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OPPORTUNITIES FOR EXPANDING THE APPLICATION OF ENVIRONMENTAL MANAGEMENT AND AUDIT SCHEME IN BULGARIA

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Abstract

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The purpose of the report is to review the application of the Environmental Management and Audit Scheme /EMAS/ in Bulgaria and to assess the attitude of Bulgarian business for its implementation and on this basis to propose opportunities for extension of its application. The tasks related to the achievement of the goal are: 1) Review of the implementation of the Environmental Management and Audit Scheme in our country 2) Assessment of attitudes of representatives of Bulgarian companies from EMAS application. 3) On the basis of the summarized and analyzed information to propose general conclusions about the possibilities for its development in our country. Can be drawn conclusions that there are opportunities for wider dissemination of EMAS in Bulgaria, which can be enhanced by a more active state policy in this field by providing tax and institutional relieves to companies that have implemented these standards; by strengthening institutional support through establishing centers which provide competent and professional advice to businesses on the various opportunities to improve its environmental performance; by conducting information campaigns aimed at consumers and producers through which they are informed about the different environmental instruments, the benefits of their application and their importance for environmental protection.

Key words: environmental; management; system; audit scheme

Introduction

Technology development, growing population, changing consumer habits increase significantly the pressure on the environment and its pollution, and require that appropriate eco-policy tools are created to create a sustainable and environmentally friendly economy. The European Union consistently supports this objective by applying various economic, administrative and voluntary instruments. One of the effective means of achieving a green and competitive economy are the environmental management systems, and in particular the Environmental Management and Audit Scheme /EMAS/.

The purpose of the report is to review the application of the Environmental Management and Audit Scheme in Bulgaria and to assess the attitude of Bulgarian business for its implementation and on this basis to propose opportunities for extension of its application. The tasks related to the achievement of the goal are: 1) Review of the implementation of the Environmental Management and Audit Scheme in our country 2) Assessment of attitudes of representatives of Bulgarian companies from EMAS application. 3) On the basis of the summarized and analyzed information to propose general conclusions about the possibilities for its development in our country.

Review of the Implementation of the Environmental Management and Audit Scheme in Our Country

The Eco Management and Audit Scheme (EMAS) is a voluntary EU environmental management tool implemented in the environmental policies of the EU Member States by

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European Council Regulation No 1836/93. EMAS is integrated into the legal system of the European Union and is applied directly by all EU Member States. The scheme has been available to EU businesses since 1995 but was initially limited to enterprises in industrial sectors. Since 2001, EMAS has been available to all economic sectors, including public and private services. In 2009, the Environmental Management and Audit Scheme Regulation (EC) No 1221/2009 was revised and amended to allow organizations to be further encouraged to register under this scheme. It is offered to organizations to assess, improve and report on their attitude to the environment. The EMAS scheme is actively supported by the European Union, governments and environmental ministries. Organizations registered under EMAS are seen as environmentally responsible companies. They have built-in environmental management systems and publicly announce their achievements. EMAS can be applied to all types of organizations regardless of the sector in which they operate the type of ownership and size. Organizations registered under EMAS are required to publish periodic environmental reports on the achieved results. Their accuracy and reliability are verified by independent experts – environmental verifiers. This gives organizations registered under EMAS additional recognition and improves their image. It helps the rational use of resources, minimization of pollution, increase employee involvement. The goal is look at environmental management as an ongoing process leading to a continuous improvement of environmental performance.

The Environmental Management and Auditing Scheme, along with the International Standard ISO 14001, are the main tools for building an environmental management system in companies. ISO 14001 and EMAS provide organizations with tools to gain recognition for their environmental management systems. The EMAS includes all the requirements of ISO 14001 with several additions. In the Environmental Protection Act of our country, the Environmental Management System /EMS/ is defined as "part of a common management system that includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for development, deployment, achievement, review and maintenance of environmental policy. "(EPA, 2005, Additional Provisions, point 45). The Environmental Management System (EMS) allows organizations to create a company's eco-policy aiming at a permanent reduction of environmental pollution by the organization and improving environmental elements.

Bulgarian environmental legislation is harmonized with the requirements of EU law. In Bulgaria, the main environmental legislation is the Environmental Protection Act, which introduces criteria on the possibility of carrying out activities harmful to the environment, the obligation to recover the damages, to be compensated for the suffered damages, etc. This act and the Regulation on the National Environmental Management and Auditing Scheme (NMISO) aim to certify certain organizations and to designate their products in an appropriate manner.

The National Environmental Management and Auditing Scheme (NMISO) introduce into Bulgarian legislation Regulation 761/2001/EC on the voluntary participation of organizations in the Environmental Management and Auditing Scheme (EMAS). The implementation of EMAS in our country complies with the requirements of Regulation 1221/2009 of the European Parliament on the voluntary participation of organizations in the Community Eco-Management and Audit Scheme (EMAS), Ordinance No. H-2 of 02.07.20012, the Environmental Protection Act, Decision 2011/832 / EU on EU corporate registration guidelines, registration in third countries and global registration, Decision 2013/1114 for the creation of an user manual indicating the steps required to participate in EMAS under Regulation (EC) No 1221/2009. The implementation of EMAS in our country respects the requirements of the European regulations and the Bulgarian legislation in this field.

The Minister of Environment and Water is the competent authority responsible for the registration of organizations in Bulgaria under the Environmental Management and Audit Scheme under the Environmental Protection Act (Art. 132 – Art. 136). A centralized option for the role of the Competent Authority is adopted. The Preventive Activity Directorate of the Ministry of Environment and Waters (MOEW) has a supporting role. The Bulgarian Accreditation Service is the Accreditation Body of the NMISO, which accredits independent environmental verifiers; maintains the register of accredited independent environmental verifiers; guides the assessment of compliance with the accreditation requirements of independent verifiers.

As a weakness in the organization and promotion of this environmental management system, we can point the fact that currently only eight companies are registered under EMAS in our country. Seven of companies – KMD Ltd, Metalvalius Ltd, Eco Resurs-R Ltd., RTC Ltd., AES X Ltd., Ecobulsort Ltd, Vodstroy-Plovdiv JSC – deal with the collection and transportation of various kinds of waste, pretreatment of separately collected waste, maintenance of landfills for solid household waste, disposal and recycling of waste materials in a safe, winter maintenance, sanding and snow cleaning. Only Vodstroy-Plovdiv, apart from waste management, is also engaged in construction of buildings. The companies with introduced environmental management system have advantage in public procurement for waste collection

logically explains the fact that they are the main part of the companies registered under EMAS.

One company – APEX service Ltd is occupied in the production of lifting equipment, which is a testament for the wider possibilities for implementation of EMAS among various sectors in our country.

Material and Methods

In order to assess the attitudes of representatives of Bulgarian companies for Environmental Management and Audit Scheme implementation and the presentation of the opportunities for its development, are used data from UNWE project "Investigating the needs for conducting social audit and applying standards for social and environmental responsibility in Bulgaria".

The term "attitude" is presented by social psychologists W. Thomas and F. Znaniecki in their study "On the Adaptation of Polish Migrants to the United States" /cit. from P. Neshev/. They define attitudes as preliminary thinking schemes to give a certain type of response to given incentives. People perceive attitudes as an integral part of their personality. They can be based on positive or negative views of people, events, or public processes that are the object of attitude. The impact of attitudes on the effectiveness of each activity is direct and profound, because they are a building block of motivation, personal attitude towards the activity / Neshev, Jonev/.

All attitudes are bipolar (negative or positive, favorable or unfavorable) and always have a certain intensity, which can range from hatred to love, subject to change and development. Since they are based on an individual's value system, his ideas of himself and of the world and are mental structure, they cannot be observed directly /Desev/. It is appropriate to assess them by person's behavior and the verbal self-report. The most common approach to measuring attitudes is to apply incentives in the form of questions and to record the answers received through different scales. For the purposes of the survey, it is assumed that attitudes are a psychological state of predisposition of the subject to a certain activity in certain situations, which are visualized by answering given questions revealing the respondents' attitude towards ecological standards.

Within the framework of the project, in the period 2015-2016, a survey was conducted on the attitudes and needs for implementation of EMAS in Bulgaria in which 461 legal entities gave their answers. The inquiry form was distributed electronically, using Facebook and LinkedIn social networks to effectively and cheaply research the attitudes to implement eco-standards by companies with a different subject

of activity. The questionnaire contains 26 questions which respondents answered by choosing a specific suggested answer. There is also an opportunity to indicate more than one acceptable response, which allows a more accurate assessment of participants' attitudes and needs for implementation of environmental standards, the benefits of their implementation and the main difficulties accompanying this process.

The attitude towards the implementation of eco-standards has been investigated by determining the significance that respondents attribute to these standards for more efficient development of the company. The assessment of importance influences the motivation of the managers and staff of the respective company to use them in their activities. Employee involvement in environmental issues is also explored as an important indicator of their attitudes and needs for the implementation of eco-standards in their activities. The social context in which the processes of ecologization of the economic activity in our country are developed, that is the appreciation of the Bulgarian society's willingness to accept and support the practice of the eco-standards, is also being studied. If there are positive public attitudes towards the application of these standards, it can be concluded that companies will be more personally involved and committed to their implementation.

Companies from various economic sectors are interviewed -17% provide services, 16% are from the construction industry, 9% from the IT sector, 5 provide consultancy services. The least number of respondents are from the insurance, agricultural and forestry sectors - with 1% each sector.

A large part of the surveyed companies have a long period of activity. 31% of them work over 20 years, 18% are active between 16 and 20 years, 15% offer their products and services between 10 and 15 years. Large part (21%) are new companies with a period of activity up to 5 years. About half of the respondents (47%) are micro businesses with up to 10 employees, 22% are small businesses with a staff of up to 100 and the rest are large companies.

Results and Discussions

The majority of respondents (88%) made their first certification in 2007 or afterwards Bulgaria became a member of the European Union. Companies introduce and certify an EMS as an important step in adapting to EU legislation and market. The majority of companies expect in the near future the importance of eco-standards to grow. As an evidence of this is the fact that 76% of respondents provide positive answer to the question that if they know that EMAS is an environmental management system they would have certified their organization to this standard. This is due to

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the increased importance given nationally and internationally to environmental protection, as eco-standards are linked to the implementation of measures to control and reduction of environmental pollution. Opportunities for better corporate control and management, meeting legal requirements, improving the marketing of company products and services, and enhancing competitiveness are the next reasons leading to the desire to implement environmental management systems. Highest is the percentage of those willing to implement eco-standards in the Education and Construction sector (Figure 1). All major companies with staff from 201 to 500 people would like to introduce the standards regardless of their field of activity. Largest is the share of those underestimating the role of eco-standards in firms with a staff between 100 and 200 people (Figure 2).

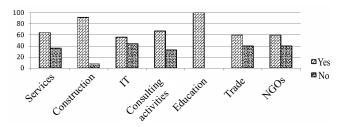


Fig. 1. Willingness to implement EMAS standard if employers know that this is an environmental management system – a division by sectors, %

Source: Own findings, based on Research Project NI 1-4/2014

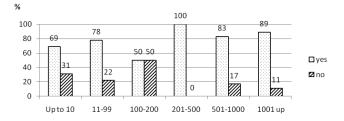


Fig. 2. Willingness to implement EMAS if employers know that it is an environmental management system – grouping of companies by number of staff

Source: Own findings, based on Research Project NI 1-4/2014

The reasons for the implementation of the eco-standards outlined by the respondents are mainly related to factors that are largely influenced by the management of the company. They are related to the desire for better environmental control over suppliers and subcontractors; improving the reduction of environmental pollution by the company and a better opportunity for preventive action; better financial results; reduction of operating expenses; increasing of operational

safety; introduction of new environmental technologies; enhancing environmental performance for foreign customers or exporting to environmentally-oriented markets.

Among the external motives are the requirements of the state policy and the national legislation; pressure from regulators because of pressure from the industry sector in which the firm operates; opportunity to participate in public procurement; creating better opportunities for marketing company's products and services on the market; improving company's environmental image and reputation; creating greater customer trust for the company; negotiating better terms when insuring and taking loans.

These motivations are realized by the respondents and the companies start the implementation of the eco-standards with the conscious need for an active environmental policy. That's why 57% of them respond negatively to the question of whether they intend to be certified by some of the eco-standards. 18% intend to introduce ISO14001, 11% EMAS and 14% SA8000. The highest percentage of those who are unwilling to be certified is among the companies providing services (69%) and NGOs (67%), which can be explained by the low level of public pressure in these spheres, lack of legal requirements for introducing eco-standards, lack of a direct link between possibilities for product and service sale options and the implementation of eco-standards. Companies from the Trade, IT, and Construction sectors have a willingness to implement standards between 29% and 38% due to their mandatory nature when participating in bids for public procurement, the need to create a better image and reputation for customers (Figure 3). Some of the large companies with more than 200 employees, regardless of the sector of activity, indicate that they intend to implement the eco-standards, while the percentage of small and medium-sized companies willing to do that is much lower. This is understandable in terms of the long and complex implementation process, as well as the high financial costs for their implementation.

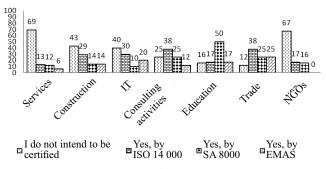


Fig. 3. Distribution of companies by desire for eco-standards certification over the next three years by sector of activity -%

Source: Own findings, based on Research Project NI 1-4/2014

As a result of the conducted survey it can be identified the main problems preventing the wider and faster spread of ecological standards in Bulgaria. As a main obstacle for the implementation and maintenance of EMAS in most sectors, employers point out the financial cause, but there are also (IT sector, education) companies that are not aware of the standards (Figure 4). The financial barrier is the leading cause for the large enterprises with 501 to 1000 people, for the micro companies with up to 10 employees and for the medium firms with staff from 11 to 200 human (Figure 5). Poor dissemination of information on eco-standards, as well as the lack of a mandatory element for their implementation are the following leading motives for their low level of use.

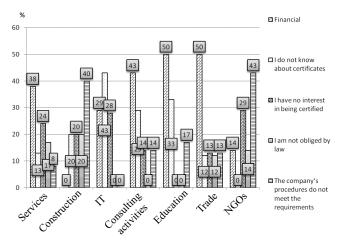


Fig. 4. Distribution of companies by sectors according to the reasons for non-implementation of eco-standards Source: Own findings, based on Research Project NI 1-4/2014

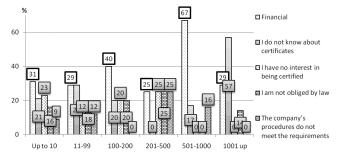


Fig. 5. Distribution of companies per number of staff according to the reason for non-implementation of eco-standards

Source: Own findings, based on Research Project NI 1-4/2014

From the interviews with company representatives that implemented one of the eco-standards as main barriers to their wider application were pointed the large financial costs of implementation, maintenance and certification, the complexity of the procedure and the large volume of documentation, the lack of state support through financial support mechanisms in the form of tax incentives and institutional support for the introduction of standards, as well as a lack of comprehensive and long-lasting information campaign for the ways of their implementation. The almost mandatory use and payment for the work of external experts, the need for significant additional investments to purchase the necessary equipment, the remuneration of the staff involved in maintaining these standards, the difficult control over suppliers and subcontractors, the complex and constantly changing laws in the field of environmental protection in the respective sector are the factors mentioned by the managers as the most important external factors that do not allow the wide and fast application of these standards in Bulgaria.

As a main reason are mentioned the poorly structured communication channels between users, manufacturers and institutions, the inadequate or lack of information campaigns with accurate and clear data about ecostandards provided by the responsible state institutions to improve the recognition and knowledge of these tools for business units and for the citizens themselves who are the end users of the products and services of the certified companies. These awareness campaigns are appropriate to offer an objective view of the real economic, environmental and social benefits for the company as a result of the introduction of an environmental management system.

The majority of the representatives of the companies that implemented the eco-standards in their activity as a barrier to their wider dissemination point the lack of adequate, precise and working requirements for the business to implement the eco-standards on the one hand and the lack of specific, clear and adequately defined control powers of the respective bodies on the other hand, and the need to create a properly functioning mechanism for imposing sanctions for non-compliance. It is underlined the need to promote good practices by companies that have implemented effective eco-standards in order to motivate other businesses in the same field to take similar actions.

The opinion of most respondents is that the Bulgarian institutions do not encourage the use of the voluntary instruments but rather prefer the measures of the control-regulatory approach. Incentives for the implementation of eco-standards are just their implementation as criteria for selecting participants in conducting some of the public procurement.

As internal organizational factors hampering the wider application of EMAS, respondents first place the lack of 920 Albena Miteva

environmental management professionals in companies and lack of administrative capacity to properly structure the projects, lack of employee engagement caused by additional obligations. The lack of skills and knowledge of management personnel regarding the implementation of this scheme leads to inadequate solutions. The voluminous documentation requires the use of a mandatory consultant, whose payment further hinders the dissemination of EMAS in our country. The need for periodic monitoring of the activity and the monitoring of the achievements leads to the fact that it is necessary to involve additional human resources with this activity and makes more expensive the application of the scheme. Difficulties in setting objectives and measuring achievements as well as taking account of environmental impacts are the other major obstacles to successful implementation of eco-standards.

Conclusions

On the basis of this analysis, the following conclusions can be drawn for the possibilities of EMAS development in Bulgaria:

Environmental issues are becoming more and more relevant for organizations and are an integral part of corporate social and environmental responsibility strategy, leading to an increase in the number of companies registered under EMAS.

Nearly three-quarters of the survey participants expect EMAS significance to grow in the coming years due to the increasing environmental problems and the need for control measures that will lead to improvement of legislation in this area and better organization of control activities between different institutional partners. Applying ecostandards will help to reduce negative corporateeco- impact, expand market opportunities, and enhance business competitiveness.

EMAS creates a better working environment and motivation among employees at all levels, improving the image of the company to all stakeholders and this will contribute to its wider dissemination in our country.

Positive impact on the expansion of the scope and increase of the number of companies registered under the EMAS in our country are the imposed mandatory requirements for the presence of such registration for the companies wishing to participate in public procurement tenders for delivery of different goods and services and the need to respond to the strengthened legal requirements in the field of environmental protection.

Strengthening the role of corporate image and reputation in consumer choice of goods and services, the need to use resources more efficiently and to reduce the negative impact on the environment from business activities leads to increased opportunities for its wider and faster distribution in our country.

There is a positive attitude towards the introduction of standards for ecologically responsible behavior of companies by end-users who are also workers in these companies, which is the basis for the wider dissemination of EMAS in Bulgaria.

Enhanced environmental culture, increased environmental pollution problems are the reason for respondents to welcome the environmentally responsible behavior of companies, and their purchases to be influenced by the fact that the commodity or service is produced by a company applying eco-standards, and in particular EMAS motivates companies to implement eco-standards.

It can be concluded that there are opportunities for wider dissemination of EMAS in Bulgaria, which can be enhanced by a more active state policy in this field by providing tax and institutional relieves to companies that have implemented these standards; by strengthening institutional support through establishing centers which provide competent and professional advice to businesses on the various opportunities to improve its environmental performance; by conducting information campaigns aimed at consumers and producers through which they are informed about the different environmental instruments, the benefits of their application and their importance for environmental protection.

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