

ANALYSIS OF THE IMPACT OF REPORTING ON ENVIRONMENTAL PERFORMANCE INDICATORS ON THE PROFITABILITY OF EUROPEAN COMPANIES

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Abstract. *The research in this paper is focused on the analysis of the environmental performance indicators reporting impact in the context of sustainable development on the profitability of companies. The research focuses on 60 companies in the energy sector in Europe in the period 2012-2020. Reports on sustainable development of companies available in the database of the Global Reporting Initiative (GRI) were used for the collection of data. The independent variables in this study are nine indicators of the environmental performance of sustainable development. The dependent variable is the profitability of the company, which is measured by the rate of return on total assets (ROA). The method of multiple linear regression will be used to analyze the impact of reporting on environmental performance indicators of sustainable development on the profitability of energy companies in Europe. Empirical results of this research have shown that reporting on environmental performance indicators of sustainable development has a positive effect on company profitability indicators.*

Key words: *reporting, sustainable development, environmental performance and profitability.*

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1. INTRODUCTION

The primary goal of any company is to make as much profit as possible. Companies are often on the wrong path to profit maximization, as they try to reduce the cost of managing environmental performance and thus increase profits. However, ecological performance is important from the aspect of the living community, because it affects the environment and natural resources. Environmental performance is important to consider at the company level, as it gains public trust. Environmental performance reporting is one of the Sustainable Development activities carried out by companies in order to become more responsible and transparent. Reporting on the performance of sustainable development is important for many parties, from ordinary people, stakeholders, government and others.

Sustainable development today is a term that is already well known and is used not only in the context of environmental protection, but also in other spheres of human society. It is a prerequisite for the development of a society that takes care of maintaining the quality of life of future generations (Ali, Arafin, Moktadir, Rahman & Zahan, 2018; Carter & Rogers, 2008; Dubey et al., 2017). The European Commission (2017) emphasizes the essence of sustainable development in a dignified life for all within the boundaries of the planet and economic performance, social sphere and environmental protection. Sustainable development is based primarily on the balance between the three basic areas of life - economic development, social development and environmental protection.

It is known that employees have a negative impact on the company's ability to increase its profits at the expense of the environment (e.g. air pollution, increase in the quantity of polluted waters, etc.). The emergence of this negative awareness requires the company not only to be profit oriented, but to manage and report on the environmental performance of sustainable development. Companies must take care to prevent and reduce negative impacts on the environment through corporate environmental practices (Albertini, 2013; King & Lenox, 2001). Minimizing environmental damage caused by business activity and protecting the natural environment are the signals of a company's environmental performance and are receiving increasing attention from society, which requires companies to reduce negative impacts on the environment, contributing to sustainable development (Féres & Reynaud, 2012). Various sustainability reporting initiatives are gaining increasing attention from stakeholders (Escrig-Olmedo, Munoz-Torres, Fernandez-Izquierdo, & Rivera-Lirio, 2017; Lai, Melloni, & Stacchezzini, 2016; Mervelskemper & Streit, 2017; Perez-Lopez, Moreno-Romero & Barkemayer, 2015). The assessment that a company receives for reporting on the environmental performance of sustainable development is considered to be one of the factors influencing its profitability.

The profitability of the company is an indicator worth the attention of stakeholders. The profitability of a company can be measured by a number of indicators that can be based on the concept of: a) accounting result, b) economic result or c) cash flow (Krstić & Bonić, 2017, 136-157). In this paper, the rate of return on total assets (ROA) will be used to measure the profitability of companies. The value of this indicator indicates the profitability and earning power of the company, which is important for managers and investors. (Gautama & Harjati, 2014). Weston and Copeland (1992) define profitability to the extent that companies make a profit from sales and investment companies. If the company's profitability is good, then stakeholders consisting of creditors, suppliers and investors will also see the extent to which the company can operate from the company's sales and investments. The higher the level of profitability, the higher the market price of

the company's shares, and the higher the value of the company. Each company definitely wants the value of the company to continue to grow, because that means that the prosperity of shareholders is high. In addition to being seen by the growing prosperity of shareholders, a company can also be measured by how well it can make a profit. In addition to being an indicator of a company's ability to meet its obligations to investors, the company's profit is also an important component in creating corporate value that shows the company's capabilities in the future.

Due to the lack of literature on the environmental performance of sustainable development in Europe, this research aims to examine the extent of the impact of reporting on environmental performance indicators of sustainable development on company profitability by applying multiple linear regression to data collected from the Sustainable Development Report of European companies in the energy sector available in the Organizations for standardization (Global Reporting Initiative) database. The choice of ecological performance of sustainable development in this research is of a particular importance, because it opens the possibility for their measurement, comparison and examination in relation to other suitable variables. The analysis of this research includes data for a time period of 8 years (2012-2020), in order to provide some certainty that the results of the research are not influenced by events from a short period of time. The results of the research show that responsible, transparent and timely reporting on the environmental performance of sustainable development and regularly informing stakeholders about them positively affects the profitability of companies in Europe. The results also indicate that the European companies are heterogeneous in terms of reporting on environmental performance and that there is room for improvement for individual companies in terms of reporting on non-financial sustainable development performance.

In the context of achieving the set goal, the work starts from the theoretical consideration of previous research related to reporting on environmental performance on profitability, followed by a description of the methodology and a discussion of the research results, with an indication of potential opportunities for future research directions.

2. LITERATURE REVIEW

There are numerous studies on the impact of environmental behavior and company performance on profitability indicators, using different samples and methodologies (Horváthová, 2010; Dixon-Fowler et al., 2013; Endrikat et al., 2014; Friede et al., 2015). Unfortunately, reaching a consensus on this topic is far away, since the previous research has obtained contradictory results regarding positive, negative or neutral nature of the relationship between environmental performance and profitability indicators (Chavez et al., 2016; Geng et al., 2017; Wong et al., 2017; Zhu et al., 2013).

According to Kuldove (2011), environmental protection can have a positive effect on economic performance if taken strategically. Duque-Grisales & Aguilera-Caracuel (2019) point out that innovative investments in the environment create new market opportunities for the company through new ecological technologies and processes and the development of ecological products and services. If we look at the problem from a purely financial point of view, then the basic strategic goal of the business is to provide the necessary profitability and increase the value of the company. Thus, the application of the corporate strategy tailored to meet the principles of environmental performance of sustainable development should lead to the increased profitability of companies and create value for shareholders.

Could the entrepreneurship that meets the principles of environmental performance of sustainable development meet this goal? There is a debate on this issue in which we meet different views on the relationship between environmental performance of sustainable development and meeting business goals, where the dominant position is occupied by the company's ownership needs. The relationship between the environmental and financial performance of companies and the extent to which reporting on environmental performance indicators of sustainable development contributes to the growth of company profitability have become the subject of interest of many authors.

Some studies confirm a positive relationship (Ameer & Othman, 2012; Barnett, 2007; Kuldova, 2011; Orliztki, Schmidt & Rines, 2003; Porter & Van der Linde, 2011; Tang et al., 2018), some confirm a negative relationship (Barnett, 2007; Kuldova, 2011; Orliztki, Schmidt & Rines, 2003; Driessen et al., 2013; Liu, Dai, & Cheng, 2011; Lee, Cin, & Lee, 2016), while others provide ambiguous results (Lee & Min, 2015; Tang et al., 2018). One of the most important critics of the concept of socially responsible business in relation to the fulfillment of business goals is undoubtedly Milton Friedman (2009), according to whom the company is interested in the activity and the activity of the profession.

Ameer & Othman (2012) point to a two-way link between reporting on the environmental performance of sustainable development and financial indicators. In their study, they have found significantly higher sales growth, higher property returns, pre-tax profits and cash flows from operating activities in a sample of 100 global companies performing environmental activities in selected industries compared to the companies that do not report these activities.

Equally, the issue of the impact of environmental management in the company and activities leading to environmental protection is given considerable attention. According to Schaltegger & Sinnestvedt (2002), there is no general automatic link that combines environmental performance with the economic performance of companies. This relationship is applied only in certain specific cases, when the environmental protection measures are a very significant motivation for the company to lead to continuous improvement of business activities. Their main finding includes the fact that the relationship between environmental and economic performance varies depending on the level of achieved economic performance.

Wagner & Schaltegger (2004) show the importance of formulating business strategy by the top management of the company in the analysis, in which they have dealt with the impact of business strategy on environmental protection and economic relations of the economy. Companies with a formulated strategy in terms of creating value for owners show a positive relationship between environmental performance and company profitability.

In their research, Green et al. (2012) state that improving the overall financial performance of a company comes from investing in operational resource efficiency and marketing environmental benefits. In their study, environmental performance means reducing the level of environmental pollutants, such as reducing air, water and solid waste, reducing the consumption of hazardous, harmful and toxic materials and reducing the frequency of environmental accidents, which leads to improved operational performance and higher profitability (Zhu et al, 2015). Better operational performance reflects the ability to satisfy customers in terms of timely and fast delivery of high-quality products and services, business flexibility and elimination of waste in production processes (Wong et al., 2017).

Tarmuji et al. (2016) point out that the higher the level of environmental performance reporting, the greater the possibility for companies to maximize their profits. Purbawangsa &

Suprasto (2019) have investigated how a non-financial performance affects the rate of return on total assets employed (ROA). They have showed that the annual variation of non-financial performance reporting improves the company's image and subsequently the financial performance as measured by ROA. They have also proved that there is a strong relationship between a company's rating and its social responsibility ratings. The impact of non-financial performance reporting appears to be more significant for companies where clients are individuals rather than groups. They have found that a company's profitability affects its value. In accordance with this research, Wardhany, Hermuningsih & Wiyono (2019) state that profitability has a positive impact on the value of companies. This is supported by the research results of Sulistyono & Yuliana (2019) who have found that there is a positive influence between profitability and company value.

According to Pasquini-Descomps & Sahut (2015), if a company approaches environmental policy, the measures it implements in this regard in accordance with the concept of sustainable development are closely related to economic performance. This policy may provoke different reactions from stakeholders. The viewpoint is that the application of environmental protection measures increases environmental performance, and that their impact on the company's business results leads to a drop in profitability. This decline is expected mainly due to rising costs. It is about:

- increasing investment costs in the field of environmental protection and minimizing the impact of business activities on the environment,
- increasing operating costs related to new production processes and environmentally friendly technologies,
- increasing the cost of acquiring inputs (limited material and energy resources, together with increasing environmental requirements for these inputs will lead to an increase in their price),
- increase costs at risk, because in connection with investing in the field of environmental protection, the company may lose income from other potential investment projects.

Furthermore, the impact of the implemented measures in the field of environment on productivity, product quality, sales development and company revenues is considered.

On the other hand, measures and implemented investment activities in the field of environmental protection can also bring cost savings (savings in material and energy consumption, savings in waste management and savings in environmental protection). These measures can improve the efficiency of business processes, and at the same time, more environmentally friendly production processes can increase the value of the products. This opens up new market opportunities, as well as increased sales prices due to the increased product image and increased customer preference. Therefore, all of the above positively affects the profitability and economic performance of the companies.

3. SAMPLE DESCRIPTION AND RESEARCH METHODOLOGY

The subject of the paper is the research of indicators of environmental performance of sustainable development and the analysis of their impact on the profitability of companies.

The starting point is made of the following research questions:

Are companies heterogeneous in terms of the degree of reporting on environmental performance indicators of sustainable development?

Do the environmental performance indicators of sustainable development affect the profitability indicators of companies?

The research aims to determine the degree of impact of reporting on environmental performance indicators of sustainable development on the profitability of companies.

In accordance with the aim of the research, the following hypotheses were formulated:

H 1. Companies are heterogeneous in terms of reporting on environmental performance indicators of sustainable development.

H 2. Environmental performance indicators of sustainable development significantly affect the profitability indicators of the companies.

The research used the secondary data collected in the available Sustainable Development Reports available in the database of the Organization for Standardization (Global Reporting Initiative) in the period from 2012 to 2020. (<https://www.globalreporting.org/database>).

This research uses a type of descriptive study because researchers want to prove that reporting on the environmental performance of sustainable development affects the profitability of companies. The level of intervention in this study, in which the researcher has not just collected data from two different time periods, is moderate. The horizon of this research is longitudinal, i.e. the data were collected in two or more different time frames and requirements. Research can be conducted if the data from dependent and independent variables are collected in two or more time constraints to answer a research question (Scott, 2010). The data collection uses dedicated sampling with certain criteria. Dedicated sampling is the determination of samples by characteristics and criteria (Sekaran, 2011). The criteria for sample selection in this study are as follows:

Reports on sustainable development of companies are available in the database of the Organization for Standardization (Global Reporting Initiative) in the period from 2012 to 2020.

The registered office of the company is located in Europe

Companies operate within the energy sector

Sustainability reports of the companies contain financial data for the calculation of the dependent variable.

The final sample consists of 60 energy sector companies presented in Table 1.

The independent variables in this study are indicators of nonfinancial performance of sustainable development (Table 2). They were selected in accordance with:

- G4 guidelines for reporting on the sustainable development of the Global Reporting Initiative (GRI, 2016),
- OECD guidelines for the application of transfer pricing rules for multinational companies and tax administrations (OECD website),
- ten principles of the Global Compact in the field of human rights, labor rights, environment and anti-corruption policy (UN Global Compact website),
- available database of sustainable development report of the company Organization for Standardization (Global Reporting Initiative)
- data from the official websites of the companies,
- selected indicators of sustainable development proposed in the habilitation paper "The impact of the concept of sustainability on the financial performance of enterprises", author Michael Krechovska, professor at the Faculty of Economics, Technical University of Liberec (2017).

Table 1 Energy sector companies in Europe that participated in the survey

No	Company	Country	No	Company	Country
1	AEM	Russia	31	LM Group	Denmark
2	AREVA	France	32	Lukoil	Russia
3	BG Group	England	33	Lundin Pet.	Sweden
4	BP	England	34	Marquard	Germany
5	Cairn Energy	England	35	Maurel	France
6	Calor Gas Ltd	England	36	MOESK	Russia
7	CEPSA	Spain	37	MOL Gro.	Hungary
8	CGG	France	38	Motor Oil	Greece
9	e2i Energie Sp	Italy	39	Nexans	France
10	EDF Polska	Poland	40	NIS	Serbia
11	Eesti Energia	Estonia	41	Nordex	Germany
12	Enagas S.A	Spain	42	NOVATEK	Russia
13	EPH	Czech	43	Oekostrom	Austria
14	ENGIE	France	44	OKQ8 Scand.	Sweden
15	Eni	Italy	45	OMV	Austria
16	Equinor ASA	Norway	46	Oulun Ener.	Finland
17	ERG Gruppo	Italy	47	Petrol Slov.	Slovenia
18	FGC UES	Russia	48	Petrom	Romania
19	Fingrid Oyj	Finland	49	Prysmian Gr.	Italy
20	Fortum	Finland	50	Rauman Ene.	Finland
21	Galp Energia	Portugal	51	Repsol	Spain
22	Gasum	Finland	52	Royal Dutch	Netherlands
23	Gazprom	Russia	53	Saipem	Italy
24	Gazprom Neft	Russia	54	Siemens	Spain
25	Ina Group	Croatia	55	SSE	England
26	INTER RAO	Russia	56	State Atomic	Russia
27	Jyväskylä En.	Finland	57	TAURON	Poland
28	KMG Inter.	Romania	58	TERNA EN.	Greece
29	KONCAR	Croatia	59	VERBUND	Austria
30	Landi Renzo	Italy	60	ZSE	Slovakia

Table 2 Environmental performance indicators of sustainable development

Label	Indicator
E1	Indirect energy consumption (in thousands of GJ)
E2	Energy efficiency (in thousands of GJ)
E3	Total water abstraction by source (in thousands of m ³)
E4	Direct greenhouse gas emissions (in thousands of kg)
E5	Ozone depleting emissions (in thousands of kg - kilogram)
E6	Other indirect greenhouse gas emissions (in thousands of kg)
E7	Measured amount of wastewater (in thousands of m ³)
E8	Total weight of waste by type and method of disposal (in thousands of kg - kilograms)
E9	Total number of significant pollution

The dependent variable in this research is the profitability of the company. Profitability is the company's ability to make a profit. The indicator of profitability in this paper is the Rate of Return on total assets (ROA), which is defined as the ratio of EBIT¹ and total assets.

¹ EBIT (Earnings Before Interest and Taxes) or earnings before interest and taxes. This is actually the operating profit (Operating profit = EBITDA - depreciation) adjusted for possible non-operating items (\pm non-operating).

$$ROA = \frac{EBIT}{TOTAL ASSETS} \quad (1)$$

This indicator provides an answer to the question of whether the company has used its funds efficiently (Lee & Faff, 2009). Many recent studies have used ROA to examine the link between sustainable development reporting and company profitability (Duque-Grisales & Aguilera-Caracuel, 2019; Deng & Cheng, 2019; Lins et al., 2017).

In order to process data, we have used measures of descriptive statistics (arithmetic mean, standard deviation, minimum and maximum) and measures of inferential statistics (correlation analysis and multiple linear regression method). Data processing has been performed using the package for statistical data processing in social sciences SPSS (SPSS, version 21.0).

The results are tabulated.

4. RESEARCH RESULTS

Descriptive measures of the indicators of environmental performance of sustainable development are shown in Table 3, in order to see the minimum and maximum values, arithmetic mean and standard deviation.

The average indirect energy consumption (E1) in the analyzed sample is 67,622.35 thousand GJ, the lowest energy consumption of 9.80 thousand GJ has been recorded in the ERG (Gruppo ERG) company, Italy, in 2012 and 2013, while the highest consumption of 692,455.00 thousand GJ recorded in the Lundin Petroleum company, Sweden, in 2020.

The average energy efficiency (E2) is 2,419.24 thousand GJ, the lowest energy efficiency of 0.02 thousand GJ has been registered in the ERG (Gruppo ERG) company, Italy, in 2012, while the highest energy efficiency of 31,623.00 thousand GJ has been registered in Gazprom Neft, Russia, in 2013.

On average, the energy sector companies in Europe capture 190,310.37 thousand m³ of water by source (E3), with the least affected water by source at Cairn Energy United Kingdom in 2012 being 2.98 thousand m³, and the highest in the Fortum company, Finland, in 2020 being 2,160,020.00 thousand m³.

The average value of direct emissions of greenhouse gases (E4) is 3,471,035.83 thousand kg, while the lowest value of 156.40 thousand kg has been recorded in Landi Renzo, Italy, in 2015, and the highest of 89,801,520.00 thousand kg in INTER RAO UES, Russia.

The average value of emissions that deplete the ozone layer (E5) is 2.33 thousand kg, while the lowest value of 0.00 thousand kg has been registered in the company FGC UES (Federal Grid Company of the United Energy System), Russia, in the period 2012-2014. and the highest of 37.37 thousand kg in the Cairn Energy company, United Kingdom.

The average value of other indirect greenhouse gas emissions (E6) is 38,853.37 thousand kg, while the lowest value of 5.90 thousand kg is in the Eesti Energia company, Estonia, in 2015, and the highest of 460,160.00 thousand kg in the INTER RAO UES company, Russia.

The average measured amount of wastewater (E7) in the companies of the energy sector in Europe is 14,056.84 thousand m³, with the lowest measured amount of

i.e. extraordinary items): EBIT = Operating profit ± non-operating items. This type of profit excludes the effects of financial transactions and income tax and other taxes payable on profits

wastewater recorded in the Eesti Energia company, Estonia, 0.60 thousand m³, and the highest in OMV Austria, 256,225.00 thousand m³.

The average weight of waste by type and method of disposal (E8) is 921,069.78 thousand kg, with the lowest weight of waste by type and method of disposal recorded in the KONCAR - Electrical Engineering Institute, Croatia, 7.10 thousand kg, and the highest of 14,800,000.00 thousand kg in the Jyväskylä Energy company, Finland.

The average number of significant pollution (E9) is 4.29, with the lowest number recorded in Enagas SA, Spain, 0, and the highest in Gazprom, Russia, 8.

In Table 3, we can see that the average value of indicators of environmental performance of sustainable development of companies is relatively declining and that the value of the standard deviation, i.e. deviations between companies are relatively reduced, leading to the conclusion that the companies are working on development of management and reporting on environmental performance indicators of sustainable development, but not to a sufficient extent.

Table 3 Descriptive measures of indicators of environmental performance of sustainable development

Indicators	2012.	2013.	2014.	2015.	2016.	2017.	2018.	2019.	2020.	
E1	Min	9.80	9.80	10.00	10.90	11.43	11.47	12.01	12.88	12.90
	Max	678,181.00	507,851.00	532,784.00	473,156.00	657,900.00	660,053.00	687,511.00	690,888.00	692,455.00
	M	75,177.95	63,506.40	61,282.29	54,670.94	65,509.69	65,742.31	73,271.36	74,361.85	75,078.32
	SD	161,762.18	134,405.35	131,271.44	111,691.95	135,018.85	135,112.16	154,014.79	155,778.88	156,575.26
E2	Min	0.02	0.05	0.05	0.06	0.03	0.07	0.08	0.10	0.12
	Max	29,152.00	31,623.00	28,384.00	22,858.00	26,700.00	27,020.00	27,460.00	27,504.00	27,540.00
	M	2,318.27	2,385.50	2,385.73	2,343.00	2,509.09	2,456.20	2,438.61	2,458.53	2,478.26
	SD	5,871.33	6,113.81	5,969.87	5,686.11	5,970.49	5,834.07	5,808.68	5,844.16	5,888.48
E3	Min	2.98	11.86	35.78	8.82	9.16	9.12	9.13	9.42	9.58
	Max	2,125,500.0	2,126,000.0	2,120,000.0	2,145,000.0	2,075,000.0	2,090,000.0	2,140,000.0	2,148,900.0	2,160,020.0
	M	196,179.98	194,344.70	194,632.34	189,561.37	190,219.18	188,684.66	186,056.18	186,306.96	186,807.92
	SD	451,159.91	450,483.99	448,958.13	435,871.92	431,907.88	426,775.97	426,144.47	428,065.35	429,533.61
E4	Min	165.12	160.12	158.66	156.84	158.14	162.36	160.08	165.12	160.12
	Max	89,777,205.0	89,801,520.0	89,706,102.0	89,534,858.0	88,238,279.0	84,558,776.0	81,256,217.0	89,777,205.0	89,801,520.0
	M	3,588,523.5	3,533,265.9	3,428,474.6	3,462,106.6	3,397,381.3	3,386,247.6	3,321,533.1	3,588,523.5	3,533,265.9
	SD	13,448,245.8	13,185,827.3	12,869,750.4	12,856,368.9	12,617,800.4	12,252,343.8	11,905,500.3	13,448,245.8	13,185,827.3
E5	Min	0.00	0.00	0.00	0.02	0.01	0.01	0.01	0.00	0.00
	Max	18.17	20.05	37.37	35.20	37.20	37.04	36.87	18.17	20.05
	M	2.00	2.32	2.67	2.42	2.43	2.40	2.40	2.00	2.32
	SD	3.21	3.86	5.88	5.21	5.43	5.40	5.38	3.21	3.86
E6	Min	9.70	8.80	8.50	5.90	6.40	6.45	6.55	6.58	7.05
	Max	460,160.00	448,902.00	452,000.00	401,253.00	443,700.00	356,800.00	335,800.00	335,961.00	336,008.00
	M	42,083.47	41,206.57	41,137.22	38,878.18	40,958.43	37,116.13	35,932.14	36,100.24	36,267.94
	SD	90,769.08	89,607.24	91,423.67	82,604.71	91,537.20	82,306.13	78,451.46	78,719.86	79,028.17
E7	Min	1.10	0.80	0.80	0.60	1.00	1.01	1.20	1.25	1.28
	Max	180,025.00	175,950.00	198,200.00	215,200.00	256,225.00	236,400.00	241,700.00	246,352.00	246,500.00
	M	12,502.39	12,329.71	12,839.24	13,031.31	15,046.49	14,905.51	15,200.91	15,289.33	15,366.70
	SD	37,335.50	37,142.44	39,511.19	40,096.70	48,814.35	46,752.20	47,158.89	47,531.80	47,556.52
E8	Min	9.10	9.90	8.60	7.10	7.50	8.90	8.70	9.10	9.90
	Max	13,500,000.0	14,800,000.0	14,800,000.0	13,000,000.0	13,600,000.0	13,700,000.0	13,800,000.0	13,500,000.0	14,800,000.0
	M	883,739.16	913,842.58	925,504.10	919,533.13	918,400.65	952,729.06	978,297.58	883,739.16	913,842.58
	SD	2,405,677.6	2,535,374.6	2,589,780.8	2,517,964.0	2,518,329.4	2,662,261.0	2,795,825.3	2,405,677.6	2,535,374.6
E9	Min	0.00	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
	Max	8.00	7.00	7.00	8.00	8.00	8.00	8.00	8.00	7.00
	M	3.70	3.77	4.20	4.62	4.75	4.97	5.18	3.70	3.77
	SD	1.68	1.64	1.76	1.66	1.56	1.67	1.71	1.68	1.64

Based on the conducted analysis, it has been determined that the companies are heterogeneous in terms of reporting on environmental performance indicators of sustainable development, which confirms Hypothesis 1.

The results obtained by the research have been statistically processed with an adequate selection of statistical methods, in order to provide an optimal model of perceiving the dependence and differences between the analyzed data obtained in the research. Descriptive and inferential statistical analyses have been used in statistical processing. Statistical data processing has been performed using the package for statistical data processing in the social sciences SPSS (SPSS, version 21.0). In order to test the second research hypothesis which predicts that reporting on environmental performance indicators of sustainable development significantly affects the indicators of profitability (rate of return on total assets - ROA), multiple linear regression has been applied.

Before applying multiple linear regression, it is important to determine the degree of agreement between the environmental performances in the sustainable development report. The results of the correlation analysis of environmental performance are shown in Table 4.

Table 4 Results of correlation analysis of environmental performance

	E1	E2	E3	E4	E5	E6	E7	E8	E9
E1	1	0.431 (0.000)	-0.062 (0.049)	-0.103 (0.016)	-0.067 (0.021)	-0.037 (0.094)	0.391 (0.000)	0.480 (0.000)	-0.050 (0.012)
E2	0.431 (0.000)	1	0.057 (0.087)	-0.068 (0.012)	0.022 (0.005)	0.200 (0.000)	0.568 (0.000)	0.920 (0.000)	0.155 (0.000)
E3	-0.062 (0.049)	0.057 (0.087)	1	0.251 (0.000)	-0.066 (0.026)	-0.033 (0.048)	0.168 (0.000)	0.042 (0.034)	0.886 (0.000)
E4	-0.103 (0.016)	-0.068 (0.112)	0.251 (0.000)	1	-0.076 (0.079)	0.496 (0.000)	-0.041 (0.040)	-0.071 (0.099)	-0.210 (0.000)
E5	-0.067 (0.021)	0.022 (0.005)	-0.066 (0.026)	-0.076 (0.079)	1	0.327 (0.000)	0.141 (0.001)	0.011 (0.001)	-0.056 (0.091)
E6	-0.037 (0.094)	0.200 (0.000)	-0.033 (0.048)	0.496 (0.000)	0.327 (0.000)	1	0.338 (0.000)	0.174 (0.000)	0.045 (0.023)
E7	0.391 (0.000)	0.586 (0.000)	0.168 (0.000)	-0.041 (0.040)	0.141 (0.001)	0.338 (0.000)	1	0.556 (0.000)	0.215 (0.000)
E8	0.480 (0.000)	0.920 (0.000)	0.042 (0.034)	-0.071 (0.099)	0.011 (0.001)	0.174 (0.000)	0.556 (0.000)	1	0.102 (0.017)
E9	-0.050 (0.012)	0.155 (0.000)	0.886 (0.000)	0.210 (0.000)	-0.056 (0.091)	0.045 (0.023)	0.215 (0.000)	0.102 (0.017)	1

Based on the results of the correlation analysis, it can be concluded that the highest degree of correlation exists between energy efficiency (E2) and the weight of waste by type and method of disposal (E8), followed by the correlation between the total water abstraction by source (E3) and the total number of significant pollutions (E9). A high degree of correlation exists between energy efficiency (E2) and the measured amount of wastewater (E7), as well as between the measured amount of wastewater (E7) and the weight of waste by type and method of disposal (E8). Through the correlation analysis, it has been observed that there is an individual dependence between environmental performances in the sustainable development reports of the European companies, which means that the improvement of one environmental performance affects the improvement of other environmental performances.

Table 5 presents the values of the following indicators: - Pearson's coefficient of simple linear regression (R). It is 0.406 which shows a linear relationship between dependent and independent variables. Since the correlation coefficient is positive, the relationship is

positive, i.e. with the improvement of the environmental performance indicators of sustainable development, there is an improvement in the rate of return on total assets - ROA. The coefficient of determination (R^2), which determines the percentage of variability of the dependent variable "ROA - rate of return on total assets", is explained by a model that includes independent variables "indicators of environmental performance of sustainable development". In this case, that percentage is 65%. - F test (31.629) and p (0.000) represent the achieved significance level. As $p < 0.0005$, which is less than the standard significance level of 0.05, we may conclude that the regression model is statistically significant.

Table 5 Results of the impact of environmental performance indicators of sustainable development on the rate of return on total assets (ROA)

R	R^2	F-mecm	p
0.406	0.650	31.629	0.000

Table 6 presents the values of the Beta coefficients of the independent variable. The highest Beta coefficient of the independent variable has the indicator "E4" (0.237), which means that the variable "E4" contributes the most to the prediction of the dependent variable "ROA - rate of return on total assets". This means that with greater control and informing stakeholders about the indicator of the value of direct greenhouse gas emissions, the company's profitability increases. After indicator "E4", the contribution of predicting the dependent variable "ROA" is as follows: indicator "E3" (0.217), "E5" (0.128), "E7" (0.102), "E1" (-0.076), "E2" (-0.070), "E8" (-0.053), "E9" (-0.042) and "E6" (0.027). In column p, we have estimated the statistical significance of each independent variable in the regression equation separately. We can see that for all independent variables $p < 0.05$ and that they are statistically significant in the model, except for the independent variable "E7" (0.067), which has no statistically significant contribution to the model, because $p > 0.05$. Reporting on all environmental performance of sustainable development creates a good image of the company, which leads to greater interest of stakeholders and support of the surrounding community. Community support is realized in a form of business licenses and provision of necessary resources to the company.

Table 6 Results of the impact of individual indicators of environmental performance of sustainable development on the rate of return on total assets (ROA)

Indicators	Unstandardized B	Beta	P
(Constant)	0.364		0.088
E1	-1.162	-0.076	0.013
E2	-1.152	-0.070	0.017
E3	3.748	0.217	0.016
E4	5.752	0.237	0.000
E5	2.710	0.128	0.004
E6	0.438	0.027	0.043
E7	1.839	0.102	0.067
E8	-0.870	-0.053	0.017
E9	-0.715	-0.042	0.040

The analysis has found that the indicators of environmental performance of sustainable development individually significantly affect the rate of return on total assets - ROA, except for the indicator "E7", which has no statistical significance. Based on the conducted analysis, it can be concluded that Hypothesis 2 is partially confirmed. This leads to the following statement: If the company is constantly working on implementing and expanding the environmental performance reporting system for the purpose of sustainable development, its profitability is not questioned, but significant profit growth is measured. With profit growth, the company is theoretically considered to be able to distribute higher dividends, which positively affects stock returns and increases in their value. Relatively speaking, higher profitability means higher company value. High profitability is also one way for a company to achieve prosperity for its shareholders, as it leads to a high rate of return for investors. Investors therefore constantly monitor the growth of profits, the growth of the company's value and its environmental performance, in order to make an investment decision.

The results of this research are in accordance with Purbawangsa & Suprasto (2019), Wardhany, Hermuningsih & Wiyono (2019) and Sulistyono & Yuliana (2019), who state that environmental performance positively affects the company's profitability, which positively affects its value. A high rate of return on total assets employed - ROA is one of the things that investors look at before providing equity funds to a company. If a company has high profitability, the company is considered to have good future prospects because it is considered capable of providing returns to its shareholders.

5. CONCLUSION

This study analyzes the impact of reporting on environmental performance indicators of sustainable development on the profitability of companies. Analyzing the average values of indicators of environmental performance of sustainable development of companies, it can be concluded that due to the transience of time, the value has decreased relatively. However, the discrepancies between the values of environmental performance indicators have relatively decreased, leading to the conclusion that companies are working on the development of management and reporting on environmental performance indicators of sustainable development, but not to a sufficient extent. The analysis has found that the companies are heterogeneous in terms of reporting on environmental performance indicators of sustainable development.

Multiple linear regression has been used to examine the impact of reporting on sustainable development environmental performance indicators on profitability indicators (rate of return on total assets - ROA). Since the Pearson's coefficient of simple linear regression is 0,406, it can be said that with the improvement of the environmental performance indicators of sustainable development, there is an improvement in the rate of return on total assets - ROA. Based on the results of the analysis of collected and processed data, it can be concluded that the indicators of environmental performance of sustainable development individually significantly affect the rate of return on total assets - ROA, except for indicators "Measured wastewater (E7)", which has no statistical significance.

The data sources used in this study are secondary data collected in the available Sustainable Development Reports available in the database of the Organization for Standardization (Global Reporting Initiative) in the period from 2012 to 2020. (<https://www.globalreporting.org/database>). The lack of a sample in this survey is limited

to energy sector companies, so the companies from other industries were not covered by this survey.

The research showed that the reporting of the European energy sector companies on environmental performance indicators in the report on sustainable development contributes not only to socially responsible behavior, but also to increasing profitability. This is important for both managers and investors. With this reporting, managers can contribute to a more responsible impact of the company on the environment and increase profits. Investors are interested in the company's ability to make a profit even before investing capital, because that will provide higher dividends. Since the reporting on environmental performance indicators affects the company's profitability, it is important for investors to know whether the company's image is based on good environmental performance indicators and thus contribute to the community and the well-being of investors.

Future research on this topic can be extended to other geographical areas, and even conducted on a global scale, and other activities may be included in the research. Also, the impact of other non-financial performance (e.g. social, economic, corporate governance performance, etc.) reported in the Sustainability Report on the profitability of companies can be observed. The independent variables in this study explain only the 65% dependent variable, and there are still 35% of variables outside the model that can explain the company's profitability. In addition, it is possible to use other indicators of profitability, especially those based on the cash flow concept (e.g. CFROI, present value of future cash flows, CVA) or economic profit (EVA), which opens the possibility of research in volatile, crisis conditions or allows binding for certain capital markets.

REFERENCES

- Albertini, E. (2013). Does environmental management improve financial performance? A meta-analytical review. *Organization & Environment*, 26(4), 431-457. <https://doi.org/10.1177/1086026613510301>
- Ali, S. M., Arafin, A., Moktadir, M. A., Rahman, T., & Zahan, N. (2018). Barriers to reverse logistics in the computer supply chain using interpretive structural model. *Global Journal of Flexible Systems Management*, 19(1), 53-68. <https://doi.org/10.1007/s40171-017-0176-2>
- Ameer, R., & Othman, R. (2012). Sustainability practices and corporate financial performance: A study based on the top global corporations. *Journal of Business Ethics*, 108(1), 61-89. <https://doi.org/10.1007/s10551-011-1063-y>
- Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*, 32(3), 794-816. <https://doi.org/10.5465/amr.2007.25275520>
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360-387. <https://doi.org/10.1108/09600030810882816>
- Chavez, R., Yu, W., Feng, M. & Wiengarten, F. (2016). The effect of customer-centric green supply chain management on operational performance and customer satisfaction. *Business Strategy and the Environment* 25(3), 205-220. <https://doi.org/10.1002/bse.1868>
- Deng, X., & Cheng, X. (2019). Can ESG Indices Improve the Enterprises' Stock Market Performance - An Empirical Study from China. *Sustainability*, 11(17), 4765. <https://doi.org/10.3390/su11174765>
- Dixon-Fowler, H. R., Slater, D. J., Johnson, J. L., Ellstrand, A. E., & Romi, A. M. (2013). Beyond "does it pay to be green?" A meta-analysis of moderators of the CEP-CFP relationship. *Journal of Business Ethics*, 112, 353-366. <https://doi.org/10.1007/s10551-012-1268-8>
- Driessen, P. H., Hillebrand, B., Kok, R. A. W., & Verhallen, T. M. M. (2013). Green new product development: The pivotal role of product greenness. *IEEE Transactions on Engineering Management*, 60(2), 315-326. <https://doi.org/10.1109/TEM.2013.2246792>
- Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S. J., Shibin, K. T., & Wamba, S. F. (2017). Sustainable supply chain management: Framework and further research directions. *Journal of Cleaner Production*, 142, 1119-1130. <https://doi.org/10.1016/j.jclepro.2016.03.117>

- Duque-Grisales, E., & Aguilera-Caracuel, J. (2019). Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. *Journal of Business Ethics*, 168, 1-20. <https://doi.org/10.1007/s10551-019-04177-w>
- Endrikat, J., Guenther, E., & Hoppe, H. (2014). Making sense of conflicting empirical findings: A meta-analytic review of the relationship between corporate environmental and financial performance. *European Management Journal*, 32(5), 735-751. <https://doi.org/10.1016/j.emj.2013.12.004>
- Escrig-Olmedo, E., Muñoz-Torres, M. J., Fernández-Izquierdo, M. A., & Rivera-Lirio, J. M. (2017). Measuring corporate environmental performance: A methodology for sustainable development. *Business Strategy and the Environment*, 26(2), 142-162. <https://doi.org/10.1002/bse.1904>
- European Commission (2011) *Green Paper: An EU framework for law and justice*. Available: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0164:FIN:CS:HTML>
- Féres, J., & Reynaud, A. (2012). Assessing the impact of formal and informal regulations on environmental and economic performance of Brazilian manufacturing firms. *Environmental and Resource Economics*, 52, 65-85. <https://doi.org/10.1007/s10640-011-9520-8>
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210-233. <https://doi.org/10.1080/20430795.2015.1118917>
- Friedman, M. (2009). *Capitalism and Freedom*. University of Chicago Press, Fortieth Anniversary Edition.
- Gautama, B. P., & Haryati, Y. (2014). Pengaruh Struktur Kepemilikan dan Kebijakan Hutang Terhadap Kebijakan Dividen Pada SubSektor Kontruksi Dan Bangunan Yang Terdaftar Di BEI [The Influence of Ownership Structure and Debt Policy on Dividend Policy in the Construction and Buildings Sub-Sector Listed on the IDX]. *IMAGE*, 3(2), 154-168. <https://doi.org/10.17509/image.v3i2.1123>
- Geng, R., Mansouri, A., & Aktas, E. (2017). The relationship between green supply chain management and performance: A meta-analysis of empirical evidences in Asian emerging economies. *International Journal of Production Economics*, 183, 245-258. <https://doi.org/10.1016/j.ijpe.2016.10.008>
- Global Reporting Initiative (2016). *Reporting Principles and Standards Disclosures*. Available: <https://www.globalreporting.org/>
- Greene, W. H. (2012). *Econometric Analysis*. Seventh ed. Prentice Hall, New York University.
- Horváthová, E. (2010). Does environmental performance affect financial performance? A meta-analysis. *Ecological Economics*, 70(1), 52-59. <https://doi.org/10.1016/j.ecolecon.2010.04.004>
- King, A. A., & Lenox, M. J. (2001). Does it really pay to be green? An empirical study of firm environmental and financial performance. *Journal of Industrial Ecology*, 5(1), 105-116. <https://doi.org/10.1162/108819801753358526>
- Krechovsk, M. (2017). *Vliv koncepcie udržitelnosti na finanční výkonnost podniku a její měření. [The impact of the concept of sustainability on the financial performance of the company and its measurement]*. Habilitační práce, Technická univerzita v Liberci, Ekonomická fakulta. Available: https://dspace.tul.cz/bitstream/handle/15240/21314/Habilita%C3%A8n%C3%AD%20pr%C3%A1ce_Krechovsk%C3%A1_pdf.pdf?sequence=1&isAllowed=y
- Krstić, B., & Bonić, Lj. (2017). *Poslovna analiza i kontrola – instrumenti unapređenja konkurentske prednosti preduzeća [Business analysis and control - instruments for improving the competitive advantage of the company]*. Ekonomski fakultet u Nišu.
- Kuldová, L. (2011). Vliv společenské odpovědnosti na výkonnost firem [The influence of corporate social responsibility on companies performance]. *Trendy v podnikání*, 1(1), 41-48. <https://otik.uk.zcu.cz/bitstream/11025/16167/1/Kuldova.pdf>
- Lai, A., Melloni, G., & Stacchezzini, R. (2016). Corporate sustainable development: Is “integrated reporting” a legitimation strategy?. *Business Strategy and the Environment*, 25(3), 165-177. <https://doi.org/10.1002/bse.1863>
- Lee, D. D., & Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. *The Financial Review*, 44(2), 213-237. <https://doi.org/10.1111/j.1540-6288.2009.00216.x>
- Lee, K., Cin, B. C., & Lee, E. Y. (2016). Environmental responsibility and firm performance: The application of an environmental, social and governance model. *Business Strategy and the Environment*, 25(1), 40-53. <https://doi.org/10.1002/bse.1855>
- Lee, K.-H., & Min, B. (2015). Green R&D for eco-innovation and its impact on carbon emissions and firm performance. *Journal of Cleaner Production*, 108, 534-542. <https://doi.org/10.1016/j.jclepro.2015.05.114>
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance*, 72(4), 1785-1824. <https://doi.org/10.1111/jofi.12505>
- Liu, X., Dai, H., & Cheng, P. (2011). Drivers of integrated environmental innovation and impact on company competitiveness: Evidence from 18 Chinese firms. *International Journal of Technology and Globalisation*, 5(3-4), 255-280. <https://doi.org/10.1504/IJTG.2011.039767>

- Mervelskemper, L., & Streit, D. (2017). Enhancing market valuation of ESG performance: Is integrated reporting keeping its promise?. *Business Strategy and the Environment*, 26(4), 536-549. <https://doi.org/10.1002/bse.1935>
- OECD (2022) *OECD Guidelines for Multinational Enterprises*. Available: <http://www.oecd.org/daf/inv/mne/48004323.pdf>
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3). <https://doi.org/10.1177/0170840603024003910>
- Pasquini-Descomps, H., & Sahut, J. (2015). ESG Impact on a Firms: International Evidence. *Management international*, 19(2), 40-63. <https://doi.org/10.7202/1030386ar>
- Pérez-López, D., Moreno-Romero, A., & Barkemeyer, R. (2015). Exploring the relationship between sustainability reporting and sustainability management practices. *Business Strategy and the Environment*, 24(8), 720-734. <https://doi.org/10.1002/bse.1841>
- Porter, M. E., & Van der Linde, C. (2011). Green and competitive-ending the stalemate. *Harvard Business Review*, 73(5), 119-134. <https://doi.org/10.4236/oalib.1103363>
- Purbawangsa, I. B. A., & Suprasto, H. B. (2019). The Role of Profitability in Meditating Influences Good Corporate Governance, Business Risk, Corporate Social Responsibility, and Firm Value of Banking Companies Listed in Indonesian Stock Exchange. *Russian Journal of Agricultural and Socio-Economics Sciences*, 9(93), 241-251. <https://doi.org/10.18551/rjoas.2019-09.26>
- Schaltegger, S., & Synnestevedt, T. (2002). The Link between Green and Economic Success: Environmental Management as the Crucial Trigger between Environmental and Economic Performance. *Journal of Environmental Management*, 65(4), 339-346. <https://doi.org/10.1006/jema.2002.0555>
- Scott, W. R. (2010). *Financial Accounting Theory*. Edition 7th, Toronto: Pearson, University of Waterloo.
- Sekaran, U. (2011). *Research Methods for business*. Jakarta: Salemba Empat.
- Sulistyo, F., & Yuliana, I. (2019). Effect of Profitability and Capital Adequacy on Firm Value with Islamic Social Report (ISR) as Moderating Variable (Study on Indonesian Islamic Commercial Banks 2014-2018). *Journal of Management and Finance*, 2(2), 238-255. <https://doi.org/10.33059/jmk.v8i2.1703>
- Tang, M., Walsh, G., Lerner, D., Fitzg, M. A., & Li, Q. (2018). Green innovation, managerial concern and firm performance: An empirical study. *Business Strategy and the Environment*, 27(1), 39-51. <https://doi.org/10.1002/bse.1981>
- Tarmuji, I., Maelah, R., & Tarmuji, N. H. (2016). The impact of environment, social and governance (ESG) on economic performance: Evidence from ESG scores. *International Journal of Trade, Economics and Finance*, 7, 67-74. <https://doi.org/10.18178/ijtef.2016.7.3.501>
- United Nations Global Compact. *The Ten Principles of the UN Global Compact*. Available: <https://www.unglobalcompact.org/what-is-gc/mission/principles>
- Wagner, M., & Schaltegger, S. (2004). The Effect of Corporate Environmental Strategy Choice and Environmental Performance on Competitiveness and Economic Performance: An Empirical Analysis in EU Manufacturing. *European Management Journal*, 22(5), 557-572. <https://doi.org/10.1016/j.emj.2004.09.013>
- Wardhany, D. D. A., Hermuningsih, Sri., & Wiyono, Gendro. (2019). The Effect of Profitability, Leverage, and Company Size on Firm Value (Empirical Study of Companies Joined in LQ45 in the 2015-2018 period). *Ensiklopedia of Journal*, 2(1), 217-224. <https://doi.org/10.33559/eoj.v2i1.388>
- Weston, J. F., & Copeland, T. E. (1992). *Financial Theory and Corporate Policy i Decisions 1992*. Addison-Wesley Publishing, California.
- Wong, C. W. Y., Wong, C. Y. & Boon-itt, S. (2017). How does sustainable development of supply chains make firms lean, green and profitable? A resource orchestration perspective. *Business Strategy and the Environment*, 27(3), 375-388. <https://doi.org/10.1002/bse.2004>
- Zhu, Q., Sarkis, J., & Lai, K. (2013). Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *Journal of Purchasing & Supply Management*, 19(2), 106-117. <https://doi.org/10.1016/j.pursup.2012.12.001>
- Zhu, Q., Sarkis, J., & Lai, K.H. (2015). Reprint of "Supply chain-based barriers for truck-engine remanufacturing in China". *Transportation Research Part E: Logistics and Transportation Review*, 74, 94-108. <https://doi.org/10.1016/j.tre.2014.12.004>

ANALIZA UTICAJA IZVEŠTAVANJA O POKAZATELJIMA EKOLOŠKIH PERFORMANSI NA PROFITABILNOST EVROPSKIH KOMPA NIJA

Istraživanje u ovom radu je usmereno na analizu uticaja izveštavanja o pokazateljima ekoloških performansi u kontekstu održivog razvoja na profitabilnost kompanija. Istraživanje se fokusira na 60 kompanija energetskeg sektora u Evropi u periodu 2012-2020. godine. Za prikupljanje podataka koristili su se izveštaji o održivom razvoju kompanija dostupnih u bazi podataka Globalne inicijative za izveštavanje (Global Reporting Initiative – GRI). Nezavisne varijable u ovom istraživanju su devet pokazatelja ekoloških performansi održivog razvoja. Zavisna varijabla je profitabilnost kompanija, koja se meri stopom prinosa na ukupno angažovana sredstva (ROA). U analizi uticaja izveštavanja o pokazateljima ekoloških performansi u kontekstu održivog razvoja na profitabilnost kompanija energetskeg sektora u Evropi primenjena je metoda višestruke linearne regresije. Empirijski rezultati ovog istraživanja su pokazali da izveštavanje o pokazateljima ekoloških performansi u cilju ostvarivanja održivog razvoja pozitivno utiče na pokazatelje profitabilnosti kompanija.

Ključne reči: izveštavanje, održivi razvoj, ekološke performanse i profitabilnost.