. Brussels: an.
- [20] United Nations. (2017). *United Nations Global Compact Progress Report: Business Solutions for sustainable Development*. New York: UN
- [21] OECD. (2011). *OECD Guidelines for Multinational Enterprises*, Paris: OECD Publishing.
- [22] ISO 26000 PPO & PPO Stakeholder Advisory Group. (2017). *ISO 26000 and OECD Guidelines*, Geneva: ISO & OECD.
- [23] European Commission. (2017). *Guidelines on non-financial reporting (methodology for reporting non-financial information)*, Brussels: Official Journal of the European Union.
- [24] European Commission. (2018). *Action Plan: Financing Sustainable Growth*, Brussels: European Commission.
- [25] Hrvatski sabor. (2015). *Zakon o računovodstvu*, Zagreb: Narodne novine 78/2015.
- [26] Peršić, M., Bakija, K., and Vlašić, D. (2015). *Corporate Social Responsibility Reporting in Accordance with the New EU Legislation - Are Croatian Hotel Companies Ready for it?*. Opatija, an., pp. 295-308.
- [27] Pokrovac, M. (2013). *CSR for All*. Zagreb, Nacionalna mreža za promicanje DOP-a.