

Eco-Management Audit Scheme for Environmental Benchmarking by Local Authorities - PT

1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products

2. Key Approaches

- Integration
- Participation
- Socio-economic

3. Experiences that can be exchanged

The development of Eco-Management Audit Scheme (EMAS) indicators and benchmarks as well as the implementation of EMAS at municipality level.

4. Overview of the case

Almada became the first Portuguese local authority to develop realistic and appropriate benchmarks for each of 27 EMAS indicators covering the environmental aspects of water use, energy use and greenhouse gas emissions, waste management, procurement of goods and services, pollution prevention and control, mobility and transport, and quality of the natural and built environment. A number of specific goods and services for resource-savings and waste reduction were implemented.

5. Context and Objectives

a) Context

The EU Eco-management and Auditing Scheme (EMAS) was developed for companies and other organizations as a management tool for environmental performance. EMAS supports a structured evaluation and report of a company's impact on the environment, as well as the development of improvement strategies on a continuous basis. The use of Environmental Management Systems for stakeholders of coastal zones can be understood as one effective method of integrative management. By taking a systematic approach to address potential conflicts that may arise from coastal activities of stakeholders, this tool makes their direct and indirect environmental impacts more easily accessible. A number of EU-funded projects have tested and applied the eco-management and audit scheme (EMAS) in municipalities. However, implementation of EMAS in Portugal has been limited both in the private and public sectors. Only four private sector bodies have received certification, and none of the 308 local governments in Portugal had proceeded with the implementation of EMAS. Furthermore, the incentives and support necessary for EMAS implementation in the country are also very limited, with instruments that facilitate the process being virtually absent.

The Municipality of Almada, south of Lisbon, is located on the south bank of the Tagus River and has a geographical area of 72 km². a resident population of 160,825 inhabitants and a fluctuating population of 70,000 inhabitants. The beachfront of great quality and landscape value extends for approximately 13 km, and it attracts the most part of the 8,000,000 visitors that the Council receives annually.

b) Objectives

The EMAS LAB initiative was to select EMAS indicators and develop the corresponding benchmarks, as well as to develop tools and methodologies for the implementation of EMAS in the Municipality of Almada. A further objective was to develop EMAS indicators and benchmarks that could be used beyond Almada for local authorities throughout Portugal.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The Municipality of Almada was responsible for this work. For some time now, the Municipality of Almada has focused on promoting sustainable development within the areas under its jurisdiction, in order to contribute to balanced growth in Portugal. To this end, it has initiated the Local Agenda 21 process, the development of a Municipal Environmental Plan and has implemented various procedures and measures with the objective of guaranteeing a continuous improvement in its environmental behaviour.

b) ICZM tools

Environmental benchmarks considered to be realistic and appropriate to the given local authority's capacities were established for each of the 27 selected EMAS indicators. The methodology of the Almada-EMAS system was established according to EMAS requirements (EMAS European Community Regulation). The indicators were grouped into eight different environmental aspects: water use, energy use and greenhouse gas emissions, waste management, procurement of goods and services, pollution prevention and control, mobility and transport, and quality of the natural and built environment. A Guide for the Application of EMAS in Local Authorities was produced which reports the methodological proposals of the different phases of the process of developing the Almada-EMAS system. This was intended as a useful document for other national Local Authorities, eventually allowing them to avoid some of the limitations and difficulties felt and overcome by Almada.

Specifically, the more visible face of the EMAS LAB process was the procurement and installation of goods and equipment for resource-savings and waste reduction aimed at a reduction of costs together with better environmental performance. The project introduced e.g. LED technology in traffic lights. LEDs offer a tenfold reduction in energy consumption and a life expectancy of an additional 10 years in comparison to traditional traffic lights. Conventional light bulbs were replaced with energy-saving light bulbs at different Almada City Council sites. This will produce a reduction in energy consumption over their lifespan of 80%. The work carried out a conversion of propane gas to natural gas at the municipal sports facility, a switch that represents a 15% reduction in CO₂ emissions. A condenser battery was installed at the municipal sports facility. Condenser batteries are a more potent replacement for conventional lead-acid batteries. In this case, the battery delivers an average savings of ca. €6,467 a year. The Municipality developed and distributed the "Paper Eater", a humorously designed paper recycling bin that encouraged the recycling of 36 tons of used paper and cardboard in the 2005-2006 period, some 12 tonnes more than in 2004. The municipality also switched its procurement of goods and services from its existing suppliers to those that were environmentally accredited (ISO 14001 or EMAS-registered). Six low emission hybrid vehicles were procured, representing a reduction of 8.6 tons of CO₂ a year (60%) on that produced by the fleet that they replaced. Throughout the process, staff training was implemented to ensure that municipal employees were all aware of the various stages and requirements of the EMAS system. Ultimately, the development of the EMAS in Almada led to significant improvements in performance and savings in areas such as recycling, solid-waste production, water and energy consumption, green purchasing, greenhouse gas emissions and use of environmentally friendly transport, all the while providing greater value for money.

7. Cost and resources

The total budget was €957,884 of which there was a Life contribution of €450,692.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The project has successfully achieved its objectives of developing benchmarks, tools and methodologies for the implementation of EMAS.

9. Success and Fail factors

The technical coordination of the initiative was the responsibility of an internal work team, nominated by the Lady Mayor, and made up of representatives of different municipal services, with varied competencies within the municipality: the Municipal EMAS Team. A group of Eco-consultants and a group of Eco-keepers were also created whose functions complemented each other: The 36 Eco-consultants supported the implementation, dissemination and management and the 90 Eco-keepers with a more targeted intervention, at the "know-how" level, related to the particular reality of each site. These staff elements participated in training and awareness raising actions organised by the Municipality, learning new technical competences in the various thematic areas covered by Almada-EMAS. The municipal executive also had a indispensable role in the project.

10. Unforeseen outcomes

The construction of the Almada-EMAS system made possible the adoption of environmental good practice, in terms of the activities developed in the organisation. This project was selected as one of the 21 "Best" LIFE Environment projects in 2007-2008.

11. Prepared by

A H Pickaver, Coastal & Marine Union (EUCC)

12. Verified by

It has not been possible to verify this case.

13. Sources

- Eco-Management Audit Scheme for Local Authorities Environmental Benchmarking LAYMAN'S REPORT (2006)
Municipality of Almada



Eco-Management Audit Scheme for Local Authorities Environmental Benchmarking - laymans text (2.58 MB)

