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**ATINER's Conference Paper Series
ENV2016-1941**

**The Role of Stakeholders in the
Eco-management and Audit Scheme**

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This paper should be cited as follows:

Szyszka, B. & Matuszak-Flejszman, A. (2016). "The Role of Stakeholders in the Eco-management and Audit Scheme", Athens: ATINER'S Conference Paper Series, No: ENV2016-1941.

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www.atiner.gr

URL Conference Papers Series: www.atiner.gr/papers.htm

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ISSN: 2241-2891

24/08/2016

The Role of Stakeholders in the Eco-management and Audit Scheme

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Abstract

Membership in the European Union obliges organizations to adhere to high standards of environmental protection. Implementing environmental management standards – both – formal (e.g. certified for compliance with ISO 14001 or registered in the Eco-management and Audit Scheme – EMAS) and informal (e.g. Cleaner Production or Responsible Care) gains popularity. Environmental responsibility is not just about taking direct actions to reduce the impact on the environment. It is also essential to identify relations between groups of interests. It is necessary to ensure that the communication is effective and the flow of information is proficient – both – within the organization (e.g. between employees, the management board) and with external interested parties (e.g. customers, suppliers, inspection authorities, local community). Communication with stakeholders is particularly important in the EMAS system. EMAS requires the inclusion of the employees in the management of environmental aspects and communication information about the environmental aspects to the external stakeholders. The implementation of the organization's environmental policy often requires cooperation with various groups of stakeholders affecting the organization. The inclusion of interest groups in the environmental management system – both – those related to the market (e.g. customers, employees, suppliers, competition, creditors) and those connected with the organization at the level of building the image and credibility (e.g. local communities, NGOs, the government agencies, social activists, media) can lead to the increase of the company's attractiveness perceived by business partners. The article attempts to assess the role of stakeholders in the EMAS system. The article consists of the theoretical part and the research part. The first section is devoted to the analysis of the literature. This part describes the division of stakeholders and explains the requirements of the EMAS system in the context of various groups of stakeholders. The second part contains the results of studies that were conducted on the EMAS registered organizations. This section describes activities undertaken by organizations in terms of various groups of stakeholders. Finally, the article refers to the organization's objectives that either influence stakeholders or are carried out jointly by stakeholders.

Keywords: environmental aspects, environmental reporting, environmental interested parties and stakeholders, environmental communication

Introduction

The theory of stakeholders is an integral part of various management concepts derived from the mainstream of sustainable development. Stakeholder analysis dominates in the concept of Corporate Social Responsibility (CSR), in which interfusion of three constituents is apparent: the business and economic fraction, ethical and social fraction and environmental fraction. The system approach to environmental management is mainly based on international standards such as ISO 14001 and the European regulation Eco-management and Audit Scheme (EMAS). In both documents, the theory of stakeholders constitutes an important element. EMAS and CSR have many common features, including: the voluntariness, external communication and social dialogue, reporting of environmental performance and involvement of employees. These elements are essential for building stakeholder involvement by organizations wishing to combine business objectives with environmental objectives.

Eco-management and Audit Scheme

Eco-management and Audit Scheme is an instrument created by the European Commission designed for organizations that voluntarily want to improve their environmental performance. The EU's EMAS was first regulated by a regulation in 1993 – so-called EMAS I. In 2001 a revised regulation was issued – so-called EMAS II and then subsequently in 2009 a third version have been released – so-called EMAS III. EMAS is generally a European system but it also allows participation of organizations from outside the EU.

The regulation is a type of an act that directly involves the member countries of the European Union, committing them to create such administrative institutional and organizational conditions, that will ensure all interested organizations to voluntarily participate in EMAS [Marcinkowski 2010; Pochyluk et al. 2005a, 2005b, 2005c].

EMAS requirements are divided into two parts. The first part covers the requirements rewritten directly from the international standard EN ISO 14001:2004¹. The second part includes additional requirements specific to EMAS. Organizations wishing to apply for the registration in EMAS are obliged to take into account both types of requirements: ISO 14001, as well as additional EMAS specific requirements (including: environmental review, legal compliance, environmental performance, employee involvement, communication) [Regulation no 1221/2009]. Comparison of EMAS and

¹ Version of ISO 14001:2004 is valid despite the release in 2015 of the new ISO 14001:2015. Changes in ISO 14001 will have impact on EMAS system since EMAS includes requirements of ISO 14001 in one of its annex (annex no 2). Some of the changes introduced in the new edition of the ISO 14001:2015 are going towards EMAS (e.g. life cycle approach, environmental performance management, communication) [Szyszka & Matuszak-Flejszman 2015].

environmental management system based on ISO 14001 was analyzed in many publications devoted to environmental management [Matuszak-Flejszman 2001, 2011; Pochyluk 2010; Marcinkowski et al. 2010; Neugebauer 2012; Łańcucki 2014; Daddi et al. 2014; Testa et al. 2014]. EMAS is regarded to be more difficult and more rigorous than ISO 14001 (including issues related to cooperation with interested parties).

Stakeholders in EMAS

The term “stakeholder” was first popularized in the strategic management literature by Freeman in 1984. According to Freeman [1984] stakeholder is “any group or individual who can affect or is affected by the achievement of the activities of an organization”. Post, Preston and Sachs presented a different definition of stakeholders [2002]. For them the stakeholders in a corporation are “the individuals and constituencies that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities, and that are therefore its potential beneficiaries and/or risk bearers”.

Stakeholders can be divided into many different groups. Depending on their approach, interested parties may be classified as: internal and external stakeholders, market-related and non-market-related stakeholders, positive and negative stakeholders, voluntarily and involuntarily stakeholders, operational and strategic stakeholders, regulatory stakeholders and organizational stakeholders.

The role of understanding the needs and expectations of stakeholders (interested parties) is emphasized in the new ISO 14001:2015 standard. In EMAS regulation the importance of stakeholders is significant. External communication, an open dialogue with stakeholders and transparency of information are fundamental assumptions of EMAS, which as a rule guarantees the availability of all environmental information to those who require them [Skouloudis et al. 2013, Testa et al. 2014; Krzyczkowski 2013, Pochyluk 2010]. The data reported in the environmental statements has to be verified by an accredited verifier during the certification audit and for that reason, EMAS is considered to be more effective tool to communicate the environmental aspects to external stakeholders and to improve its corporate image [Testa et al. 2014; Iraldo et al. 2009; Arimura et al. 2008]. Requirements of EMAS in relation to main stakeholders are presented in Table 1.

Table 1. *Requirements of EMAS in Relation to Stakeholders*

Stakeholders	EMAS requirement
Employees	<ul style="list-style-type: none"> ○ Process of EMAS implementation should include involvement of employees and workers. ○ Active employee involvement is a driving force for successful environmental improvements. ○ Employee participation scheme at all levels is required. ○ Commitment, responsiveness and active support from the management is needed for the success (necessary feedback from management to employees). ○ Employees shall be involved in the environmental review, environmental committees, joint working groups and elaboration of the environmental statements.
Suppliers	<ul style="list-style-type: none"> ○ Indirect environmental aspects should include environmental performance and practices of contractors, subcontractors and suppliers. ○ Organization should ensure that suppliers comply with the organization's environmental policy. ○ Applicable procedures and requirements associated to the significant environmental aspects should be communicated to suppliers, including contractors.
Other interested parties (local communities, customers, public)	<ul style="list-style-type: none"> ○ Organization shall be able to demonstrate an open dialogue with the public and other interested parties including local communities and customers. ○ Organization should produce and make publicly available periodic environmental statements providing the public and other interested parties with information on their compliance with applicable legal requirements and environmental performance.

Stakeholders may exert pressure on companies to implement environmental management systems [Bansal & Bogner 2002; Kollman & Prakash 2002; Neumayer & Perkins 2004], but relationships with stakeholders usually are not considered as main driver of implementing such systems [Pedersen 2007; Neugebauer 2012]. The evidence from analyses suggests that companies benefit from the implementation of the environmental management systems in terms of improvement of relationships with stakeholders [Morrow & Rondinelli 2002; Biondi et al. 2000; Pedersen 2007]. According to Vries et al. [2012] there are six key factors that have the greatest impact on the effectiveness of the environmental management system: strong internal motivation, commitment of top management, communication with stakeholders, stakeholder engagement, well-defined responsibilities within the environmental management system and training programs. In some cases, EMAS is preferred over ISO 14001 because of the possibility of using credibly validated environmental statement [Iraldo et al. 2010].

EMAS registration is a kind of promise for all kinds of stakeholders (including employees, communities, customers, law enforcement authorities) that any activities carried out by registered organizations are conducted in accordance with the principles of nature protection and with respect for the

environment. This article attempts to assess the role of stakeholders in the EMAS system.

Material and Methods of Empirical Studies

Currently there are less than 3,000 organizations registered in the EMAS system [www.ec.europa.eu, 04.01.2016], which is a small number compared with the environmental management system (EMS) based on the requirements of ISO 14001 standard with more than 300,000 certificates worldwide [www.iso.org, ISO Survey 2014].

The study was conducted in the period of 2013-2015 on a group of companies operating in Poland that have implemented and maintained Eco-management and Audit Scheme according to EMAS. The study involved an analysis of both sources of data: primary and secondary.

Secondary data were obtained from the companies' environmental statements. The most important advantage of using secondary sources is saving time and cost of research [Churchil 2002]. For the purposes of this research article we have used obligatory environmental statements, which include the description of the organization's EMS and environmental policy, the description of the direct and indirect environmental aspects, the description of the environmental objectives and targets, data on the performance of the organization in relation to its environmental objectives and targets. The analysis includes all 59 organizations that were registered in the Polish EMAS register during the study (full study).

Primary data were gathered using survey methods (electronic survey and direct interview). The surveys and interviews were addressed directly to the environmental management representatives or to competent employees with adequate knowledge suitable for the aims and scope of the study. The results are described on the basis of 26 organizations participating in the survey and 31 organizations participating in the interview.

Results and Discussion

EMAS Registered Organizations Environmental Stakeholder Analysis

Each organization wishing to be registered in EMAS should identify its environmental stakeholders by defining what kind of parties may be interested in the environmental activities of the organization and what type of environmental information they can expect. An example of the various groups of stakeholders in EMAS is indicated in Figure 1.

Figure 1. Stakeholders in EMAS System

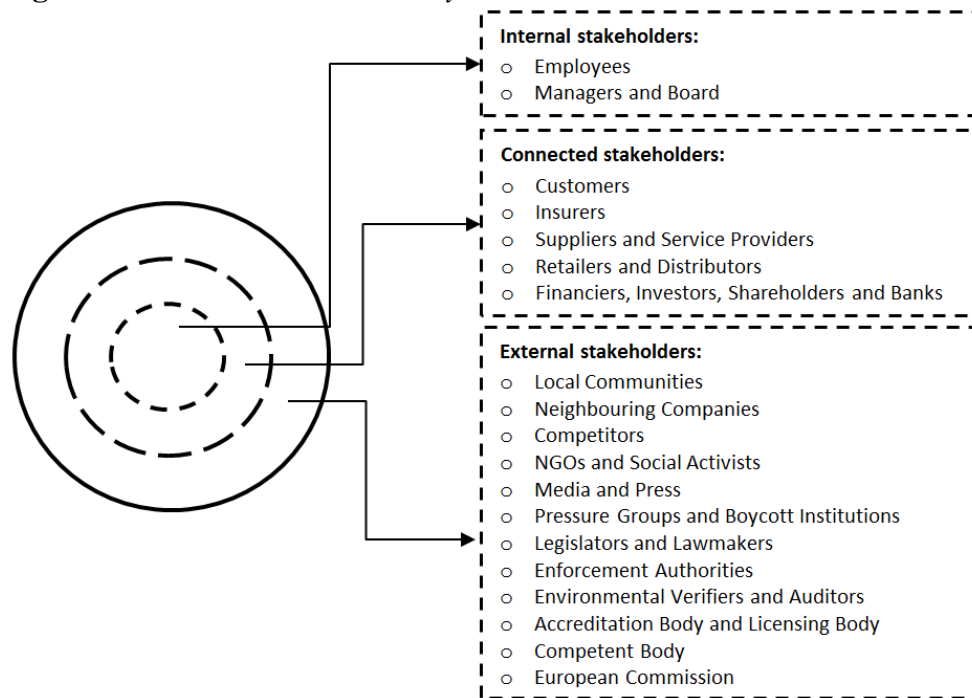
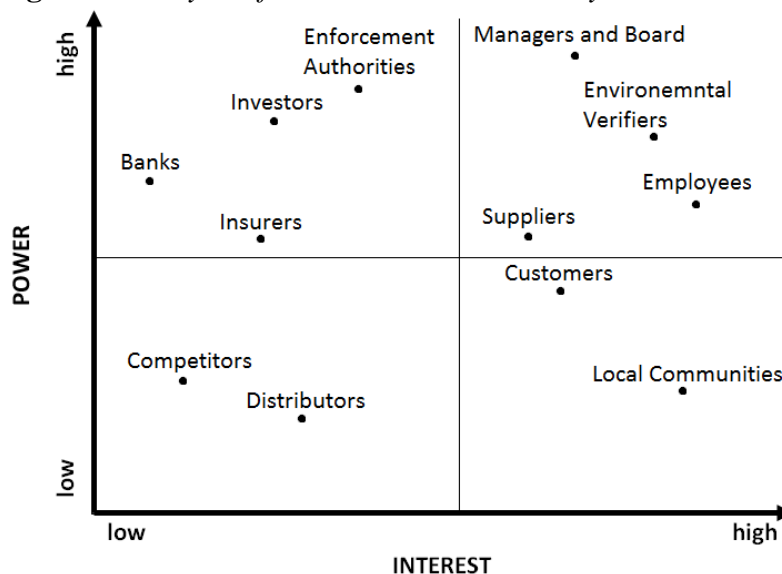


Figure 2. Analysis of Stakeholders in EMAS System

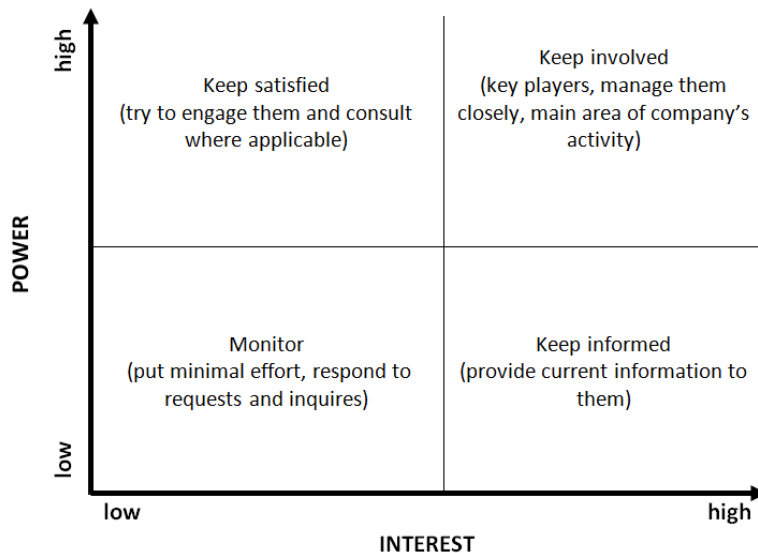


After identifying stakeholders, each group or an individual should be evaluated in terms of two values: the size of the impact on the organization and its key business processes (P – power) and the degree of interest in the organizations environmental activities (I – interest). The power of stakeholders may arise either from their ability to mobilize social and political forces or to withdraw resources from the organization [Post et al. 2002; Iraldo et al. 2013]. It should be noticed that the flows between the organization and its stakeholders run in both directions. Example of EMAS stakeholder analysis in

relation to the power and interest in terms of environmental management is presented in Figure 2.

The analysis of stakeholder's influence and interests enables to define actions to be taken in relation to each group. As indicated in Figure 3 – the most important group is the one with high power and high interests – this group should be the main area of company's activity as regards environmental management.

Figure 3. *Actions to Be Taken in Relation to Stakeholders*



Stakeholders' analysis indicated in above matrixes should be preceded by in-depth evaluation of needs and expectations of the interested parties (both – expectations of the organization in relation to different groups of stakeholders and the expectations of stakeholders in relation to the organization). Understanding this relationships is a prerequisite to develop environmental statement. Environmental statement is a communication tool required by EMAS and shall provide comprehensive information to the public and other interested parties. The information presented in environmental statements should include as a minimum parts indicated in Annex IV of EMAS regulation. The information provided in EMAS environmental statement is not limited to that required by Annex IV [Isenman 2009]. In 2006 ISO published an ISO 14063 standard that is aimed to give guidance to organizations on principles, policy, strategy and activities relating to environmental communication [Matuszak-Flejszman 2015].

Forms of Stakeholders Engagement in EMAS Registered Organizations

According to Unerman et al. [2011] stakeholder engagement and dialogue are crucial elements of social and environmental reporting. There are many forms and methods of stakeholders' engagement depending on the engagement

level (consultation level, negotiation level, involvement level, collaboration level, empowerment level) [AA 1000, 2011, 2008].

The conducted research indicates, that employees and suppliers are the two groups that are the most frequently engaged in environmental activities, while other groups usually are not involved but only informed.

In terms of employees most commonly reported actions include training for employees (100.0% of the surveyed organizations), programs of employees initiatives in form of boxes or books of ideas, proposals and suggestions (51.6%) and active participation in working groups (38.7%). Some organizations reward employees for ideas and initiatives. Other forms of employees engagement in surveyed organizations includes: use of visualization, preparing educational presentations (including videos), publishing articles to company internal newsletters and intranet and environmental competitions.

In terms of suppliers EMAS registered organizations are required to ensure that suppliers and subcontractors comply with the organization's environmental policy. In most cases this is ensured by appropriate cooperation agreements. 93.5% of respondents indicated that agreements include reference related to environmental protection and subcontractors and suppliers responsibilities in this area. It is also practiced to create instructions or manuals for suppliers and subcontractors (usually as an appendix to the agreement). Supplier environmental audits are conducted by 29.0% organizations. 16.1% of surveyed parties conduct environmental trainings for suppliers and subcontractors. 35.5% organizations declared that environmental criteria were taken into account in the process of selection and evaluation of suppliers (implementation of environmental management system compliant with the ISO 14001 or EMAS). Only one of the surveyed organizations indicated that they pay attention to the environmental permits of suppliers.

Environmental Objectives Related to Stakeholders in EMAS Registered Organizations

Organizations registered in EMAS are obliged to communicate established environmental objectives in their environmental statements. The analysis of organizations statements indicate that objectives are rarely carried out with the participation of stakeholders (except employees naturally). Some goals, although do not require direct involvement of stakeholders, have some influence on stakeholders. Examples of such goals are presented in Table 2.

Table 2. *Environmental Objectives with Influence on Stakeholders*

Stakeholders	Environmental objectives
Employees	<ul style="list-style-type: none"> ○ Reduction of emissions from the process of painting and varnishing. ○ Withdrawal of harmful substances from the manufacturing process. ○ Reduction of noise and concentration of dust in the air. ○ Reduction of energy consumption through the replacement of office equipment and light sources and increasing the awareness of employees. ○ Reduction of the amount of unsorted waste by conducting trainings on waste segregation, leaflets, purchase of containers for segregation.
Suppliers	<ul style="list-style-type: none"> ○ Buying recycled office paper, paper with ecological labels (eg. Blue Angle, Nordic Swan, EU Ecolabel) or paper coming from certified production. ○ Withdrawal of harmful substances from raw materials. ○ Increasing the number of suppliers certified on ISO 14001 or registered in EMAS.
Customers	<ul style="list-style-type: none"> ○ Withdrawal of harmful substances from products. ○ Increased environmental awareness of customers by organizing training, distributing flyers and handouts.
Local communities	<ul style="list-style-type: none"> ○ Reduction of emissions of gases and dust into the air. ○ Reduction of noise. ○ Removal of hazardous materials and the elimination of the threat of asbestos emission. ○ Reduction of nuisance odor through the modernization of the sewage treatment plant. ○ Ecological education of society in the field of waste collection.

Evidence shows that the beneficiary of environmental objectives is not only the environment, but also different groups of stakeholders. The analysis of EMAS benefits indicates that the implementation of this system allows to:¹ improve the environmental awareness of employees (3.83), suppliers and subcontractors (3.42), improve relations with local community (3.46) and local authorities (3.21), increase employees engagement (3.42), improve external (3.17) and internal communication (3.00). According to another study [Iraldo et al. 2013] a role of the various groups of stakeholders in stimulating actions for environmental improvement differs from country to country.

¹ In order to explore the benefits achieved by organizations after the implementation of EMAS a five-point Likert scale was used. Respondents were asked to assign score from 1 to 5, where 1 indicated that they have not achieved any benefit and 5 indicated that they have achieved very great advantages. Average values are indicated in brackets.

Environmental Indicators Related to Stakeholders in EMAS Registered Organizations

EMAS regulation requires monitoring of environmental performance indicators in specific areas of environmental influence. Core indicators include: energy efficiency, material efficiency, water consumption, waste generation, biodiversity and emissions. According to the research results, 79.7% of organizations registered in EMAS report also additional environmental indicators in environmental statements. Some of monitored indicators are associated with stakeholders – results are shown in Table 3.

Table 3. *Indicators Related to Stakeholders Monitored by EMAS Registered Organizations*

Indicator	Organizations Monitoring Indicators	Average Score
% of employees participating in emergency exercises	45.2%	65.4%
% of employees participating in trainings on topics related to the environment	51.6%	59.7%
% implementation of the training program (conducted trainings vs. planned trainings)	64.5%	91.3%
% of suppliers and subcontractors with implemented ISO 14001 or EMAS system	6.5%	31.0%

Apart from the indicators listed in the above table, 15.2% EMAS registered organizations monitor various indicators related to environmental education of customers, contractors or society (e.g. number of participants in the workshops for schools, number of children participating in educational action for kindergartens, level of employees environmental awareness, number of people participating in environmental campaigns, trainings and conferences).

Conclusion

According to the conducted research, stakeholders are an important part of the Eco-management and Audit Scheme. The beneficiary of pro-environmental actions carried out by organizations is not only the environment, but also stakeholders. The impact of environmentally related actions on stakeholders may be direct (e.g. environmental trainings for suppliers or customers, withdrawal of harmful substances from products) or indirect (e.g. reduction of emissions, gases, dust, noise and odor). It should be noted that the systems are created by people. Relations between expectations of the organization and expectations of stakeholders are mutual and run in both directions. It is apparent that EMAS affects stakeholders. However, the relationship is mutual here as well. Different groups of stakeholders also affect the EMAS system and its effectiveness through the constitution of their expectations. The two groups

that are the most frequently engaged in environmental activities are obviously employees and suppliers. Nevertheless, not only EMAS allow to improve the environmental awareness of employees and suppliers but it also allows to improve communication and relationships with the local community and authorities.

Acknowledgments

The article was written based on the results of the research project "Research on effectiveness and the efficiency of the Eco-Management and Audit System EMAS in companies on Polish territory". Project was financed by the National Science Centre granted pursuant to decision no DEC-2012/07/N/HS4/02654.

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