

“Capacity Building and Strengthening Institutional Arrangement”

Workshop: Sustainable Development

EMAS and ISO 14000 Standards

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1. Introduction

At International and European level have been developed different tools that can be used by every organization (public and private) to protect the environment and improve their environmental performances.

For example, EMAS and ISO represent useful tools for the environmental management of an organization and are based on voluntary adhesion

The EMAS scheme is a regulation ruled by the European Parliament, with a specific Commission EMAS that has the duty to verify the adhesion to the EMAS system, by means of an 'environmental statement' and is applied in Europe, while ISO regulations are ruled by a non-governmental organization such as the network International Standardization Organization (ISO), that is composed by environmental experts of every country

2. EMAS (Environmental Management and Audit Scheme)

The Eco-Management and Audit Scheme (EMAS), approved with CCE Regulations in 1993 and reviewed in 2001, is the EU voluntary instrument which acknowledges organizations that improve their environmental performances

The target of EMAS is the management of the environmental issues linked with organization's activities and to promote continual improvement of environmental performances

The organizations that adopt the Environmental Management and Audit Scheme are recognised by the EMAS logo, which guarantees the reliability of the information provided.

EMAS Logo



2. EMAS (Environmental Management and Audit Scheme)

Emas history evolution

- June 1993 — Council Regulation 1836/93 adopted on 29 June 1993. It creates the Eco-Management and Audit Scheme (EMAS) with a view to allow companies to voluntarily participate in an environmental management scheme. It is open to industrial sector companies operation in the European Union and the European Economic Area (EEA).
- 1993-1995 — Set up of the structures for the implementation of the scheme: Competent Bodies, Accreditation Bodies.
- April 1995 — EMAS is open for participation by companies of the manufacturing sectors
- 1996 — Commission recognises EN ISO 14001 as a stepping-stone towards participating in EMAS.

2. EMAS (Environmental Management and Audit Scheme)

Emas history evolution

- 1997 — Consultation process for the review of EMAS begins : DG Environment carried out a series of consultations with all relevant stakeholders in order to gather their views concerning possible amendments to EMAS.
- October 1998 — The Commission presents a proposal for the revision of EMAS. This proposal goes through the legislative procedure of co-decision.
- March 2001 — EMAS II is born; the new EMAS regulation is adopted by the Council and the European Parliament.
- September 2001 — The Commission adopts technical guidance documents for the implementation of the scheme

2. EMAS (Environmental Management and Audit Scheme)

Comparision between EMAS I and EMAS

EMAS I (1993)

- Only industrial organization can access
- Introduce the implementation of environmental programmes, systems and policy
- The systematic assessment is about these programmes, policy and EMS

EMAS II (2001)

- The access is enlarged all kind and sectors of organizations
- Introduce the implementation of a real and complete Environmental Management System (EMS)
- The assessment is about environmental performances of the organization
- It foresees an active participation of employees and program training for them

At the moment European Union is reviewing EMAS II to prepare a possible frame for EMAS III (for the future), with the aims to integrate the process productive with the final product

2. EMAS (Environmental Management and Audit Scheme)

The 3 main principles of EMAS:

PERFORMANCE: EMAS is a voluntary environmental management scheme based on a harmonised scheme throughout the European Union with the objective to improve the environmental performance of organisations by committing themselves to evaluate and reduce their environmental impact.

TRANSPARENCY: Public information is an important aspect of the EMAS's objectives and it's achieved providing information to the public. The EMAS logo which can be displayed on letterheads, environmental statements, and adverts for products, activities and services is an attractive visual tool to demonstrate the organisation's commitments to improving its environmental performances and indicates the reliability of the information provided.

CREDIBILITY: The external and independent nature of the EMAS registration and verification process (competent bodies, accreditation bodies and verifiers under the control of the EU Member States) ensures the public credibility and reliability of the EMAS scheme including the environmental management system and the organisation's information to the public (environmental statement)

2. EMAS (Environmental Management and Audit Scheme)

Environmental benefits:

- quality environmental management due to the use of a highly developed scheme such as EMAS
- resource savings and lower costs according to the organisation's needs
- financial benefits through better control of operations
- compliance check with environmental legislation by EMAS verifier
- learn from good practices of other companies and organisations

2. EMAS (Environmental Management and Audit Scheme)

Environmental benefits:

- new business opportunities in markets where green production processes are important
- increase credibility and confidence with public authorities, businesses, customers and citizens
- improved relations with the local community
- improved quality of workplaces, employee morale and incentive to team working
- marketplace advantage and improved company image by improving stakeholder relations

2. EMAS (Environmental Management and Audit Scheme)

EMAS actors

A number of actors share responsibility for implementing and promoting EMAS in the European Union.

The European Commission develops and supervises the EMAS scheme at the EU level and the Member States are obliged to develop the registration and verification scheme at the national level including competent and accreditation bodies

The main actors involved are:

- a) The National Competent Bodies
- b) Accreditation body
- c) Environmental Verifiers

2. EMAS (Environmental Management and Audit Scheme)

a) The national competent bodies

In order to organize the EMAS registration process in the territory, each Member State of EU designates a national (independent and neutral) **Competent Body**

The competent body has the responsibility to register the organizations which have submitted a validated environmental statement, collect any payable registration fee, refuse, suspend and delete organizations from the register and respond to enquiries concerning organizations on the national EMAS register.

All the Competent Bodies meet at least once a year to exchange information each other and to improve EMAS process

2. EMAS (Environmental Management and Audit Scheme)

b) Accreditation Body

An **Accreditation Body** is an independent, impartial institution or organization responsible for the accreditation and supervision of environmental verifiers and designated by the Member State (in Italy the competent and accreditation body is the same, EMAS-Ecolabel Committee)

The Accreditation Body establishes, revises and updates a list of environmental verifiers and their sector of accreditation (according to Nace codes) in their Member State. Changes to this list have to be communicated to the Competent Body and the EU Commission.

The procedures relating to the verification process is ensured by review process of all Accreditation Bodies which meet at least once a year in the "Forum of Accreditation Bodies" (FAB) to exchange information and disseminate best practice. The FAB develops also guidelines in the field of accreditation, competence and supervision of environmental verifiers.

2. EMAS (Environmental Management and Audit Scheme)

c) Environmental Verifiers

EMAS verifiers are organisations or individuals with expert knowledge in the field of EMAS that have been accredited by their Accreditation Bodies and which are independent from the organisation and the organisation's auditor

Their task is to ensure that organisations registrations are in compliance with the requirements of the EMAS Regulation and to verify that the improvement plan respects the environmental objectives and targets defined

Verifiers are also responsible for checking that an organisation is in legal compliance, has carried out an environmental review, has an operational environmental management system which is audited in a systematic, objective and periodic way and that it has prepared an environmental statement in accordance with the EMAS regulation

Therefore, they verify the reliability, credibility and correctness of the data and information in the environmental statement and other environmental information provided by organisation

2. EMAS (Environmental Management and Audit Scheme)

EMAS registration

In order to receive EMAS registration an organisation must comply with the following steps:

- a) Develop an environmental review considering all environmental aspects of the organisation's activities, products and services, the environmental main impacts and methods to assess them, environmental regulations at national and international levels and existing environmental management practices and procedures.
- b) establish an effective environmental management system aimed at achieving the organisation's environmental policy defined by the top management. The management system needs to set responsibilities, objectives, means, tools, financial resources, operational procedures, training needs, monitoring and communication systems
- c) carry out an environmental audit, to assess the functioning of the management system, the conformity with the organisation's environmental policy and compliance with relevant environmental regulatory requirements

2. EMAS (Environmental Management and Audit Scheme)

EMAS registration

- d) provide a statement of environmental performance which shows the environmental objectives achieved and that include the environmental improvement plan to continuously improve the organisation's environmental performances
- e) obtain the approval by an accredited EMAS verifier that assess the environmental analysis presented by the organization, the environmental system management, the audit's activities and the environmental statement
- f) sent the environmental statement to the EMAS Competent Body for registration. Obtained the EMAS logo, the organization can use the logo and make available the environmental statement for the public

2. EMAS (Environmental Management and Audit Scheme)

EMAS registration

Example of Environmental Statement for EMAS of an Italian organization

The mission of the organization

1) The presentation of the organization (description organization and site)

2) The Activities (the different plants, management of disposal and compost production)

3) The EMS (policy and system organization)

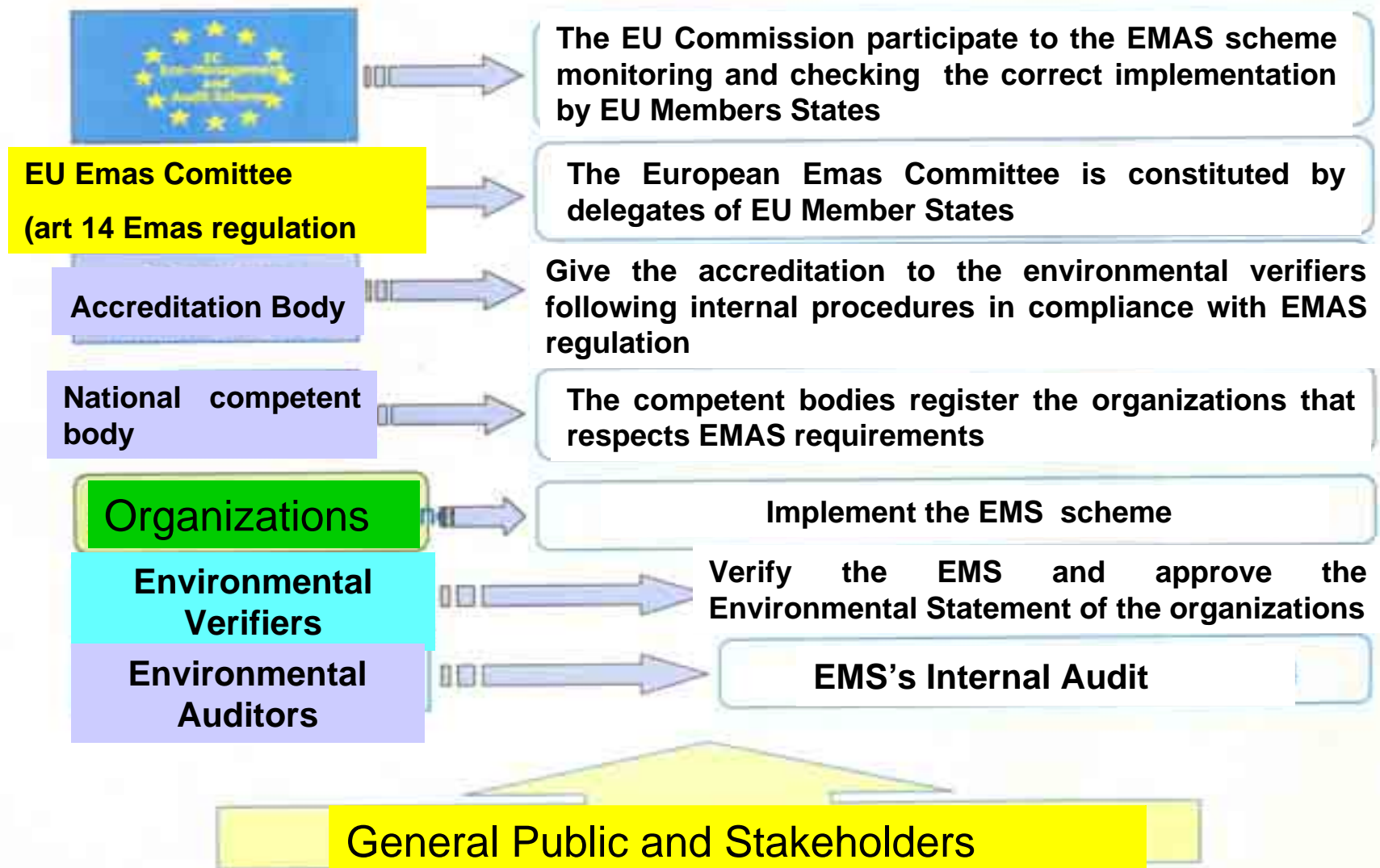
4) Environmental Aspects (identification, evaluation, environmental direct and indirect aspects)

5) Objectives and improvements programmes (definition and descriptions)

Attachments (lists of authorized waste for plants and main national law)

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2. EMAS (Environmental Management and Audit Scheme)



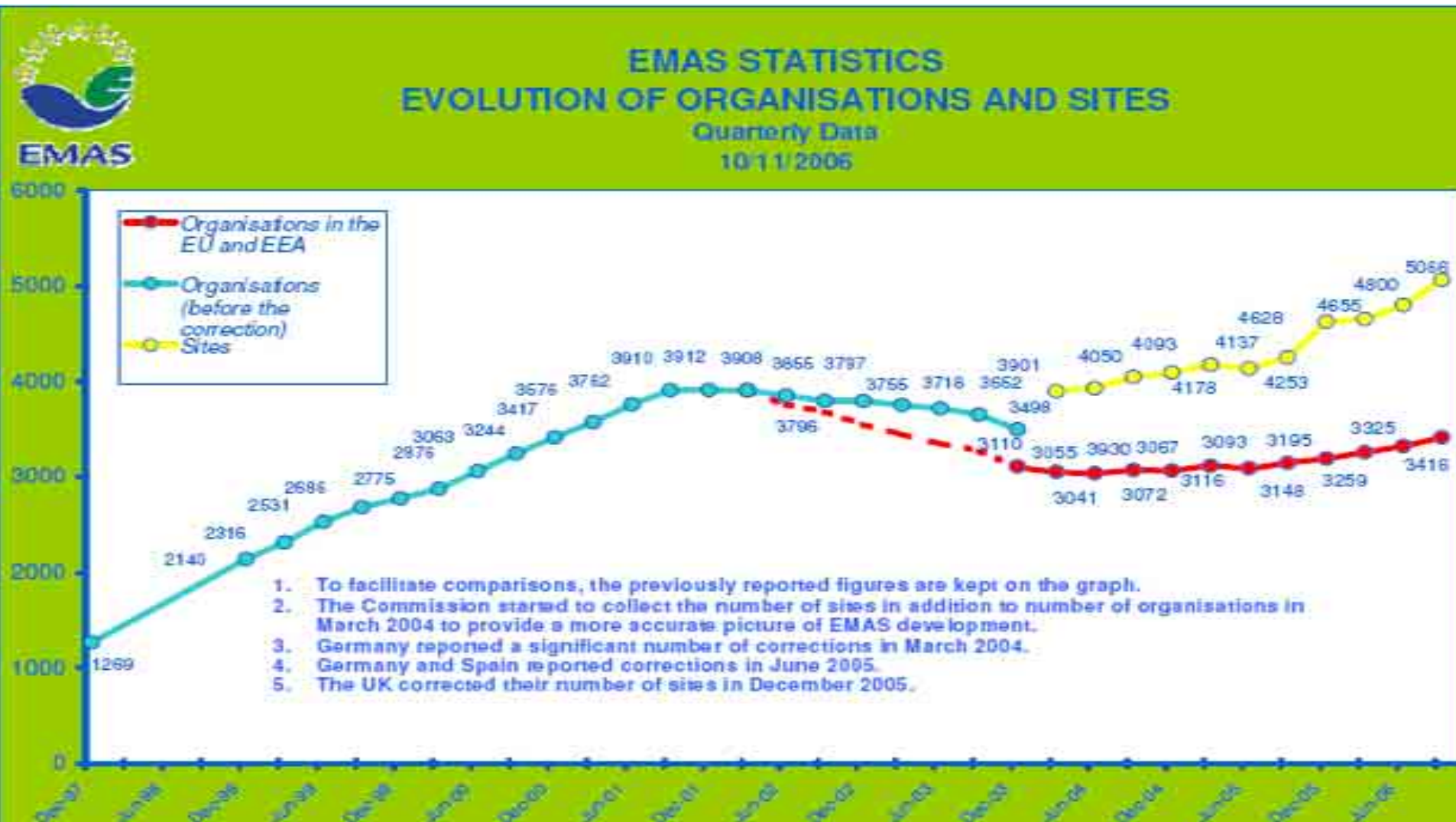
2. EMAS (Environmental Management and Audit Scheme)

EMAS Scheme process for registration



2. EMAS (Environmental Management and Audit Scheme)

European Stastical Data

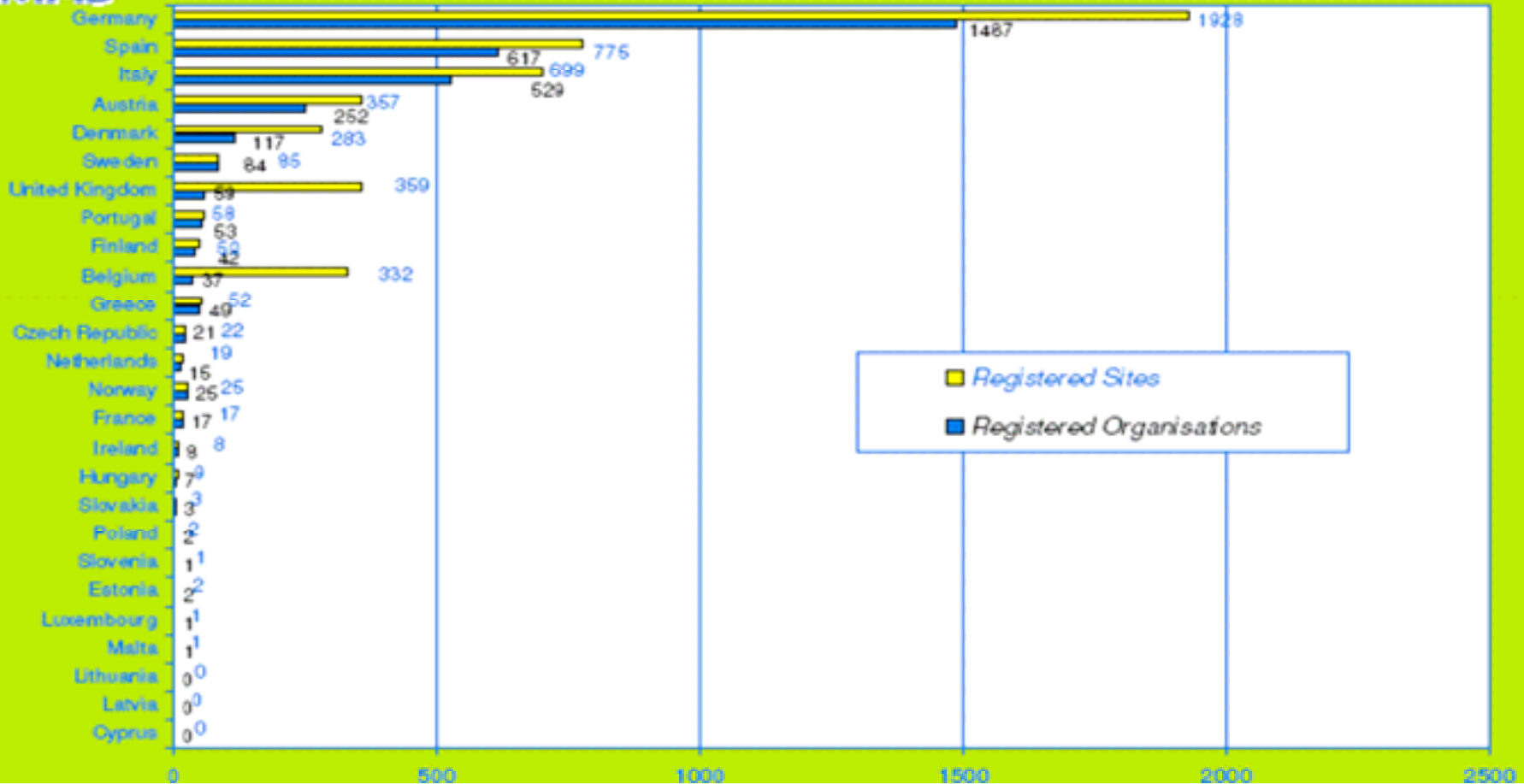


2. EMAS (Environmental Management and Audit Scheme)

European Stastical Data



EMAS ORGANISATIONS AND SITES
10/11/2006

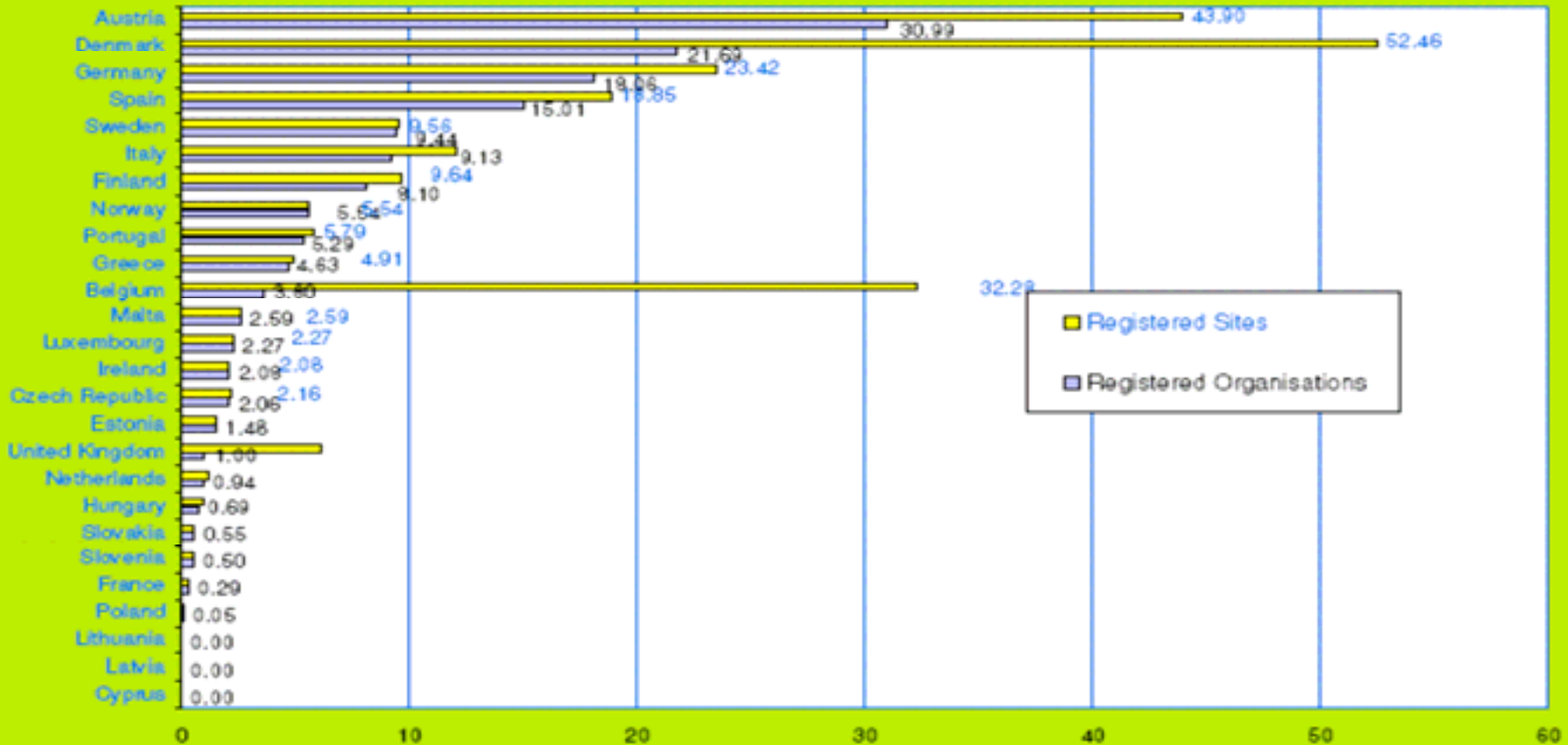


2. EMAS (Environmental Management and Audit Scheme)

European Stastical Data



Organisations per One Million Inhabitants
10/11/2006



3. Italian experiences on EMAS

In Italy the National Body for the Accreditation and Certification is the 'Committee Ecolabel and EMAS' and it's composed by delegates of the Ministry of Environment (MATTM), Ministry of Industry, Ministry of Health, Ministry of Economy and they are in charge for 3 years

In this context APAT provides a continuous technical-scientific support to the Committee and implement a National Register of all the accredited EMAS verifiers and participate, together with the EMAS Committee, to the periodical meeting of the European EMAS Committee

In the last 3 years the EMAS registration in Italy have increased of the 220%, and it's the European county whit the most rate of increasing

Italy has also a special record: for the first time a sport event, the Olympic Winter Games, held in Turin in 2006, has been registered with EMAS, with the aim to achieve environmental objectives by all the Local Authorities involved in the Olympics Games

3. Italian experiences on EMAS

The environmental training

The Committee 'Ecolabel and EMAS' in order to implement EMAS at national and local level, is promoting environmental courses and schools, with the aims to:

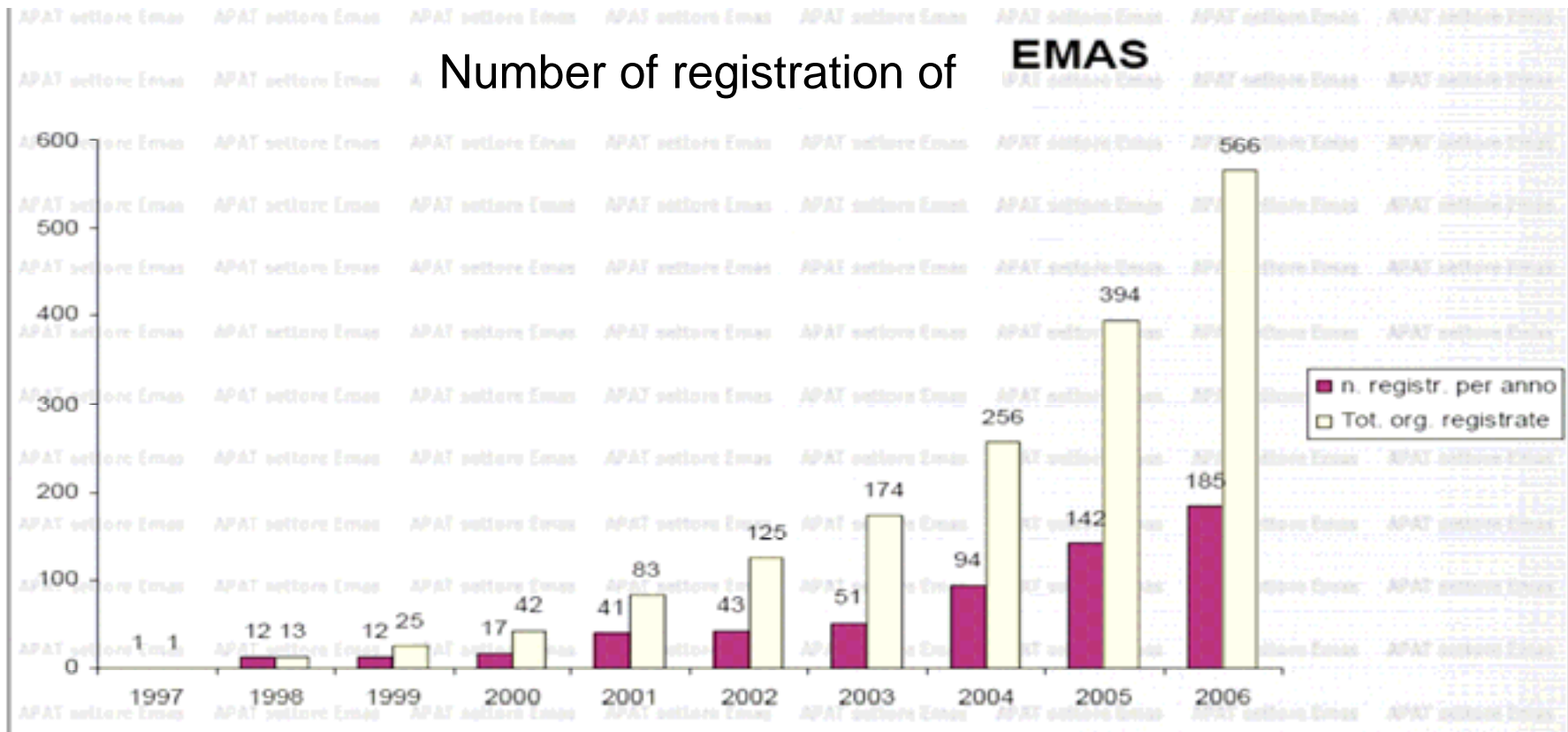
- develop a correct implementation of EMAS schemes
- provide good professional skills to professional figures (environmental verifiers, experts consultants) involved in EMAS process
- support the organization during all the EMAS registration process

At the moment in Italy there are 4 permanent EMAS schools (Perugia, Brescia, Abruzzo, Ancona) and in 7 Italian Universities there are EMAS training courses

3. Italian experiences on EMAS

Number of registration of

EMAS

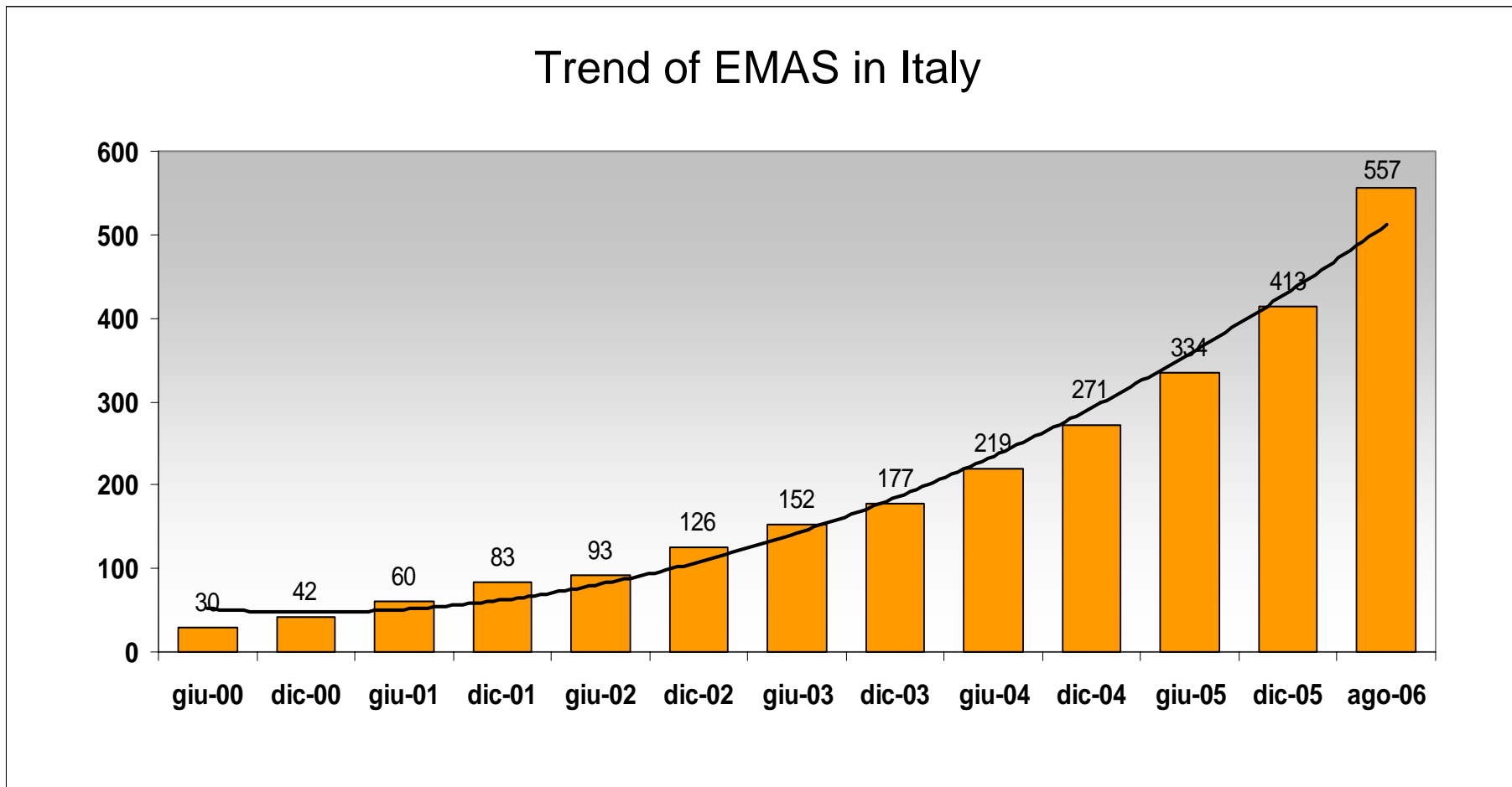


 Total organization registered

 Number organization registered/year

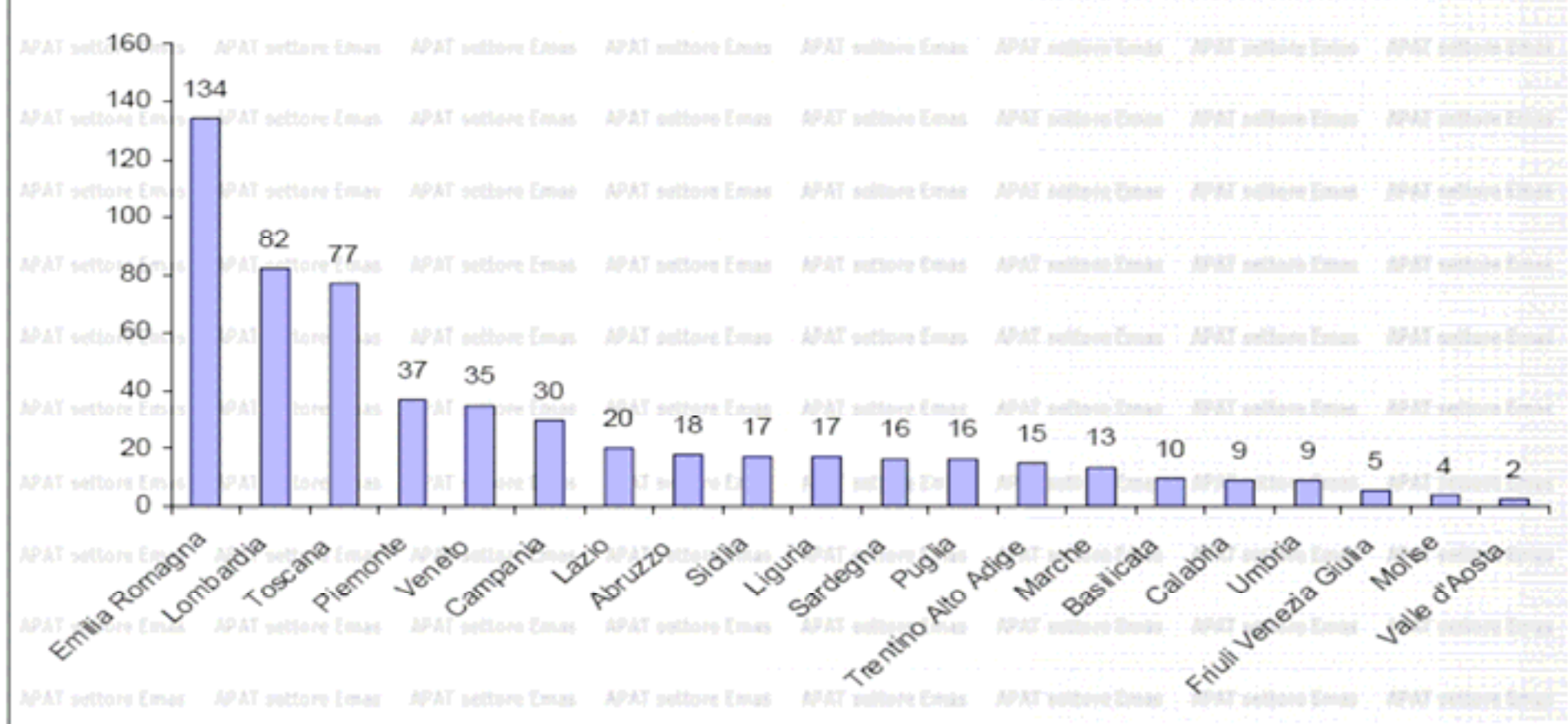
As shown in the figure, starting from 1997 the number of organization registered with EMAS has increased every year

3. Italian experiences on EMAS



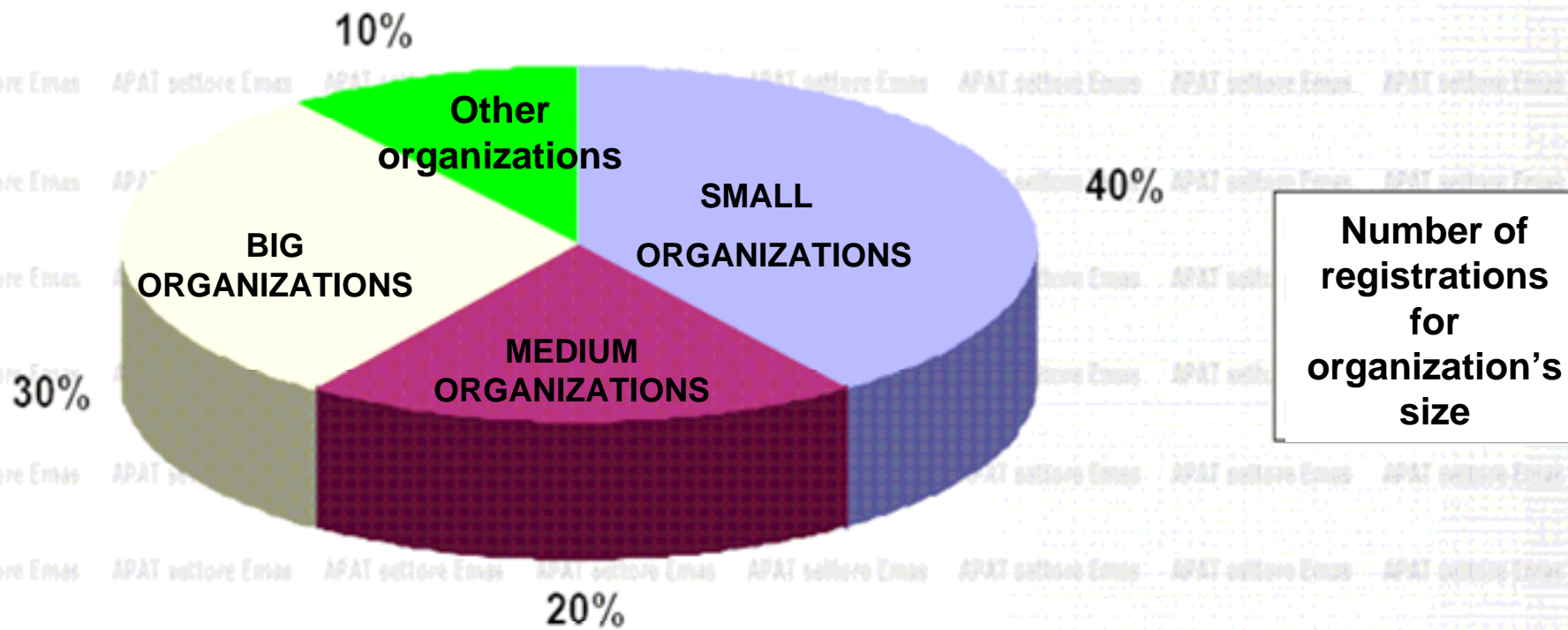
3. Italian experiences on EMAS

Number of registration of EMAS for regions



Most of the organization registered are Emilia-Romagna, Lombardia (in the North Italy)

3. Italian experiences on EMAS



In Italy the small organizations are the most registered with EMAS

4. ISO 14001

ISO, the International Standards Organization, has developed a series of voluntary standards and guidelines in the field of environmental management which are known as the EN ISO 14000 series.

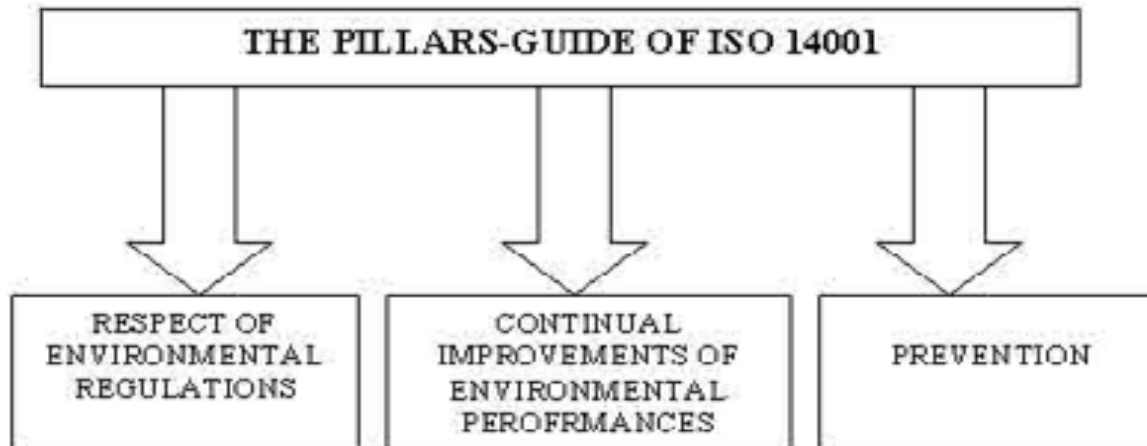
Developed under ISO Technical Committee 207, the ISO 14000 series of standards address the the following aspects of environmental management :

- ISO 14001 ‘Environmental Management Systems: Requirements with guidance for use’
- ISO 14004 ‘Environmental Management Systems: general guidelines on principles, systems and supporting techniques’
- UNI EN ISO 19011:2003 (ex ISO 14010, 14011, 14012) ‘Environmental Auditing guidelines: general principles, audit procedures, environmental systems audit, qualification criteria for environmental auditors’

4. ISO 14001

The ISO standards can be used by every organization to:

- Implement and to improve their own Environmental Management System (EMS)
- Be sure that their EMS is in compliance with environmental regulations
- Request the certification and registration of the EMS by a certified organism

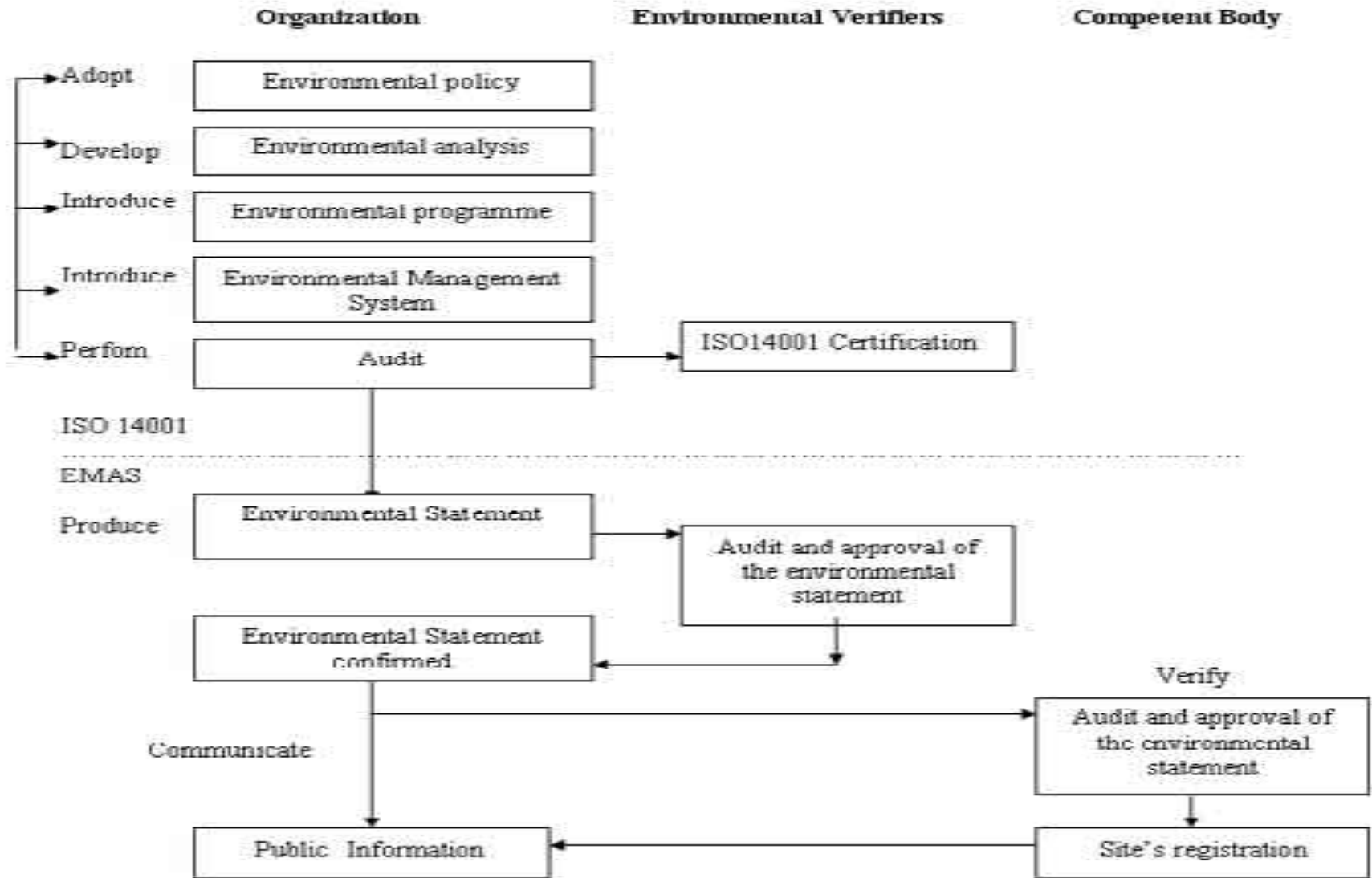


4. ISO 14001

ISO14000 standards and EMAS scheme present the same basic principles, but there are some main differences, such as:

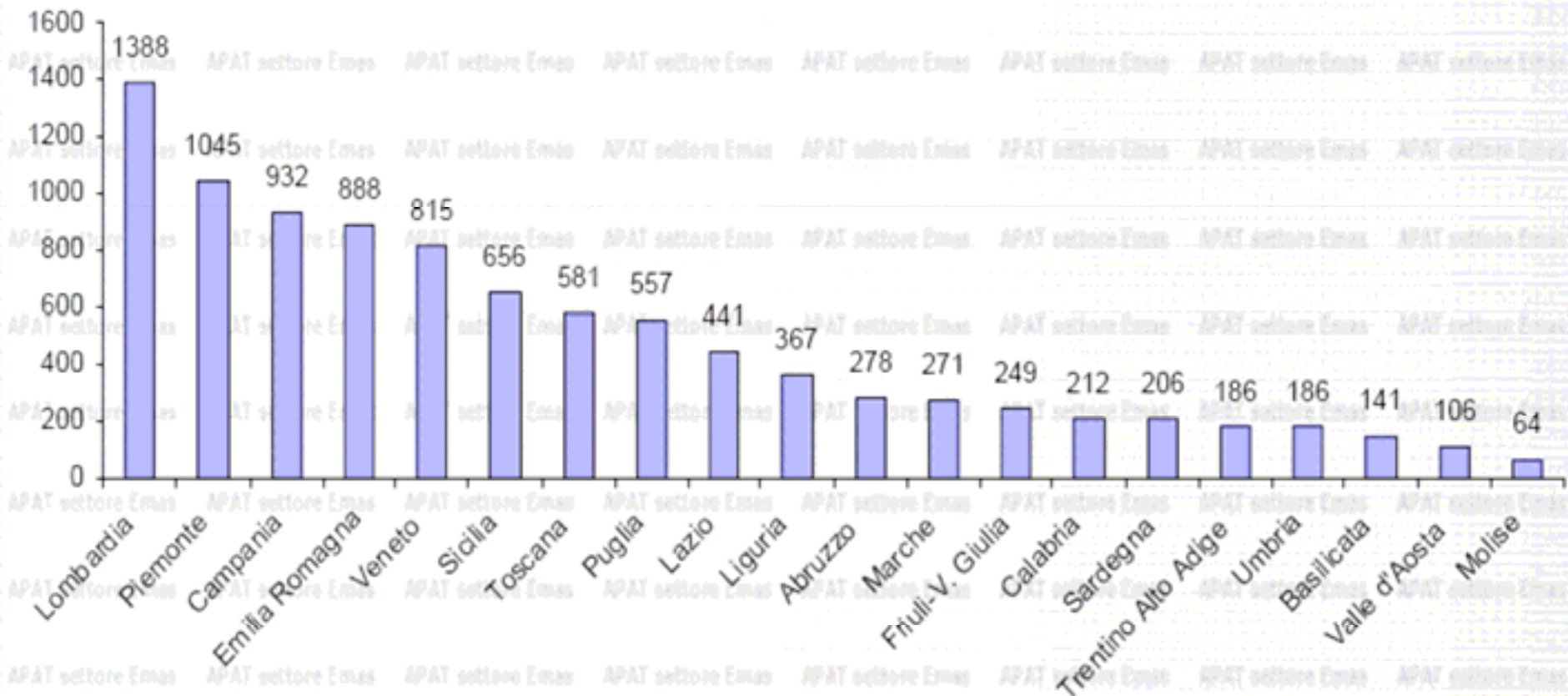
1. ISO is ruled and implemented at international level while EMAS at european level
2. Different system of accreditation and registration: for ISO there is a private Body (in italy is the SINCERT), for EMAS is a public institution (EMAS committee) that gives directly the certification to the organizations, after the Audit
3. ISO14001 doesn't have any oblige of 'environmental statement', while with EMAS the 'environmental statement' is seen as a tool to communicate the information to the public
4. With ISO the certification is given for whole organization's processes, while with EMAS the certification can be given also to a single site or process of the organizations

4. ISO 14001



4. ISO 14001

Certifications ISO 14001 al 31/12/2006



4. ISO 14001

ISO or EMAS?

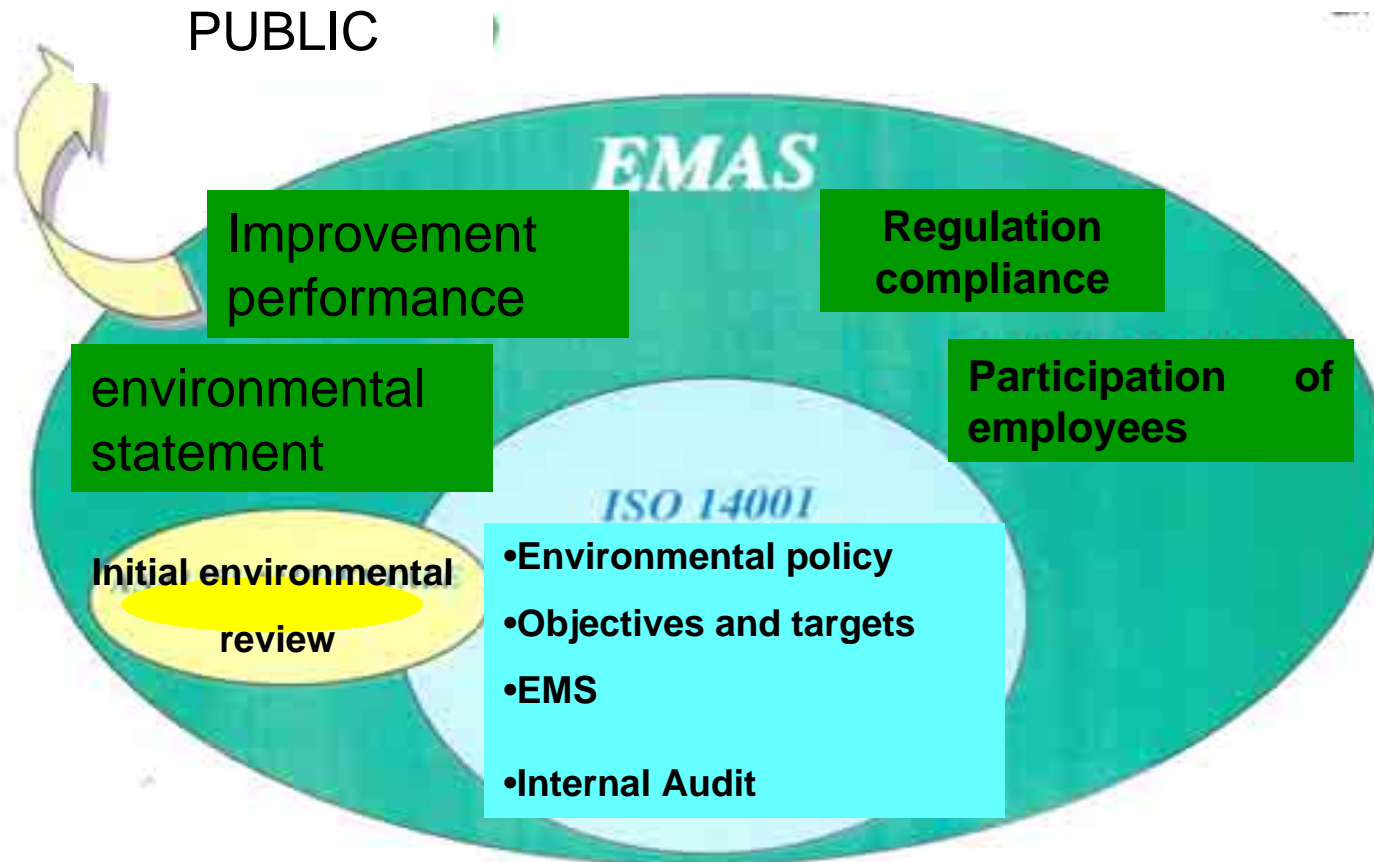
Either ISO and EMAS are tools that allow organizations to obtain advantages such as the improvement of the environmental performances, a sustainable management of the natural resources and a better images of the company towards authorities and customers.

The adoption of EMAS scheme can be more binding than ISO certification, because with 'environmental statement' the organization declares the environmental objectives achieved and the future commitment to the public

All the above can also produce not only an improvement of environmental performances but also an economic advantages for the organization

Therefore ISO can represent a first step for the companies that want to certificate its EMS that can be integrated with EMAS scheme

4. ISO 14001



5. References

www.apat.gov.it

<http://www.apat.gov.it/certificazioni/site/it-IT/>

http://ec.europa.eu/environment/emas/index_en.htm

<http://www.emas-ecolabel.it/site/it-IT/EMAS/>

'Sistemi di gestione Ambientale per le imprese' MATTM- ARPA ER- Città di Manfredonia