

IMPROVING ENVIRONMENTAL PERFORMANCE THROUGH IMPLEMENTATION OF COMMUNITY ENVIRONMENTAL MANAGEMENT AND AUDIT SCHEME (EMAS) IN COMPANIES

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Abstract:

The environmental management and audit scheme (EMAS) is designed for companies in the services sector, manufacturing, state institutions. Implementing an environmental management system is based on the field of activity having as a priority a specific environmental policy in this field, the action plan, organizational structure, a documentation / analysis of information, communication, audit and management review. For implementation, the key environmental issues are identified by the company to (waste management, air emissions, water , soil, according to company's specific activity, consumption of utilities, communication with specialized institutions, the use of "environment friendly" raw materials. The book presents ways to improve environmental performance through EMAS, companies' benefits for implementation and correlations with the ISO 14001 system.

Key words: *environment management system, environment performance, improvement manners*

JEL classification: *Q56*

By implementing an environmental management system, the company improves the environmental performance by achieving the goals of environmental obligations, a better management of activities, services, products related to environmental protection.

According to ISO international system, an environmental management system is " the component of total management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for development, implementing, achieving, reviewing and maintaining environmental policy" .

Environmental performances consisted of quantifiable results of environmental management by an organization.

Implementing an environmental management system is based on:

- Environmental Policy
- Environmental program or action plan
- Organizational Structure
- System Documentation
- Management Review
- EMS audit
- External communication (with specialized institutions, individuals or legal entities that interfere with a company in the work place)
- A management system

An environmental management system can be applied to the following categories of institutions: organizations, institutions, authorities, various economic units

such as town halls, hospitals, schools, chain stores, animal farms, workshops, production units, offices.

The steps for implementing EMAS site are:

- identifying and prioritize environmental issues
- identifying environmental objectives
- identifying the specific legislation regarding the activity developed by the company
- identifying responsibilities within the overall management of the company
- preparing the environmental statement with the current legislation
- validating the information in the environmental statement by an accredited person
- company's employee involvement in the development and implementation of EMS in the company
- internal and external communication with anyone interested.

Direct environmental aspects include, but are not limited to: air emissions, water discharges, generation, recycling, reuse, transportation, solid waste disposal, including hazardous waste, exploitation and contamination of soil, natural resources and raw materials (including energy), noise, vibrations, effects on biodiversity, problems of transport (of goods and services), odors, risk of environmental accidents and environmental impacts that occur or may occur as a result of accidents and potential emergency situations.

Indirect environmental aspects may occur as a result of company interaction with third parties which may influence the company to seek EMAS registration. These include: issues related to product life cycle (design, development, transport packaging, use and recovery / disposal of waste, capital investment, lending and insurance services, composition of the product range, performance and environmental practices of contractors, subcontractors, and suppliers, administrative and planning decisions.

In Fig. no. 1 An EMS implementation schedule is presented in accordance with EMAS and EN ISO 14001 (according to the EMAS Regulation).

The advantages of implementing environmental management system according to EMAS guide are:

- a better environmental management
- lower-cost
- new business opportunities
- attracting investments
- competitive advantage
- promoting innovation
- credibility
- systemic approach
- better communication.

If a company already has certification SR EN ISO 14001 and wants to implement EMAS, some issues have to be accomplished such as:

- Identifying environmental aspects (review them if they have already been identified)
- Preparing an environmental statement as required by EMS
- Independent validation of the environmental statement

The environmental statement contains detailed information provided to the public and other interested parties on the structure and activities of organizations, environmental policy and environmental management system, environmental aspects and environmental impacts, program, goals and targets for environmental performance environment and compliance with environmental legal obligations.

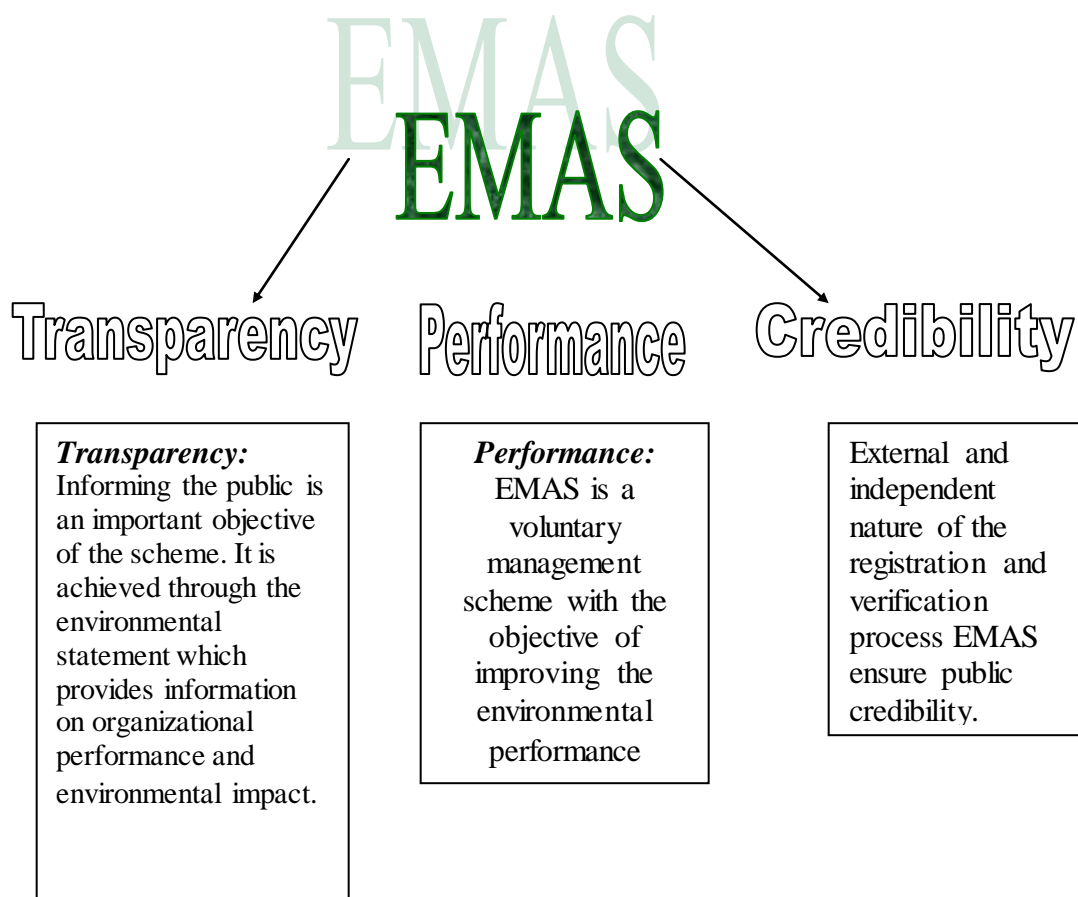


Fig. no. 1 Scheme implementation of EMS according to EMAS and EN ISO 14001 (Guidelines under EMAS)

Differences between the SR EN ISO 14001 and EMAS are presented in Table. 1.

Table. no. 1.
Differences between the SR EN ISO 14001 and EMAS (according to EMAS)

SR EN ISO 14001	EMAS
International Standard 1996.	EU legislation (1836/29.06.1993).
Initial Environmental Impact Analysis-Optional.	Initial Environmental Impact Analysis.
EMS Continuous improvement of environmental performance reflected by the increase of the moment.	Improving environmental performance at the best available techniques.
External communication (public access only to environmental policy).	A public environmental statement is needed
Applicable international scale.	Implemented at EU level.
Achieving Environmental Audit (without specifying the frequency).	Achieving environmental audit within 3 years.
A register of the environmental impact is not needed	The existence of a register of environmental effects.
Environmental policy is made public.	Policy, program, EMS, organization performances are made public

EMAS registration necessary steps are:

-conducting an environmental inspection (approved by an accredited inspector EMAS)

- establishing an environmental management system aimed at achieving environmental policy defined by top management
- conducting an environmental audit, evaluating the management system implemented (approved by an inspector accredited EMAS)
- creation of a report on environmental performance (approved by an inspector accredited EMAS). Validated report will be sent to the EMAS Competent Body for registration and made available publicly, before an organization can use the EMAS logo.

Conditions to be met for maintaining registration of EMAS:

- Having a system of environmental management and program audit of the frequency of checks.
- Submission to the competent body of material updated and validated annually in the environmental report and making it publicly available.

EMAS registration of a company may be canceled or suspended by EMAS Advisory Council in the following cases:

1. No annual updates on environmental report are validated within three months from the request.
2. Registration fees are not paid within three months from the request.
3. Violation of environmental legislation.
4. Failure in compliance with EMAS Regulation.

If a company has locations in one or more Member States or third countries, it may only require a collective record for all of these sites or some of them.

Costs for implementation of EMAS is to acquire equipment to reduce emissions into water, air, soil, to reduce noise, occupational safety and health for people, innovations in manufacturing, personnel training, to implement organizational procedures for monitoring and internal and external environment.

To register the company, depending on the size, the fee is € 1500. In case of SME registration and renewal fees of EMAS's are reduced by 25%

"Method of non-quality costs (fig. no. 2) is a method that integrates the assessment of costs related to environmental management costs (technology performance, maintenance, communication, training, management of emissions and waste, consumption of materials raw power). Another category of expenditure consisted of so-called expenses "resulting from environmental violations (sanctions, claims, damages, insurance costs).

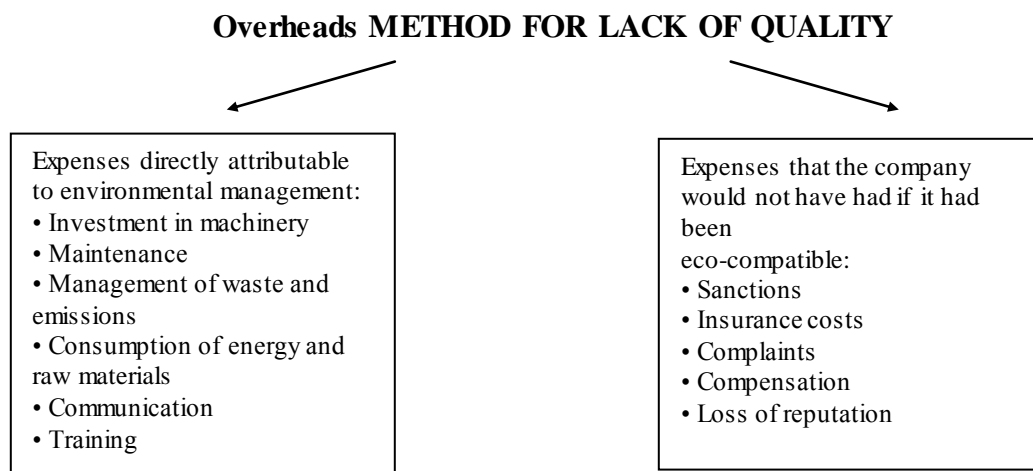


Fig. No. 2 The cost scheme of the method generated by non quality (According to the EMAS guide)

The period of implementation of EMAS is shown in the Tab.nr. 2. Specific implementation of EMAS regulations (according to EMAS Guide)

Probation	Duration
Preliminary environmental analysis	6 months-1 year
Environmental policy	1-2 months
Environmental Management Program	1-6 months
Training and capturing workers' interest	1-2 months
Environmental Management System	2 months -1 year
Control and internal audit	1-2 months
Independent auditing	2 days 2 weeks 1 month

EMAS logo may be used only by registered organizations and only during its validity and always wears the company's registration number. EMAS logo should not be used on products or their packaging with comparative statements or other activities and services in a way that would cause confusion with environmental product labels.



Fig. no. 3 EMAS label (www.europarl.europa.eu)

Order no. 50 of 01/14/2004 establishes procedures for the organization and coordination of environmental and Audit systems (EMAS). This order shall be applied to organizations in all fields who wish to improve their environmental results.

EMAS Advisory Committee (with a principal role in the management and control program EMAS) and EMAS Office (responsible for registration of organizations) are found in the Ministry of Environment and Forests, as part of the Integrated Pollution Control Service.

EMAS Advisory Committee consists of 19 members representing the following authorities: central environmental authority, the central public authority for urban and regional planning, industry, SMEs, research institutes, industry, higher education institutions, associations, NGOs environment.

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