## EMAS 2000

a dynamic instrument for environmental protection and sustainable development



Business benefits and Eco management in the Mediterranean Region





# Emas is the trademark of modern environmental policy and proactive environmental management

## EMAS and sustainable development

The Eco-management and Audit Scheme, known as the EMAS regulation, represents a new approach to environmental protection through the use of market mechanisms.

It helps upgrading existing legislation by developing voluntary inventive based legislation.

EMAS is a direct response to some of the key principles in the European Union's Fifth Environmental Action Programme and the challenge of sustainable development.

Behind EMAS stands the concept of broadening the range of instruments and promoting an approach of shared responsibility in environmental protection.

EMAS has been adopted by the council on 29 June 1993 and open to industrial participation since April 1995.

The EMAS scheme is currently being revised EMAS 2000 and will lead to a wider scope of application to all sectors of economic activity public and private. Also, the integration of ISO 14001 removes the competitive element between the two schemes and ensures a smooth transition for companies wishing to progress from ISO 14001 to EMAS.

Nevertheless, EMAS continues to go further than the international standard in its requirements for performance improvement, employee involvement, legal compliance and communication with stakeholders, including performance reporting.

## EMAS: modern environmental management

The main objectives of EMAS are the improvement of environmental performance, demonstration of compliance with environmental legislation and the communication of environmental achievement to the public by a company The requirements of EMAS as a voluntary instrument are the establishment of an environmental management system and its audit as well as the public report of environmental performance.

This should help companies to integrate more and more environmental considerations into their daily management.

The compulsory independent verification of the environmental management system and the quality of environmental information give credibility to the EMAS Scheme.

Most of companies with EMAS state that they are satisfied with economic benefits, improved management practice and better employee morale.

So far, more than 3000 registered sites have participated.

Northern Europe took the lead but there are ever increasing registrations in southern Europe.

The objective of this brochure is to familiarise SME's in the Mediterranean region with the approach of the EMAS regulation and how to get there in 21 steps. Step by step.

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### THIS DOCUMENT IS ELABORATED AND PUBLISHED BY:



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## Environmental management day by day

## What is environmental management?

Environmental management is the management of a company's activities which have, have had or may have an impact on the environment.

Its objective is to preserve natural resources, to limit emissions of pollutants and environmental hazards and have a safe workplace.

Economic activities can have a significant impact on the environment:

- The manufacture of products requires the extraction of raw materials from the environment and the consumption of water and energy.
- Activities associated with the manufacturing process, such as maintenance, packaging and transport all have environmental impacts.
- In addition, the majority of products end up rapidly as waste after utilisation
- Supplies and services can also have considerable impacts on the environment. The use of products and the required energy generate waste, pollution and emissions.

Regardless of whether your organisation is large or small,

or whether you are involved in production or services... protection of the environment and sustainable development is your business.

It is not only a duty for every citizen and an obligation towards future generations, but environmental management can also be a source of revenue, through the creation of new products, services and new markets. EMAS is modernisation of management. Tools like EMAS will shape public policy and markets. Today EMAS is voluntary.

It may well become mandatory tomorrow. because consumers and customers want it... Modern companies have to be part of it.

## What is an environmental management system (EMS)?

An environmental management system is built upon a set of environmental actions and management tools. Those actions depend on each other to achieve a clearly defined goal: environmental protection. EMS is a continual cycle of planning, doing, reviewing and improving the environmental performance of an organisation. It helps to build environmental management everywhere.

Among the working steps you find:

- Initial analysis and inventory of the environmental aspects associated with the company's activity
- Planning of the management system
- Environmental action programme to meet specific objectives
- Training and awareness programmes of all employees
- Implementation of the system
- Inventory of the legislative requirements
- Internal monitoring of the EMS and audits
- Internal and external communication
- Independent verification

The whole system functions with a view to continuously improve the environmental performance of an organisation.

#### What is EMAS?



EMAS is a public European wide quality label for voluntary environmental management and communication. It is a symbol for modern environmental management, transparency and participation. It is managed by the memberstates of the european union. EMAS means environmental management and audit scheme. EMAS is simple:

Private and public companies that would like to participate in the scheme must establish an environmental management system, develop an environmental action program, audit and report publicly their environmental performance. Their work and information will be verified and judged by a public accredited independent expert. Successful companies will be publicly recognised european wide.

EMAS is completely compatible with the international environmental management standard ISO 14001, but goes further. EMAS is like a trademark which stands for:

We do better than legal compliance We have active employee involvement We practice honest and true communication

Our goal is good environmental performance



## There are very good reasons to go for EMAS

There are hundred and hundred of companies throughout Europe which made benefits with EMAS – economic and organisational - as well as improved image and reputation.

#### Economic benefits gained from the implementation of EMAS, Cleaner production and ISO 14001

Company	Sector	Action	Measures Improvement of oil and combustible storage	Benefits
Secil Betao (P)	Concrete factory	Energy reduction		6 000 euros
Louis Letz GmbH (D)	Office Supplies	Waste reduction	Use of recycled granulate	225 000 euros
Secil Prebetao (P)	Cement factory	Water reduction	Water management	7 400 euros
Industria Servas (S)	Gasket manufacturing	Rawmaterials reduction	replacement by water	2 000 euros

# EMAS is about sustainable use of resources, prevention of pollution, involving employees... and making profit!

By rationalising and optimising raw materials, packaging, transport, water and energy- including by recycling, you can cut your costs and identify other possible savings.

Reducing the volume and toxicity of your waste, used water and air emissions does not only improve the environment but also reduce related taxes and costs. It was proven most of the time that going for EMAS is cost saving

### EMAS Improves relations with the authorities

In the near future, authorities will reward voluntary environmental excellence and offer administrative relief to proactive companies. Already the implementation of an EMAS will accelerate your applications for public aids and subsidies. EMAS will enable you to get ready for future fiscal and administrative developments and will help you to comply with regulatory requirements. In the future EMAS companies will have a fast

track in regional European administrations. EMAS is trustworthy because it goes beyond environmental compliance.

## EMAS might be the entry door of future public markets and public procurement

Many institutional consumers will very soon demand that you prove your "green" credentials. You will have to be "environmentally performing" if you want to have access to future public markets. Companies with EMAS already get in some countries like Spain, a bonus within the attribution of public calls for tender. As local authorities and public utilities will go for EMAS as well in the future they will "green "their supply chain and ask SME for more eco efficiency.

## Consumers and customers: with EMAS you will stay better in the market

Business of tomorrow is not only about products and processes it will be more and more about how business is done. Responsible consumers will choose more and more those services and products that have a confirmed and credible environmental performance along their lifecycle. These markets are growing constantly—EMAS will become a trademark.

### With EMAS your company has more value

An environmental management system in operation will enhance the value of your business in the event of merging, acquisition or sale of your company. The value of your company depends also on your environmental image, environmental management capacity and good track record. Bankers and investors start to recognise the benefits of EMAS All major transnational companies at international stock exchanges are already screened for their environmental performance today, tomorrow this will be reality for a lot of SME

### EMAS helps your partners in finance and insurance

An EMS will help you to obtain financial and insurance services faster and perhaps even at a cheaper price. Some companies already profit from low and adjusted insurance fees in view of their environmental management program. A Company that can demonstrate that it has implemented a hazard-prevention policy can reduce its liabilities in the event of an environmental accident. EMAS stands for application of the precautionary principle and prevention.



## EMAS will definitely modernise your management

An EMS allows you to check efficiently your company's up-to-date and relevant data and performance. Furthermore it gathers all the necessary information to communicate effectively with the different internal and external actors involved. Environmental protection concerns everybody on the shop and top floor. EMAS will empower people in different departments to work and dialogue again around environmental action programs. It gives transparency of management and processes.

## Enhance the quality of your products and services with EMAS

The management and protection of the environment are the natural extensions of quality management. They go together and your customers like multinational companies will demand it more and more in the near future. A lot of European SME's have been "invited" in the past to have certified quality management systems. The same trend is coming for environmental management systems. EMAS stands for "environmental quality"

### EMAS could enrich the process of environmental innovation

Internal action and reflection on the environment performance can generate new gestures and positive behaviours. New insights may lead to innovation into better products and services. EMAS helps to move away from end of pipe thinking and integrates principles of environmental protection already in the early stages of design and creative thinking.

## EMAS is about being part of a modern trendy organisation

An EMS that operates on the basis of active involvement is stimulating and enriching for all employees. Staff motivation and employee moral are among the most frequently named benefits from

EMAS European wide. People working in an "EMAS" certified organisation can be proud to work in a company demonstrating environmental excellence.

## EMAS helps to improve individual and public health

Having a responsible attitude towards hazardous products and processes has a direct beneficial effect on the working conditions in your company and in the vicinity. Diminution of the dispersion of toxic substances, development of safer products and services and respecting the carrying capacity of our ecosystems will improve quality of life and our health.

## Neighbours are partners: EMAS facilitates local accountability

People live around service and production facilities. Companies have neighbours and should cohabit in harmony within the rural or urban environment.

#### EMAS

enables to avoid situations of conflict because it favours a pro-active attitude of transparent communication. EMAS stands for dialogue with all interested parties like employees, general public, local administration, and environmental pressure groups.

## EMAS means : Act for your children and the future

Today every economic activity should be sustainable and be compatible with the concern to preserve and guarantee the quality of life of future generations Organisations in every sector should have this ethical commitment and demonstrate a responsible attitude to the use of natural resources, and to the carrying capacity of planet earth. EMAS is already a tool for sustainable development.

Benefits of the implementation of an environmental management system in a small or medium-sized enterprise (SME)

#### Internal

Potential savings of energy and resources
Cost reduction
Improved employee moral
Better internal communication
Modernisation of management

#### **External**

Better communication with the authorities
Better appreciation by the banks and insurance companies
Improvement of your public image
Advantage for obtaining future public contracts
Snowball effect on suppliers

Compliance with environmental legislation Prevention of environmental accidents

#### Public authorities and institutions

also will use EMAS to modernise sectors, industrial sites and regions... EMAS is a tool for sustainable development and collective action

## 4 Sustainable tourist development in the Mediterranean region with EMAS

Tourism is central to sustainable regional development strategies. In Baleares (S), 30 tourist facilities (hotels, harbours, restaurants, golf course...) provided useful information about their environmental performance to concerned consumers and tourists. The region of Campania and Piemonte (I), regulators have had good experience with EMAS and will extend it to entire hotel groups. Spanish authorities support 125 hotels in the region of Granada, Tenerife and Benidorm to focus on their main environmental impacts. EMAS step by step methodology, environmental training of employees and building capacity will help to empower the tourist sector in the Mediterranean area to improve its environmental performance and green competitiveness

## Join forces : small SME's in the ceramic district go for EMAS

Public and private partnerships in the district of Modena and Reggio Emilia are leading to a Local Agenda 21 with clear environmental performance indicators for all actors in the ceramic sector. 160 SMEs will do environmental benchmarking and transparent reporting, 114 sites will be cleaned up and already 10 SMEs have started their move to EMAS

### Management of an industrial estate with EMAS: the harbour of Ravenna

The Provincial and Municipal authorities in Ravenna are promoting the implementation of EMAS in the principal chemical plants situated in their harbour Till now 16 chemical plants have signed a mutual agreement to start implementing EMAS at their sites. The

The eco-management family

There are quite a number of management tools and approaches available like ISO 14001, clean technology, regional pilot programs and awards – all of them are stepping stones towards EMAS.

joint technical committee will elaborate the area's initial environmental review, environmental policy, objectives and program to harmonise methodologies for EMAS implementation.

## Organise and use infrastructure with EMAS

300 textile industries and 3500 employees in the district of Prato (I) are implementing a collective EMAS. After the development of a common environmental policy, they reduced air emissions, energy, waste and water consumption. Their innovative approach uses EMAS to manage the common infrastructure like waste management facilities, process water, sewage system, electricity power generation and even an electrical bus on site.

### Eco-efficiency and sustainable development is Setúbal Region (P)

INETI/CENDES, in co-operation with the Municipality of Setúbal and the regional enterprises association (AERSET) developed the PROSSET Programme (Sustainable Production in Setúbal) with the participation of 10 industries from different sectors: metal works and surface treatment, production of white goods, food, paint, vehicles components and concrete. The application of cleaner production strategies had lead to the definition of over 190 feasible improvement

ment of 875 000 Euros and anual savings of 850 000 Euros. The environmental benefits of these measures have a significant impact in the region: less 595 000 m³ of water consumption, less 355 000 m³ of waste water discharges and less 142 ton of hazardous materials use. Therefore, the results achieved at the micro level (even with only 10 participating companies) had a very positive impact at the meso level (region). Some of the PROSSET companies are implementing EMS's and integrated the projects' results in their environmental objectives and programmes.

## Green suppliers with EMAS: the case of Public Hellenic enterprises

The Greek Ministry of Environment and Urban Planning is investing in knowledge and capacity building within the chemical industry: oil refinery, power generation, vehicle and sugar industry in Thessaloniki, West Attiki and Kozani. Participating companies have to pass along their EMAS expertise to small SMEs in their supply chains.

### Do-it-yourself : public authorities go for EMAS

Tourist resort Capri or the municipality of Varese Lurgi recently demonstrated the trend in southern Europe to use EMAS as a management tool for local public authorities.



#### **EMAS**

## Eco-management and auditing scheme Go for it Step by step, at your own speed...



#### Getting started

There is no standard method. The implementation process depends on the size of the organisation, its products and services and also on its level of management culture. Use your common sense!

## 1. Be clear about the ultimate objective of your project

Do you have to implement an EMS because the European head office has requested it you to?

Is an ISO certification or EMAS registration indispensable for you to access a new market?

Do you want to take part in an environmental excellence programme (e. g. regional voluntary agreement)?

Do you want to get savings or market benefits?

Are you convinced that an EMS is the natural extension of your current management and that it represents an investment for the future?

#### 2. Analyse your need for resources

EMAS needs time, knowledge, human resources, additional information, external advice, your company's enthusiasm and also your economic resources.

#### 3. Have the support of the boss

Make sure that management, at the highest level, is involved and supports the EMAS implementation project.

#### 4. Involve motivated staff

Involve and integrate your colleagues from the outset. Form a competent team.

Make use of internal "know-how" and of the experience of the employees. Take the time to act, learn, build capacity and experiment.

#### 5. Get a leader

Find and name a dynamic co-ordinator that can bring life to the project, make it effective and promote it internally.

### 6. Look for and find the necessary information

The great number of books published on environmental protection in different sectors can be a source of information and can help you to understand how to start your project. Look for information on the Internet. You will find information about your legal obligations, clean technologies to use as well as action-plans, case studies, recommendations, etc.

## 7. Call on eco-counsellors and ask for public grants and help

External assistance can be useful to carry out different steps of the EMS, such as the initial review and identification of the significant environmental aspects of your company's activities, legal requirements, the development of procedures, etc. All regions offer a financial assistance to cover costs associated to the counselling to the SME's.

### 8. Provide for training and capacity building

Environmental management is a process where you only learn by doing things. Environmental education is very important. There exist very specific public programs for capacity building Info at::

Greece: http://www.minenv.ar

Italy: http://web. tiscalinet. it/ComitatoEcolabelEmas

http://www. sinanet. anpa. it

Portugal: http://www. dga. min-amb. pt Spain: http://www. mma. es

http://www. gencat. es/mediamb

Where to get public help and assistance		Greece	Italy	Portugal	Spain
			Regional		
Financial	phase 1 : environmental				
assistance	review, policy and program	•	75 to 50%	•	100 to 50%
	phase 2 : introduction of				
	the ems and validation to EMAS		50 to 40%	•	50 to 40%
Investment subsidies		•	<b>✓</b>	•	<b>V</b>
Fiscal deduct	tion	•	<b>✓</b>	<b>V</b>	<b>V</b>
Available info	ormations (Cdrom, web pages )	V	<b>✓</b>	<b>V</b>	<b>V</b>
Pilot projects	3	V	V	<b>V</b>	<b>V</b>

The competent bodies of each countries can be contacted to get further information about the available financing possibilities and pilot projects.

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 Portugal: +351 214728249
 Italy: +39 06 50072066
 Spain: +34 915976423

## EMAS from the idea to the action





You have started and 19 more steps are now necessary to achieve an effective systematic environmental management.

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There are some milestones on the road to EMAS like P= planning the EMS, D = doing and realising your program, C = controlling and evaluating the environmental performance A = acting on continual improvement and last but not least, communication and verification.

Those who have a quality management system in place may profit from this experience. Others who are already ISO 14001 certified have already done a good job on the road to EMAS and have to realise only a few more steps. New starters have to start from here...

# The planning of your environmental management system: the first five steps

Step 1: Develop an environmental policy for your company or organisation

The environmental policy is a public document prepared by your company, in which you describe your commitments in respect to the environment. This written commitment from management must make a reference to

- Development of environmental performance beyond legal requirements
- Examination and monitoring of your organisation's activities and the analysis of critical environmental impacts
- Implementation of measures necessary to reduce, prevent or eliminate environmental pollution and pressures.
- Preliminary assessment of the environmental impacts of new activities and products

- Prevention and reduction of the risk of emission of pollutant substances in the event of accident
- Regular comparison of the action plan with the environmental policy
- Systematic pursuit of environmental objectives and targets
- Co-operation with the public authorities in order to reduce environmental risks and to minimise impacts of accidents by using appropriate technologies
- Increased environmental awareness and participation of employees
- Providing your customers with information on the environmental aspects of your products and services
- Obtaining agreement from contractors working at your site that they will comply with your standards and procedures

#### Your 19 steps to implement EMAS

#### Getting started

#### P = plan

- 1. Defining the environmental policy
- 2. Identifying significant environmental impacts
- 3. Legal requirements
- 4. Defining objectives and targets to be achieved
- 5. Defining the environmental management programme

#### D = do

- 6. Structure and responsibilities
- 7. Training, awareness and skills
- 8. Communication
- 9. EMS documentation
- 10. Documentation control
- 11. Operational control
- 12. Contingency planning and emergency plan

#### C = check

- 13. Monitoring and measurement
- 14. Non-conformance, corrective and preventive actions
- 15. Records
- 16. EMS internal audit

#### A = act

- 17. Management review
- 18. Public communication
- 19. Validation, verification and registration

#### Communicate

Providing full information to the public and opening dialogue about the environmental impacts of your company and complaints coming from the outside.

#### ASER

### Recycling industry of lead and zinc Spain

Policy: "We commit ourselves to evaluate, control and reduce the level of air emission, waste water, noise and hazardous waste as well as improve the visual impact of our industry. We will develop training of employees in order to increase their preparation and motivation towards environmental protection"

SOFÍA BARRENECHEA

## Step 2 Analyse the significant environmental impacts of your activity

The most important step in the implementation of EMAS is probably the initial environmental review. This means the systematic and exhaustive evaluation under ecological criteria of the various aspects of your activity. It is like a snapshot picture of the "ecological footprint" of your company or organisation

This will provide a basis for a sound environmental action programme with clear objectives and targets. This initial review includes the examination of:

Significant environmental impacts associated with your activity, products and/or services

- Legal and regulatory requirements relevant for you
- All your existing practices and procedures concerning environmental management
- Evaluation of the results of inquiries into previous incidents
- Complaints from neighbours about your activities.

These results will figure in a so called register of significant environmental impacts. There is no universal method of assess-

ing and measuring environmental impacts.

To start, have a closer look at your direct and indirect impacts.

While evaluating your organisation you should also consider issues related to the location of your activity like noise, odours, visual impact, occupation of space etc.

#### Direct environmental aspects

Air emissions
Use of natural resources
Use of raw materials
Waste generation
Waste water disposal

#### Indirect environmental aspects

Design of products
Transport
Supply chain practices
Recycling of waste
Planning and administrative decisions

#### Examples of emission of hazardous substances

Activity	Emissions	Environmental impact
Transport	Carbon dioxide (CO <sub>2</sub> )	Contribute to the greenhouse effect
Landfill	Methane (CH <sub>4</sub> )	and thus to the alteration of
Heating	Fluoride gases (CFC, HFC, etc)	global climatic conditions
Air conditioning		
Cooling agents	CFCs	Deplete the ozone layer which protects
Textile washing agents	Chloride solvents	the earth from harmful ultra-violets
Fire extinguishers	"Halons"	radiation from the sun
Road traffic	Sulphur dioxide (SO <sub>2</sub> )	Acid rain (causing health problems and
	Nitrogen oxides (NOx)	forest and building deterioration)
Use of solvents	Volatile organic compounds (VOCs)	Contribute to ozone formation in
Heating	Nitrogen oxides (NO <sub>x</sub> )	the low atmosphere and are harmful
Waste burying	Methane (CH <sub>4</sub> )	to health
Road traffic	Nitrogen dioxide (NO <sub>2</sub> )	Cause local air pollution
Heating	Particles (MW <sub>10</sub> )	(especially in urban areas)
Industry		
Waste water from	Nutritive salts (phosphorus	Cause eutrophisation (enrichment of
industrial activity	and nitrogen)	nutritive materials in rivers, lakes and
	Organic compounds	marine areas)

Every economic activity has an environmental impact: global and local

#### Where to get help?

Professional federations, chambers of commerce or local authorities can provide you with publications and information about your sector of activity and about its specific environmental impacts. There are simple and original methods to assess the significant environmental impacts of your activities, such as "Ecomapping" for SME's and other tools you may find in the EMAS Toolkit available on Internet <a href="http://wwww.inem.org">http://wwww.inem.org</a>

No cherry picking but critical evaluation and focus on significant impacts

## EMAS, be above the law



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## Step 3: Keep you informed about legal requirements and comply with them... And do even better

EMAS is useful in helping you to comply better with the legal requirements that affect your economic activities.

It keeps you up-to-date with developments and to comply with environmental legislation. In the event of non-compliance, corrective measures must be taken to redress the situation.

EMAS organisations go further which means that they fulfil with the legislation, anticipate new regulations and perform even better.

It is often difficult to keep informed of all legal requirements that affect you but there are now many places where you can find smart information

## Small non-exhaustive check-list of your legal obligations:

Waste
Recycling of production waste
Packaging legislation
Hazardous waste storage & collection
Waste register
Surface water
Discharge permit
Soil and underground water
Underground storage tanks
Inflammable liquids storage conditions
Hazardous materials storage
Air emissions, noise and other nuisances

EMAS can also help you to built a more trustful relationship with the authorities

Technical conditions of operating license

#### Cooperativa Ceramica Imola - Italy

"Because of our EMAS certification, the local authorities have diminished the number of environmental controls they used to do in the past "

FABIO FRANCHINI

## Step 4: Set clear environmental objectives and targets

Environmental objectives derive from the environmental policy. An environmental target is the precise method, quantified over a period of time, of achieving the objective. Objectives and targets of an EMS have to be described, communicated and regularly up-dated. They must reflect the company's environmental policy, including the concept of pollution prevention. These objectives may include commitments such as:

- Reduce waste and the consumption of resources
- Reduce or eliminate pollutant emissions in the environment
- Re-design products in order to minimise their environmental impact during their production, utilisation and disposal
- Promote environmental awareness of employees and the external community

Characteristics of objectives and targets

- They are established according to the significant impacts of the activity and must be formulated clearly
- They must bring out a real improvement in environmental performance and are regularly reviewed, corrected and adapted
- They are written, quantified and include deadlines
- Employees are regularly informed about their implementation
- They must be consistent with the environmental policy and be realistic and reasonable

Lonza Ravenna Chemical industry Italy

**Policy** 

Prevention and minimisation of possible environmental, health and safety risks for employees, local community and clients

Objectives

Reduction of air emission

**Targets** 

10% reduction of TOC (Total Organic Compound) in air per tonne of product

Environmental objectives and targets must have a clear and realistic link with your significant environmental



## Ready for action

Step 5: Establish your environmental programme: who does what, when, how, with what means and by which dates?

An environmental management programme is a set of environmental objectives and targets designed to improve the environmental performance of the organisation. It is an overall work plan that translates the company's environmental policy into everyday practice. The programme designates the responsibilities and the means to achieve the defined objectives and targets and to meet the deadlines. The programme is used to integrate environmental protection into the daily life and must lead to changes in behaviour and environmental performance. It is the driver for continuous improvement.

#### Industrias Serva manufacturing industry Spain

 Use of a new skylight to improve the efficiency of the solar light in order to reduce the electric power consumption

2. Implementation of closed circuits refrigeration in some machines to reduce water consumption (14 litres saved per minute)

3. Substituting solvents by water in printing and adhesive processes (in 3 years, the waste of acetone has been reduced by 20 tonnes to 0 Tonnes)

Alfonso Orduña

## Example of a future environmental program Hotel Virginia - Greece

Objective	Target	Environmental actions and means
Reduce energy consumption	25% reduction of the electricity consumption by june 2001	control system of individual electricity consumption in all bedrooms and hotel's facilities     replacement of the old lamps by low energy consumption lamps
Reduce waste generation	50% reduction of waste generation by june 2001	<ol> <li>avoid small packages</li> <li>promote the use of glass, metal, returnable and recycling containers</li> <li>use of chlorine free paper</li> </ol>
Reduce water consumption	20% reduction of the consumption by june 2001	provide " on-off "knob in showers     differentiated water meters for bar, bedrooms and kitchen

**NIKITAS CHOUCHOUTAS** 

While defining your environmental programme, don't forget to also focus on indirect aspects

- supply chain
- subcontractors
- workers involvment...

#### OPEL Portugal Azambuja Factory Portugal

Environmental objectives (selected): Energy: Implementation of energy saving measures in the range of 2% per year (on going)

Water: Maximum water usage in the range of 2m³/car (2001)

Air emissions: Implementation of new paint shop with water born paint technology to reduce the VOCs emission (1999)

OK IT IS
PECIDED
OBJECTIVE: 0% WASTE IN CHARGE
YOU ARE
IN CHARGE
YOU
HAVE
8 DAYS
OH
PEAR

## The Implementation and everyday management require 7 other steps and teamwork

Step 6: Structure and responsibilities: is there a pilot in the plane?

> An environmental management system may be informal in nature but it has also a formal structure. One must delegate tasks and designate people with responsibilities so that everyone knows what has to be done. It is vital for the system to operate well to know who does what, how, when and with what authority. At least seven responsibilities and tasks have to be established in order to

- ensure compliance with environmental legislation and beyond
- co-ordinate the environmental action programme
- raise environmental awareness of the employees and organise training
- organise documentation and internal monitoring
- · communicate with all the staff
- · facilitate the external dialogue and communication
- audit the environmental programme and the management system

They must preferably be written and formalised More important one person "Mr. or Mrs. Environment" has to be in charge and pilot the entire environmental management system.

Step 7: Back to school: Environmental awareness and training

Whatever the size of your organisation, the activity of every employee has an impact on the environment.

Directly or indirectly, significant or small... He or she can contribute positively by innovating with new ideas, changing behaviour, involving people. This requires information, training and acquisition of new skills. EMAS requires to evaluate capacity needs and to organise training. Who needs it? Everybody and:

- Persons involved in the management system and program
- People having a specific job with an environmental impacts
- Following the implementation of new production processes
- Or the introduction of new technical products
- Following accidents and incidents
- change in work processes or the arrival of new employees

• The introduction of new requirements in the environmental legislation

#### Barricalla of Collegno Landfill - Italy

"The process of implementing EMAS have deeply changed the behaviour of workers who feel now very much concerned by the environmental impacts of their activities and are managing them consequently"

ALBA RICHINI

#### **Industrias Serva** Manufacturing industry Spain

The internal training of employees concerning their behaviour to the environment was successful. The internal training programme included not only the acquisition of new skills towards the environment at work but also in their private

ALFONSO ORDUÑA



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## Step 8 : Internal communication : Say what you are going to do and what you have already done

Communication is probably the most motivating element in an environmental management system. Without it nothing moves.

Internal communication consists not only of messages and documents addressed to the staff, or messages from management to executives and workers, like the environmental policy with its objectives and targets. It means also reporting on the EMS's evolution and progress. Furthermore it should be an open transparent dialogue to involve all the workforce.

Step 9 : Have an eye witness : the EMS documentation

The documentation is the internal memory of the environmental history inside an organisation. It is the proof of the performance of the management system. It is adequate, well organised and efficient, by means of paper or eventually in an electronic format.

It contains:

- 1. A written copy of the environmental policy
- 2. A register of environmental aspects and impacts, the environmental management programme and the definition of the system's various responsibilities
- 3. Work instructions and procedures that define the areas concerned by the environmental programme

Step 10: Documentation management or: "The spoken word fades away, the written word remains"

Managing the documentation ensures that everyone uses the same work documents. Main goal is to know everything recent that is available and important at the time and to eliminate out-of-date data in order to lighten the management system regularly. Updating the documents regularly makes your information system credible. Important documents must have an identifi-



number, a publication date and a record of its up-dating, with one or several sig-

natures.

cation

## Step 11: Put your good practice on paper: operational control

Operational control is a set of precise instructions that an organisation follows to protect the environment. It is the

heart of your environmental management system. It helps to pursue environmental objectives and targets and to comply with the requirements of EMAS and environmental legislation. It is the guarantee for a good environmental performance under normal or abnormal working conditions. A procedure may be a simple pictogram or an easy description of tasks to be accomplished. But it may also be an exhaustive statement of specifications for your sub contractors. Their format depends on whether their absence could be prejudicial to the environmental policy or to the objectives and targets to be achieved. These procedures are for all the work-

Step 12: "Fire brigade": The prevention of emergency situations

Major accidents and incidents can damage the environment and the health and safety of the company's work-force and even neighbours. They can generate major economic repercussions for your organisation. Prevent risky situations before it is too late.

The programme for prevention of emergency situations is based on:

- The identification of potential accidents and emergency situations.
- The prevention of accidents (segregation of hazardous materials, non-slippy floors...).
- "Just in case" emergency plans and procedures, drills etc.
- Periodic tests to make sure the plans and procedures work properly.
- · Learning from past incidents.

## Control your own environmental management and its continuous improvement in five more steps

## 12 Step 13 : Monitoring and measuring: the control panel of your EMAS

This central part of your EMAS is useful to follow the progress of environmental objectives and targets and assure compliance with the legislation.

Permanent measuring and monitoring is helpful:

In providing relevant data on request to public authorities.

In enabling permanent control of the use of resources.

In comparing the quality of the site's environmental management over the years.

In informing the employees in a precise way about environmental performance. In monitoring the continuous improvement of environmental management with simple performance indicators.

In involving the financial management team in the environmental process and to measure the financial impact.

**In simulating** different scenarios for Substitution of products or processes.

## Step 14: Learning by doing, non-conformance, corrective and preventive actions

Nobody's perfect... and a management system does not work like a clock from the first day. Reality in the field does not always match the environmental actionplan or the requirements of EMAS.

Non-conformance (something that does not work properly) can be caused by technical problems (leaks, accidental spillage, equipment failure...) or by a management problems like insufficiently rigorous monitoring, lack of training, poorly drafted work instructions...).

What to do in case of a problem? Four

What to do in case of a problem? Four simple steps.

- 1. Examine the problems
- 2. Identify the causes
- 3. Try another approach to find a solution (corrective action)
- 4. Keep track of the action and monitor it. Thus, a corrective action is a rapid and

adequate response to a problem, which tempers the negative effects and prevents the problem from happening again. Preventing a problem from happening is a preventive action. You can learn from each mistake and benefit from the experience. Keep a logbook of the incidents that occur, the problems they cause and the solutions you find.

## Step 15: The records: the memory of your environmental management

The records represent evidence of the environmental management system for the outside world. EMAS implementation will generate and accumulate a lot of new and useful data about energy, waste, resource use and efforts made on a day to day basis. All information must be recorded correctly in writing, and must be precise, simple and understandable.

One manages these records in the same way as the rest of the EMS documentation and period for which they should be retained should be defined in writing. Examples of records:

- Annual waste register
- Reports on incidents, accidents and complaints
- Reports on analysis of wastewater, smoke and air quality
- Statements of energy and water consumption, product usage etc.
- Training certificates
- Summaries of internal audits and management reviews.

The core of an environmental management system's records is formed by the collection of workers' observations of instances of non-conformance in the system, external complaints and the corrective and preventive actions taken.

## Step 16: The audit of the EMS –invite Sherlock Holmes!

The internal audit consists of a periodic assessment of how well the EMS is functioning and how environmental performances are achieved. It enables also to

check the compliance with the EMAS regulation.

This is a systematic, routine and documented process that must be carried out by someone independent who can step back and take a critical look at how the environmental management system works. Audits are necessary because they are an opportunity to take stock of the situation and are vital for the continuous improvement of environmental performance.

Internal audit is the means by which the company is able to determine, by itself or with outside help, whether the system is operating correctly. External audits are carried out by independent external verifiers and auditors with a view to certification. Internal audit results are examined regular-



## Step 17: Meeting on the top for continual improvement: the Management Review

Management reviews are important to keep the environmental management system going in the right direction. Once a year results of the internal audit, of measurements and other useful insights will be shared to plan the future environmental strategy and the next year of the EMS. . . On the agenda of the meeting:

Are we achieving our objectives and targets?

Is our environmental policy up-to-date?

Are the roles and responsibilities that we defined still relevant?

Have we managed our resources properly and intelligently?

Can we still go a little further in the continuous improvement?

Did we succeed in involvement of employees?

How do we communicate?



## You cannot manage what you cannot measure...

The management control panel with environmental performance indicators is vital to navigate, manage and communicate environmental performance. Environmental performance indicators are lean information and steering tools for continuous improvement. They increase clarity, transparency and comparability of the information provided by the EMAS organisation.

Activities	Environmental aspects	Example of Operational Performance Indicators
Transport	Consumption of energy	500 litre fuel used / 1 ton of raw material delivered
•	Air pollution	50 % of our car fleet is equipped with catalysors
Energy use	Consumption of energy	30 % of electricity comes out of alternative energy
Consumption of resources	raw material	5 kg of raw material / 1 kg manufactured product
	• energy	20 kWh electricity used / 1 injection machine hour
	• water	10 Litres of water used / 1 unit of manufactured product
Production process	Pollutant discharge to • Air	500 kg CO <sub>2</sub> / year
	• water	0, 3 gr grease / litre of waste water
	Production of waste	80 kg of waste / Ton manufactured product
Storage of hazardous liquids	Risk of spillage	90 % of hazardous liquids are put in containment
Waste management	Resource use and pollution	80 % of our waste is separated and recycled
Distribution and Packaging	Waste generation	60 % of our transport packaging is returned and reused
		0, 2 kg of packaging / kg of manufactured product
In a Service company		
Activities	Environmental aspects	Example of Operational Performance Indicators
Heating	Consumption of fuel or gaz	150 litres fuel consumed / year /m3 building
Business journeys	Consumption of fuel	50 000 km of business travelling in plane / employee / year
		60 % of employees use local public transport
Printing, copying	Consumption of paper	18 kg of paper used / year / employee
		30 % of paper used is recycled paper
Catering activity	Producing of waste	250 gr of waste / meal supplied
	Consumption of resources	45 % of food used in supplied meals is coming from biological agriculture
Maintenance service	Consumption of material and chemical substances	30% of cleaning products are 98 % biodegradable
		15 Litres of cleaning products used / year / m 2 office surface
Some examples of Manageme	ent performance indicators	
Activities	Environmental aspects	Example of Management Performance Indicators
Environmental department	Environmental objectives and targets	80 % of the environmental targets are fulfiled
Accounting	Green investments	10 % of investments made last year are in clean technologies
Human resources	Training of employees	2 hours training on environmental issues / employee in 1999
Safety	Environmental incidents on site	3 minor environmental incidents without pollution happened in 1999
Public relations	Environmental complaints	2 noise complaints received from the neighbourhood in 1999
Public relations	Neighbourhood relations	3 open days of the company / year
		250 visitors on site event
Procurement	Green purchasing	75 % of all no technical goods are bought with environmental criteria
Quality management	Suppliers chain management	80 % of suppliers were environmental rated in 1999

#### Environmental performance indicators are useful for different stakeholders

 Local public authorities emissions of pollutants into air, water. . • Neighbours noise levels near the factory Customers % of suppliers environmentally rated Employees annual hours of environmental training Financial institutions % of investments in clean technology • NGO's

% purchasing of "green goods"

#### Environmental performance indicators are useful for EMAS because they

- monitor progress related to the different significant environmental aspects
- map out non-conformance and monitor corrective and preventive actions
- generate and compact relevant useful data for records
- assist internal and external audit process
- support the management review
- add value to internal and external communication
- allow benchmarking in the same sector
- generate a pool of information for various stakeholders
- give employees a clear picture of the environmental performance

# Communication reporting and dialogue the show case of your environmental management system

#### 14 Step 18 the External communication or the environmental reporting with verified information

The communication of your environmental performance will add considerable value and improve your image in the market. The fact that this information is reliable, because verified, will be appreciated by customers suppliers public administration employees and local community.

Move away from one paper report a year to a more interactive open communication with different stakeholders. EMAS is an invitation to dialogue.

### Interested parties require different kinds of information

#### Local authorities

Emission data and waste management Compliance and complaints Accidents and incidents

#### Local community

Environmental and health aspects of substances and products emitted Nature of complaints and their settlement

#### Customers

Information relating to processes Environmental quality of products services or management

#### **Employees**

Environmental situations and working conditions
Implication of works council

#### Financial Institutions and investors

Compliance behaviour soil pollution or presence of high risk substance like asbestos



Topical issues in media or of public concern

Origin of raw materials : timber and rainforest

#### **Environmental NGO's**

Development of environmental performance over time

How the precautionary principle is applied

#### The environmental statement

This public environmental statement, validated by an verifier, is presented in a clear and understandable way during the initial registration and then every three years in new complete edition. Updates have to be provided yearly

Main elements to integrate in the environmental statement are :

- clear and succinct description of the organisation and his activities, products and services
- environmental policy and short description of the environmental management system

#### Barricalla of Collegno Landfill - Italy

As landfill of hazardous wastes we were very badly considered by the local community. The publication of our EMAS environmental statement has notably improved our relationship with them.

ALBA RICHINI

We introduced EMAS because the European Textile Distribution from several countries has asked for it. Our company with 30 employees believes strongly that EMAS represents a strategic investment for our image.

High Fashion - Textile factory

Greece

MARIA MOUSIOU

- description of significant environmental aspects and their associated impacts
- description of the environmental program and main objectives
- the results of the environmental action program.
- Facts & figures Use compact environmental performance indicators and establish comparison with results of previous years
- name, date and agreement number of the verifier

EMAS allows flexibility. A written concise statement is required every three years but you may communicate and dialogue in different ways via internet, brochures, leaflets etc. à la carte. The use of an EMAS LOGO will attest the quality of the verified information.

## The EMAS Logo,

trademark of environmental excellence



The EMAS logo is the trademark of the EMAS regulation. It represents a proof of environmental excellence as well as the reliability and credibility of the information with regards to its environmental performance. It means that you have successfully implemented an environmental management system and that you are ready to communicate your results to the outside world.

#### What the EMAS logo stands for:

- The establishment and functioning of an environmental management system
- The commitment to improvement in environmental performance and its systematic, objective and periodic evaluation above legal compliance
- The credibility of the information validated by an accredited environmental verifier
- The active involvement of employees

#### Why an EMAS logo:

The purpose of the EMAS logo is to

 raise awareness about the scheme in the public, among interested parties and among organisations willing to improve their environmental performance

• allow EMAS registered organisations to better communicate in the market. The EMAS logo is not an Eco-label. It delivers no information on a product to the consumer as an eco-label. It indicates the verified status of the information provided and the participation in the european wide scheme. In other words, the logo represents a "seal of reliability of the information" but not a "seal of superiority of the products"

#### Options for using the logo:

- on information advertising an organisation's participation in EMAS
- on registered organisation letterheads
- on validated environmental statements
- on extract of validated information
- on adverts for products, activities and services while ensuring that there is no confusion with environmental product labels

## What you can do and not with the logo

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The use of the logo: "verified environmental management"

- Yes, on the entry door of a registered site
- Yes, on the cover of a brochure of an organisation completely registered
- No, for an organisation that uses products or services coming from a registered site
- No, for a global environmental report of an organisation if not all sites are registered.

The use of the logo: "validated information"

- Yes, on a compilation of validated performance data for authorities
- Yes, on a brochure based on the content of validated statement
- No, on products and their packaging
- No, on adverts with comparative claims

For further guidance on the use of the logo, the competent bodies can be consulted.

EMAS public administrative fees for registration which entitles the use of the logo

	Small and Medium	Large
	companies	companies
Greece	•	•
Italy	50-500 Euros	1500 Euros
Portugal	588 Euros	588 Euros
	+ (Annual fees:	+ (Annual fees:
	588)	1764)
Spain	•	•

#### THE LOGO CAN BE USED IN TWO SITUATIONS:

Version 1



Verified environmental management REG. NO:

The organisation has an environmental management system conforming to the requirements of EMAS

Version 2



Validated information

REG. NO:

The specific information to which the logo is attributed has been validated under EMAS

Where to use it: In newspapers, catalogues, user manuals, medias (TV, websites...), shelves, exhibition stands, information brochures, datasheets, handouts etc. The registration number of the organisation always has to be indicated in conjunction with the logo.

## EMAS stands for environmental credibility and transparency!

Step 19: the last step
The independent verification and validation of your
environmental management
system and environmental
information.

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When the EMAS environmental management system has reached maturity an accredited environmental verifier is invited to validate environmental information and have a closer critical look at the reality and performance of the environmental management system.

This is a unique feature and will give credibility to your management system.

Verifiers are special environmental auditors. They are accredited and controlled by the state or other public private institutions. The supervision is done by public administrations. Verifiers may be persons or organisations.

They know very well the EMAS regulation and the environmental problems and solutions of a particular sector. EMAS verifiers are auditors and environmental experts which may work european- wide but only in a specific sector like energy, public administration, chemical industry etc. Therefore they are different from ISO 14001 auditors who are management experts.

The european commission and the member states control the quality and independence of, the accreditation system.

If there is no verifier in your country available in a specific industrial sector – find one in the other EU Members states.

The names of all accredited EMAS verifiers can be found on the internet: <a href="http://www.europa.eu.int/comm/">http://www.europa.eu.int/comm/</a> environment/emas

#### What is the job of the verifier?

He has to audit and verify that an organisation's environmental management system and its communication conform to the requirements of the EMAS regulation.

This verification is carried out by examining documents, visiting the organisation and interviewing personnel. The verification programme will be mainly focused on :

- compliance with environmental legislation
- significance of the organisation's direct and indirect environmental aspects
- environmental policy and performance
- involvement of workers
- reliability of information
- and the environmental statement
- results from previous verifications, internal audits
- efficient working of the environmental management system.



This thorough job will be done in a period not exceeding 36 months.

A verifier audits once a year the environmental data which have been generated due to continual improvement.



What happens if you are ISO 14001 certified and want to be EMAS registered?

Companies which have an environmental management system certified to the international ISO 14001 standard have already gone a long way to meet the requirements of EMAS. This because the management system of EMAS is the twin of ISO 14001. Therefore, once a company is ISO 14001 certified, few more things have to be demonstrated to the outside world:

- Honest information to the public and stakeholders
- Improvement of environmental performance
- Legal compliance
- Involvement of the employees

These aspects will need to be verified by an accredited verifier in order to obtain the EMAS registration Both the ISO certification and EMAS verification happen sometimes already at the same time to avoid any unnecessary duplication, cost and time.

After the successful verification, registration and the publication in the official journal of the EU, the EMAS logo may be used to spread the word...

Industrias Serva Headshields and sealing gaskets industry Spain

"We decided to be ISO 14001 certified and EMAS registered, as EMAS is a step more further than ISO. Both registrations have been established at the same time, which made the process easier. EMAS has fully improved our transparency by the annual report (at the disposal of anybody interested about the activity of our company) and also by the EMAS external verification that represents a proof of reliability and credibility of the information communicated."

ALFONSO ORDUÑA

# Everything you have always liked to know about EMAS... Frequently Asked Questions

### Can very small companies participate in the EMAS scheme?

Yes, EMAS is open to any organisation which has an impact on the environment. Tall or small companies are fully encouraged to it! Access to public financial help will be facilitated in every member states.

### How much does it cost to implement FMAS?

Cost depends on the size of the company and on its activities. Experiences in Northern European countries show that there is no standard rule. Financial resources spent on setting up an EMS including external consulting fees and associated communication and certification costs are on an average of: (figures don't integrate public aid)

10000 euro for very small companies (< 10 employees)

20000 euro for small companies (< 50 employees)

35000 euro for medium companies (50 <250 employees)

50000 euro for tall companies (> 250 employees)

In most Member States SME's can benefit of 75 % of public aid for the external consultant costs.

### How long does it take to implement EMAS?

The time needed to set up the system very often exceeds one year and

increases in line with the size of the enterprise and the complexity of the production process

To give an idea, the implementation of EMAS took in Northern European countries an average of:

- less than 1 year for small companies
- at least 1 year for SME's
- more than 1, 5 year for major companies

#### Does one really need outside help?

Yes, introducing an environmental management system still seems complicated and calls for outside help most of the time

Experience shows that for EMAS registered companies :

10 % didn't need any kind of help 25 % only needed help from their group 65 % asked for outside help

## What is the most time consuming step in implementing EMAS?

Experience shows that the initial environmental review and the thorough evaluation of management practices are the most time consuming steps. These are followed by:

- Gathering legal, technical and environmental data
- Establishing the environmental action program
- Writing procedures and instructions
- Training of employees
- Internal and external communication

## How many days a week does it take to maintain EMAS working properly?

It is usually one day per week on average, the effort required after certification is the same – small or tall organisations alike

% of companies	Days a week
55%	1 day a week
12, 5%	1, 5 day a week
20%	3 days a week
12, 5%	5 days a week

In France, original new approaches are tested to share one "environmental manager" among 4 SME's.

## Can you get public financial help to go for EMAS?

Yes, most Member States provide financial support mechanisms for SME's. This help can be direct (75 % financing) or indirect (free accompanying measures). The competent body of your country can be contacted to get further information concerning financial assistance.

Additional information can be found on the EMAS helpdesk website :

http://www.europa.eu.int/comm/environment/emas

Aser	Recycling industry of lead and zinc	Spain	Sofía Barrenechea	+34 944 53 50 30
Bio Artsa	Organic bread factory	Spain	Juan Manuel Castro Albuin	+34 936 52 28 51
Industrias Serva	Manufacturing of sealing gaskets	•		
	and heat shields	Spain	Alfonso Orduna	+34 976 46 51 00
Barricalla of Collegno	Landfill	Italy	Alba Richini	+39 011 455 98 98
Cooperativa Ceramica	Ceramica industry	Italy	Fabio Franchini	+39 054 260 16 01
Lonza Ravenna	Chemical industry	Italy	Perrera	+39 054 445 70 11
Hotel Virginia	Hotel	Greece	Nikitas Chouchoutas	+30 375 22 022
High Fashion	Textile industry	Greece	Maria Mousiou	+30 319 45 396
Secil Betão	Cement factory	Portugal	João Taborda	+351 265 52 82 20
Secil Pré-Betão	Cement factory	Portugal	Carlos Figueiredo	+351 265 73 27 68
Pegop	Power plant	Portugal	José Lopes	+351 2418305
Opel Portugal	Automobile industry	Portugal	Public relation Dpt	+351 214407550

## EMAS is welcomed by clients and tour operators

Hotel Virginia - Greece

We participate and contribute with EMAS to solve the environmental problems of our country like water shortage and air pollution, waste. . . parts of the tourist industry as well our guests positively support us and do now excellent promotion for us.

Nikitas Chouchoutas

## EMAS is possible for micro companies producing organic food

Bio Artsa Organic Biscuit and bread factory - Spain

Our organic bread and biscuits respect the environment and human health during their entire lifecycle and production process. Having EMAS and certified bio products is a symbol of excellence. Its is possible even for SME's with less than 10 workers

JUAN MANUEL CASTRO ALBUIN

## EMAS is a tool for the modernisation of management

ASER - Recycling industry of lead and zinc - Spain

Our EMAS registration have enabled us to integrate environmental protection in the global management of our company (manufacturing, maintenance, supply chain, laboratories. . . ). It has also

improved the communication and collaboration in between departments and our employees of the company.

SOFÍA BARRENECHEA



#### EMAS brings competitive advantage

PEGOP - Pego Power plant - Portugal Having EMAS our business image, our relationship with local comunity and environmental awareness of staff have undoubtedly improved. In addition, the Environmental Management System (EMS) has helped us to better organise and control our activities, this contributing towards company business optimisation.

Maria José Lopes

#### EMAS is good for our reputation

Barricalla of Collegno - Landfill - Italy
As landfill of hazardous waste we were
very badly considered by the local community. The publication of our EMAS
environmental statement has notably
improved our relationship with them.

ALBA RICHINI

Your Partner in the region for EMAS

#### **COMPETENT BODIES**

#### In italy

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E-mail: EMAS@anpa.it Tel: +39 0650072066 Fax: +39 065018684

Website:

http://www.sinanet.anpa.it/novita/emas.asp
In Portugal

Direcção - Geral Ambiente, Rua da Murgueira, Zambujal, P - 2720 Amadora

E-mail: paula. nunessilva@dga. min-amb. pt,

Tel: +351 21472. 82. 00, Fax: +351 214719075

Website: http://www. dga. min-amb. pt

#### In Spain

Ministerio de Medio Ambiente, Plaza San Juan

de la Cruz, s/n, E - 28071 Madrid E-mail: ana. fresno@sgeaas. mma. es,

Tel: +34 91597. 64. 23, Fax: +34 91597. 58. 16

Website: http://www. mma. es

#### In Greece

Ministry for the Environment, Physical Planning and Public Works, Dept. of International Relations and the EU, 17, Amaliados Str.,

GR -115 24 Athens

E-mail: e. ioannidou@minenv. gr, Tel: +30 16465762/ 6411717,

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Website: http://www. minenv. gr

EMAS helpdesk in Europe : http://www.europa.eu.int/comm/environment/emas/