# **GREEN ACCOUNTING - SUSTAINABLE DEVELOPMENT ASPECTS**

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Abstract:Ensuring continuous development is a recognized worldwide need. Over time, concerns for sustainable development have embraced all economic, social and human spheres, becoming one of the primary objectives of humanity. Strategies applied for economic development must take into account the environmental limits offered by the environment and the resources of the planet. Each country must comply with international sustainable development requirements designed to protect natural resources, which are limited. By striking a balance between the social, ecological and economic aspects at national level, through research efforts, we want to highlight the efforts to move towards a green economy (green economy) at the legislative level, to analyze the effects of reforms and measures taken by the authorities environments to comply with environmental rules. This in the context of the sustainability phenomenon and the emphasis placed on it in corporate governance. The main objective is to identify the consequences of non-compliance with the norms imposed according to the legal instruments applied for environmental protection and their impact on the representations of the accounting and social image of the analyzed entities.

Keywords: Green Accounting, Sustainable Development, Green Economy, Environmental Aspects, Environmental Law.

# JEL CLASSIFICATION: Q53, Q56, Q58

# **INTRODUCTION**

The implementation of economic activities in an ecological context, in most cases has a negative impact on the environment. Nowadays, we can say with rigor that the worldwide economic activity has reached the level of significant proportions affecting the environment, which is a good reason to seek solutions to contribute to the development of a green economy both at national level and at international level. In this respect, sustainability strategies have been developed over time and have to be implemented by each Member State. Thus, issues in the field of social, economic and environmental development, as well as the structuring of public policy in the interests of a green economy are of particular interest.

Although the notion of environmental accounting has been discussed globally since the 1970s, in Romania it is a subject of interest in research only after the year 2000.

The role of green accounting within an entity is to increase the efficiency of management's actions to protect the environment and to distinguish distinctly environmental revenues and expenditures by including them both in the profit and loss account and balance sheet as well as in explanatory notes.

With the accession of Romania to the European Union, a major national interest has been manifested on the protection of the environment, so that strategies and measures for sustainable development from the legislative point of view were elaborated and implemented. Companies, wishing to create the most favorable social and accounting image, adopt green accounting and social responsibility practices. The implementation of environmental accounting is primarily aimed at improving the performance-environment ratio, where an important part is the efficiency of investments in technologies and the promotion of some less polluting production processes.

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Starting from the analysis of the alignment of the Romanian legislation in the field of sustainable development with the European legislation and the highlighting of the researches carried out in this field, we applied a constructivist research methodology in the realization of the research approaches for analyzing the green accounting issue in the field of extractive industry and production and supply electricity from the entities listed on the Bucharest Stock Exchange. The object of the research was focused on the financial and accounting information found in the financial statements of the entities analyzed, in order to identify its importance in creating a favorable image for the entities from the accounting and social point of view, increasing the level of trust of the users. The answer to the objective is found in the Results and Discussion section, followed by the Conclusions section.

# BACKGROUND

# Legislative Framework in a National Context and its Harmonization with the European Directives

Given the scale of the sustainable development phenomenon, the central objectives of the European Union were to develop an environmental policy to improve the problem of excessive consumption of natural resources. Thus, the European Waste Management Directive (Directive 2006/12/EC), which was replaced by European Directive 2008/98/EC, was drafted. In order for Romania to comply with EU requirements, it has developed a national legislative framework in which it took over the provisions of the Waste Directive (Decision No 1470 of 9 September 2004, Order No 1364/1499 of 14 December 2006, Law no. 211 of November 15, 2011, and others).

Another European Directive has been developed for the storage of waste (Directive 1999/31/EC), transposed into national law by a series of normative acts (Decision No. 349 of 21 April 2005, subsequently amended and supplemented by Decision 1292 of 2010, etc.).

Waste regulations in the extractive industries are aligned with directives through two pieces of legislation: Decision no. 856/2008 and Order 2042/2934/180 of 2010.

#### Similar Studies in the Studied Field

We note the focus of research on the current challenges in the field of sustainable economic, social and environmental development in order to formulate recommendations for public policies related to reducing the negative effects of economic development on the environment. Some believe that the involvement of activists and environmental NGOs is a clear sign of greening the economy (Vertakova & Plotnikov, 2017).

Green accounting contributes to the assessment of sustainable economic growth, with the indication that sustainable development should be measured with the use of standardized alternative physical indicators. (Bartelmus, 1999). Later, he studies how the SEEA acts and influences progress in environmental accounting. (Bartelmus, 2014).

Numerous studies have been conducted to determine the relationship between environmental performance and environmental reporting. (Cohen et al, 1995; Stanwick & Stanwick, 1998; Pattern, 2002; Melynk et al., 2002; Al-Tuwaijri et al., 2003; Filbeck & Gorman, 2004; Elsayed & Lizal, 2005). Regulators of accounting and securities are aware of the importance of effective environmental reporting, so deficiencies in such reporting are conducted by many researchers (Franco, 2001; Chan-Fishel, 2002).

In the context of a sustainable economy, national research was conducted on the implication of environmental factors on economic efficiency (Botezatu & Andrei, 2012). Research from Romania proves that there is a convergence trend of sustainable and financial reporting (Camp, 2005, Apostol, 2008).

# METHODOLOGY RESEARCH

In order to meet the objective of the research, we identified, in the *first phase*, the size of the sample to be studied. It consists of all companies listed on the Bucharest Stock Exchange in the

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main market segment, the Standard and Premium categories in two fields of activity: extractive industry and electricity production and supply. Of the total number of entities in the two fields of activity, the analyzed sample represents 86% and consists of 6 companies of national and international interest (extractive industry: SC DAFORA SA, ROMPETROL WELL SERVICES SA, SNGN ROMGAZ SA, OMV PETROM SA; production and supply of electricity: CNTEE TRANSELECTRICA, SN NUCLEARELECTRICA SA).

**Phase II** of the study consists in analyzing the social image of the sample companies by making 180 observations during 5 years (2012-2016) on how to report social corporate governance, identifying whether companies refer to social responsibility and to environmental protection in annual reports (including whether they specify environmental investments or environmental fines), whether there is a separate heading on social responsibility on their website (a box on which the Corporate Governance Code specifies for listed companies) and whether they publishes a statement of compliance with the Corporate Governance Code. The results of these observations show whether the social image of the companies in the sample is favorable through the use of green accounting and the application of a corporate social governance policy.

**Phase III** of the current research includes 210 financial-accounting observations over the 5 years of the sample survey. The aim is to identify the existence of accounting entries in the accounting policies of companies of green accounting practices. We also observed the way in which revenue and expenditure on sustainable development (in the Profit and Loss Account) are reflected, but also the elements of receivables and liabilities with environmental protection (in the Balance Sheet) and their details in the Explanatory Notes. After studying the observations, we can conclude on how the companies under review use green accounting practices and whether these practices influence their accounting and social image.

# **RESULTS AND DISCUSSION**

By making the first 180 observations on the sample, we find that all companies under review are adopting responsible corporate governance, their annual reports including a corporate governance statement and references to social responsibility. However, in these references, details of investments made for environmental protection (waste disposal, cleaning of contaminated sites, etc.) are not specified, except for half of the companies in the sample. Moreover, notices on Environmental Guard fines for non-compliance with environmental legislation are not presented to any of the companies.

The level of quantifiable investments reported in the Social Responsibility section of the annual report was 2015 over 115% in 2015, while in 2016 they fell by almost 16%.

The presence in the Annual Report of Investment Claims for Sustainable Development and the absence of any mention of fines may indicate that companies are interested in presenting a more favorable social image, although we cannot say this.

Surprisingly, in all 210 observations relating to the way in which the accounting information on sustainable development is reflected (according to Phase III of the Research Methodology), data on accounting policies specific to green accounting and their way of accounting could not be identified reflected in the financial statements. In fact, investments for sustainable development are insignificant amounts, so they are not presented separately in the Explanatory Note. However, environmental expenditure is specified in the annual reports although they are not separately reflected in the financial statements. So, looking only at the financial statements, it is hard to say that companies do not adopt any environmental accounting practices, whether or not they are presented under the accounting policy box of the annual report.

Because the results obtained cannot be quantified, we will continue our research to obtain results to substantiate the assumption that the accounting image has changed due to the fact that the entities under review do not adopt green accounting practices.

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# CONCLUSION

The green accounting currently applied in the accounting of Romanian companies and the requirements for disclosing information through published financial statements and other documents that compose the annual report of companies do not reveal sufficient information to make it possible to quantify the impact of the green economy and sustainable development on the financial position and the overall result of an entity. We note that new developments in the financial reporting framework are needed in this respect, including developments in organizational culture regarding the notion of green accounting. However, as regards the social image of the entities under consideration, we can say that they are working to comply with the requirements of the Corporate Governance Code. The results show that there is a tendency to improve the social image in terms of investments made during the analyzed period for sustainable development, by adapting environmental protection policies and social responsibility to the specifics of the activity.

The limits of our research consisted mainly of the limited number of companies in the sample and the fact that the data were manually removed and processed from the Bucharest Stock Exchange database and no other economic factors were taken into account could influence the results. Another possible limit can be considered to be the financial reporting framework (IFRS) as it allows entities to briefly present financial information that is not considered to be material, which is why the results of the research could be influenced.

Additional studies may be undertaken for entities belonging to other areas of activities on the Bucharest Stock Exchange or by studying the effect of not adopting green accounting on the share price on the capital market and the level of investor confidence. Also, a future study can be conducted on the same entities, using the interview method, to obtain relevant data from company managers about environmental practices and how they recognize, assess and account for operations engaged in related to the protection of the environment.

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