

# **EU ECO-MANAGEMENT AND AUDIT SCHEME (EMAS) APPLIED TO CERAMIC TILE COMPANIES**

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## **ABSTRACT**

The EU Eco-Management and Audit Scheme (EMAS), is a voluntary system recognised in all member states of the EU, regulated by (EC) Regulation No. 761/2001 of the European Parliament and the Council, which allows participating organisations to evaluate and improve their environmental performance and disseminate information relevant to the public and other interested parties.

In accordance with EU guidelines, and in addition to accessing new markets, improving the corporate image and relationships with customers, administration and other interested parties, the companies in the ceramic tile sector registered in EMAS in our territory enjoy less pressure from the environmental authorities and fewer controls and inspections, as well as exemption from the need for compulsory financial guarantees stipulated by the new Law 26/2007 concerning environmental responsibility.

## 1. INTRODUCTION

Given the pressure that ceramic tile companies in the European Union are currently experiencing with regard to environmental matters, with increasingly restrictive legislation and a market that is increasingly aware and demanding, those organisations that continue to adopt a reactive approach, considering environmental protection as a threat to their businesses, risk losing competitiveness and suffering a deterioration of their corporate image in the eyes of their customers, consumers and interested third parties.

However, those organisations that decide to face up to the challenge of incorporating the environmental vector into their business strategy proactively, by anticipating the legislative requirements, will have an opportunity to strengthen their image and stand out from the competition.

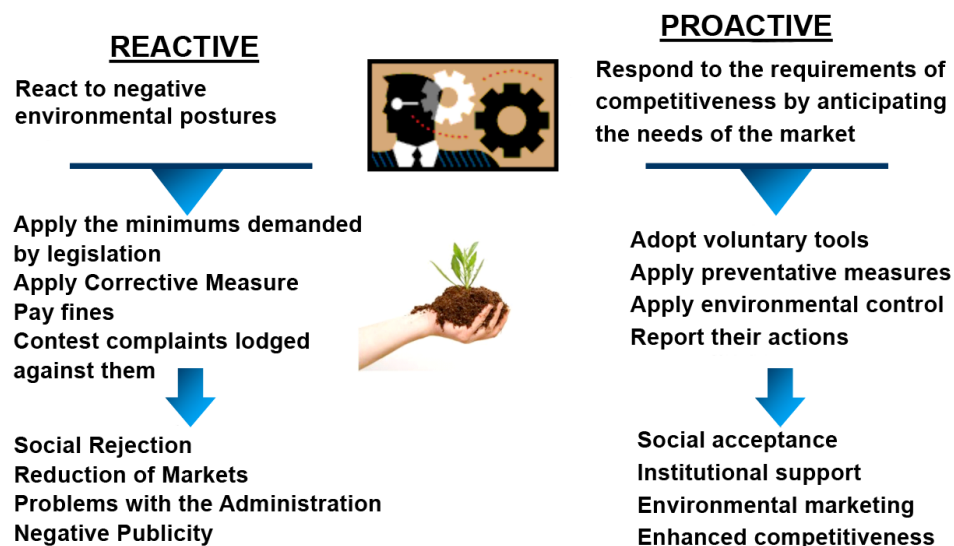


Figure 1. Different business attitudes to the environmental factor.

There are various voluntary tools that the EU makes available to the administrations and to companies that decide to respond to the requirements of competitiveness by anticipating market needs, from an environmentally responsible point of view.

Best Available Techniques (BAT), a basic concept contained in Directive 96/61/EC, succeeded by Law 16/2002, concerning the prevention and control of pollution, is the most technically effective and economically viable way of producing efficiently and protecting the environment.

These BAT act as a basis for determining the emission limit values that are set out in the environmental authorisations drawn up by the competent authorities.

The BREF are EU documents that set out the BATs for particular key sectors.

The BATs for the frit production sector are to be found in the "Glass Manufacturing Industry BREF".

Standardised eco-management systems are recognised within the horizontal-type BAT, i.e. applicable to all sectors, with EMAS prominent among these as being considered the one that offers the most transparency and credibility.

## 2. EMAS

EMAS is a voluntary eco-management system recognised in all member states of the EU, which allows participating organisations to evaluate and improve their environmental performance and disseminate information relevant to the public and other interested parties.

EMAS stands for Eco-Management and Audit Scheme.

EMAS was created by Council Regulation (CEE) No.1836/93, of June 29<sup>th</sup> 1993 (EMAS I). Its review led to European Parliament and Council Regulation (EC) No.761/2001, of March 19<sup>th</sup> 2001, in force (EMAS II), currently partially amended by Regulation (EC) No.196/2006 of the Commission, of February 3<sup>rd</sup> 2006.

The draft of the future EMAS regulation (EMAS (III)) is currently under review. It is expected to be finally published at the end of 2009 and will incorporate significant developments.



|                 |                                                                                                                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EMAS I</b>   | Regulation (EEC) 1836/1993 of June 29 <sup>th</sup> 1993 allowing companies in the industrial sector to participate in a Community eco-management and audit scheme                          |
| <b>EMAS II</b>  | EC Regulation 761/2001. Extended to all economic, public/private, services/industry<br>EC Regulation 196/2006. Modifies Appendix I in order to take into account EN ISO standard 14001:2004 |
| <b>EMAS III</b> | Draft published                                                                                                                                                                             |

Figure 2. How European legislation has evolved with regard to the EU.

The aim of EMAS is to promote the continuous improvement of organisations' environmental performance by:

- Implementing an environmental management system.
- Carrying out a systematic, regular and subjective assessment of such a system.
- Providing information to the public and to interested parties.
- Training employees and encouraging their active involvement.

### 3. THE EMAS LOGO

The EMAS logo may be used by registered companies in two versions, as established in the guidelines set out in Appendix III of the Commission's ruling, of September 7<sup>th</sup> 2001 (DOCE L 247, of September 17<sup>th</sup> 2001).

The EMAS logo always makes reference to the fact that the organisation possesses an environmental management system in accordance with the EMAS requirements, however there are two versions:

Version 1 is used in:



- Informing about the organisation's participation in EMAS.

Version 2 is used in:



- Valid environmental statements.
- Information coming from a valid environmental statement.

*Figure 3. Use of the two versions of the EMAS logo.*

### 4. DIFERENCES BETWEEN EMAS AND ISO 14001

The EMAS Regulation and the international standard ISO 14001 constitute two environmental management tools that are related to the extent that the EMAS regulation refers to ISO 14001 in order to define the requirements of the environmental management scheme.

Companies certified in accordance with ISO 14001 wanting to join EMAS should take into account the additional considerations set out in figure 4 below:

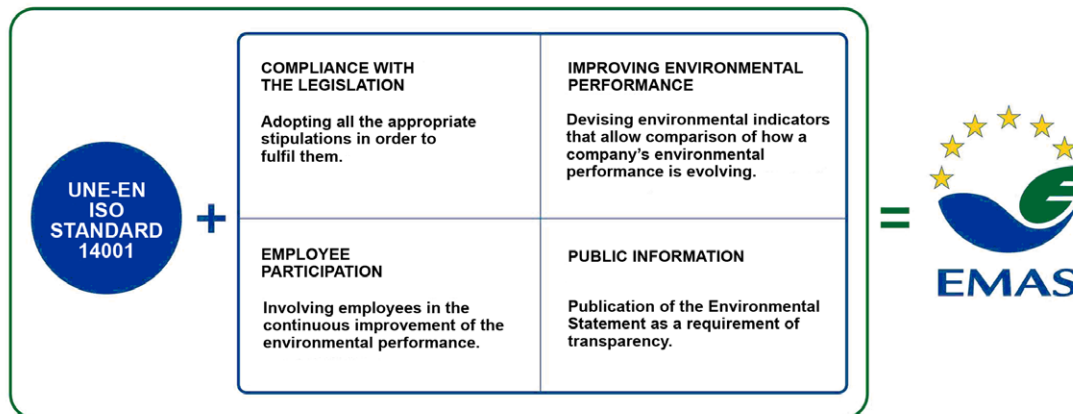


Figure 4. Differences between ISO 14001 and EMAS.

## 5. THE ENVIRONMENTAL STATEMENT

The environmental statement is a document that is intended to give the public and other interested parties information concerning the impact, environmental performance, initiatives set in motion and continuous improvement in the field of environment obtained by an organisation.

It constitutes a basic tool for communication and dialogue with the public and with interested parties. Transparency, credibility and regular supplying of environmental information via the environmental statement are key factors that distinguish EMAS from other environmental management tools.

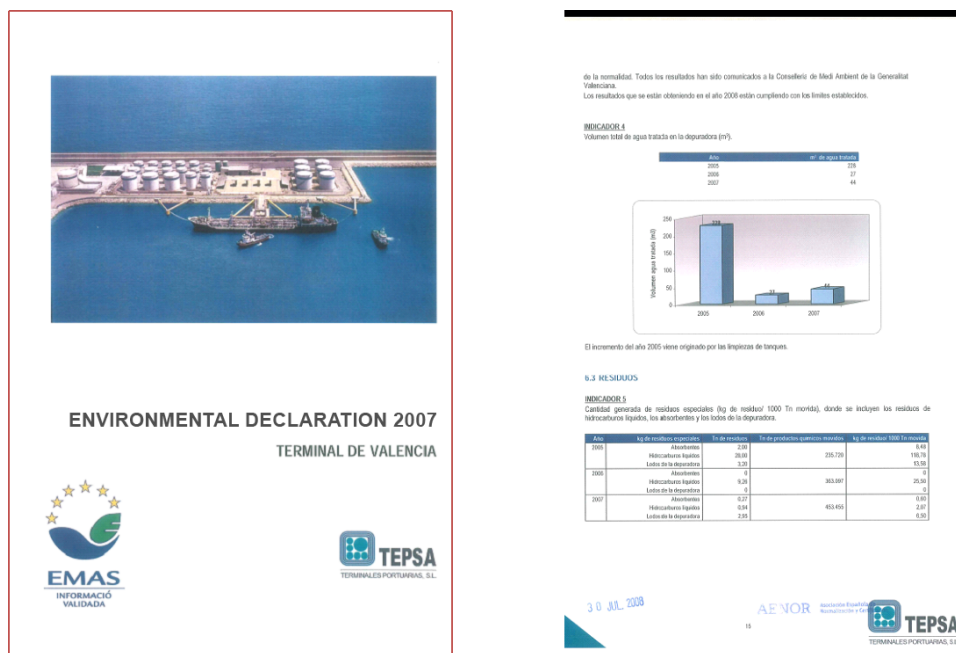


Figure 5. Example of a company's environmental statement.

The minimum content of the environmental statement is stipulated in Appendix III of European Parliament and Council Regulation (EC) No.761/2001, of March 19<sup>th</sup> 2001, and is the following:

- A summary of the organisation's activities, products and services.
- The organisation's Environmental policy and a brief description of its Environmental Management Scheme.
- A description of all the significant environmental aspects, both direct and indirect.
- A description of the environmental objectives and targets in relation to the significant environmental aspects.
- Summary of the data available on the significant environmental aspects that allow a comparison between periods, and an assessment of the development of the organisation's environmental performance, with the use of indicators being recommended.
- The organisation's performance with regard to the applicable environmental legislation.
- The name and accreditation number of the verifier and the date of validation.

Registered organisations must update the information in the Environmental Statement on an annual basis, and this must be validated by an environmental verifier and submitted to the competent body.

## **6. EMAS REGISTER**

The register of EMAS organisations is public and unique. It is maintained by the competent bodies of the various member states. In the Autonomous Region of Valencia this body is the Centre for Clean Technologies (*Centro de Tecnologías Limpias - CTL*), which is answerable to the Office for Climate Change (*Dirección General para el Cambio Climático*).

Any organisation wishing to join EMAS has to have its system verified by a duly accredited verifier and has to submit it to the CTL together with the application for membership and the validated environmental statement.

The environmental verifiers are entities that are accredited and controlled in Spain by the National Accreditation Body (*Entidad Nacional de Acreditación-ENAC*), a private, independent and non-profit making body, sponsored and protected by the Administration, whose function is to coordinate and direct an Accreditation System on the national level while conforming to international standards and rules.

Environmental verifiers carry out two types of action in the EMAS scheme:

- **Verification:** The assessment (audit) carried out by the environmental verifier in order to ensure that an organisation's environmental policy, management system and audit procedure or procedures comply with the requirements of Regulation (EC) No.761/2001. This includes carrying out an inspection of the organisation, reviewing documents and records and interviewing the staff.
- **Validation:** The assessment conducted by the environmental verifier in order to check that the information and details in the organisation's environmental statement are reliable, credible and correct and fulfil the requirements referred to in Point 3.2 in Appendix III.

This table contains a summary of the relationship between the various bodies participating in EMAS in our territory:

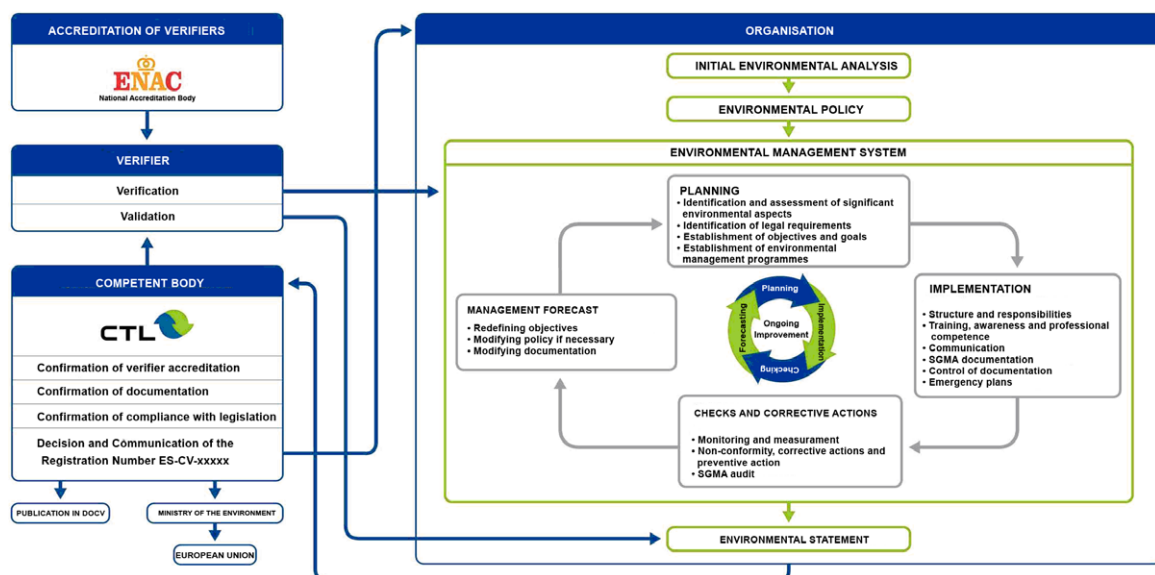


Figure 6. General diagram of EMAS in the Autonomous Region of Valencia.

Once it has been confirmed that all the regulatory requirements have been complied with, the competent administration assigns the organisation a registration number and performs a resolution, which, in addition to be sent to the interested party and to the Ministry of Environment for communication to the EU, is published in the DOCV (the official gazette of the Autonomous Region of Valencia). The organisations registered in EMAS in the Autonomous Region of Valencia can be consulted on the CTL website: <http://www.cma.gva.es/ctl/>

The Spanish organizations registered in EMAS can be accessed on the website of the Ministry of Environment and Rural and Marine Affairs: [http://www.mma.es/portal/secciones/calidad\\_contaminacion/ecogestion\\_ecoauditoria/aplicacion\\_reglamentaria/index.htm](http://www.mma.es/portal/secciones/calidad_contaminacion/ecogestion_ecoauditoria/aplicacion_reglamentaria/index.htm)

For its part, the European Commission's website contains information about

the registration of all the organisations in all the countries: [http://ec.europa.eu/environment/emas/about/participate/sites\\_en.htm](http://ec.europa.eu/environment/emas/about/participate/sites_en.htm)

## 7. MAIN ADVANTAGES OF EMAS FOR CERAMIC TILE COMPANIES

Among the major benefits that the implementation of EMAS can provide for the ceramic tile industries are:

- Guaranteeing compliance with environmental legislation, thereby reducing the risk of incurring environmental penalties.
- Improving the company's corporate image, communications and relations with interested parties.



*Figure 7. Example of an act of dissemination of the recognition by the administration of the organizations registered in EMAS.*

- Savings in terms of resources and costs as a result of correcting inefficiencies and improving the company's competitiveness.
- An increase in staff motivation and awareness.
- Access to new markets, to green purchasing processes and incentives.
  - **Access to tax incentives for environmental investments:** R.D. 1777/2004, of July 30<sup>th</sup>, approving the Company Tax Regulation.

- **LAW 30/2007, of October 30<sup>th</sup>, concerning Public Sector Contracts**

Article 70. Accreditation of compliance with the environmental management standards

"1. In contracts subject to a standardised regulation, the contracting bodies may require the presentation of certificates issued by independent bodies to demonstrate that the employer meets certain standards of environmental management, **referring to EU eco-management and audit schemes (EMAS)** or to the environmental management standards based on the European or international regulations in this area, and certified by bodies conforming to EU legislation or to the European or international regulations relating to the certification".

• Less pressure from environmental regulations:

- **R.D. 509/2007, of April 20<sup>th</sup>**, approving the Regulation for the development and implementation of Law 16/2002, of July 1<sup>st</sup>, concerning the **Prevention and Control of Pollution**. Art.8:AAI and SGM

"..in relation to those activities for which SGMA certificates are applied externally via EMAS or ISO 14001, the Autonomous Regions may establish the rules to simplify the mechanisms for verifying compliance with the obligations arising from the AAI, as well as the processing of the corresponding application for authorisation or adaptation and its successive renewals.

- **Decree 127/2006, concerning Pollution Prevention and the Quality of the Environment Chap. II AAI renewal**, Art. 45.2

"If a facility or activity is registered in EMAS, it will be directly understood that it satisfies the environmental stipulations currently in force"

- **LAW 26/2007, of October 23<sup>rd</sup>, concerning Environmental Responsibility**. Article 28. Exemptions from the obligation to establish an obligatory financial guarantee.

The following are exempt from the obligation to establish an obligatory financial guarantee:

- a) The operators of those activities likely to cause damage whose repair is valued at a quantity of less than 300,000 euros.
- b) The operators of activities likely to cause damage whose repair is valued at a figure of between 300,000 and 2,000,000 euros, who accredit this by the presentation of certificates issued by independent bodies, attached on a permanent and continuous basis either to

the **EU eco-management and audit schemes (EMAS)**, or to environmental management system UNE-EN ISO 14001:1996.

- **Law 34/2007, of November 15<sup>th</sup>, concerning air quality and the protection of the atmosphere.**

Art. 21. Environmental management and audit systems.

The Government Administration and the autonomous Regions, as part of their powers, **will encourage** the voluntary implementation of **environmental management and audit systems** in all the sectors of public and private activity that are sources of emissions, in order to promote a more sustainable production and market and thus contribute to the reduction of atmospheric pollution.

- **Directive 2008/98/CE of the European Parliament and the Council, of November 19th 2008, concerning Waste.**

Chap. VII Registrations and Inspections Art. 34 Inspections

"Member States may take into consideration the registrations made in accordance with the EU eco-management and audit schemes (EMAS), especially with regard to the frequency and intensity of inspections".

## REFERENCES

- Centre for Clean Technologies (Centro de Tecnologías Limpias)  
Ronsa Isaac Peral y Caballero, 5-Parque Tecnológico de Paterna-46980 Valencia.  
<http://www.cma.gva.es/ctl/>
- Ministry of the Environment (Ministerio de Medio Ambiente)  
[http://www.mma.es/portal/secciones/calidad\\_contaminacion/ecogestion\\_ecoauditoria/](http://www.mma.es/portal/secciones/calidad_contaminacion/ecogestion_ecoauditoria/)
- European Union, EMAS  
[http://ec.europa.eu/environment/emas/index\\_en.htm](http://ec.europa.eu/environment/emas/index_en.htm)
- National ENAC Accreditation Body (Entidad Nacional de Acreditación ENAC)  
<http://www.enac.es>