

ITALIAN EXPERIENCES IN ENVIRONMENTAL CERTIFICATION PROCESSES

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1. INTRODUCTION

Enterprises could not be pointed as the only cause of the damages towards environmental aspects. How people work, travel, organise the free time, or, in other words, how people interact with the territory represents an high potential impact for the environment. This is why the whole vision of the territory and the attention to all the activities is the key factor for safeguard the environment, improving the quality of life and the image of the territory for all the stakeholders.

The current scenario in sustainable planning processes introduces a variety of methodological procedures and action plans; in this paper we want to introduce the Italian experience in environmental certification processes, in particular the EMAS registration applied at territorial level. In particular, an approach in two steps will be suggested:

- an overview over two of the most diffused tools for environmental planning in Italy (Agenda 21 and Environmental Management Systems), especially in the Public sector;
- the explanation of three Italian case studies, exploring reasons and results of the certification in a territory.

2. ENVIRONMENTAL MANAGEMENT OF A TERRITORY

Since the early 1990s, many local and county authorities have worked successfully on environmental management. Above all, their work has included projects to improve the environment of schools, hospitals, equipment yards, day-care facilities, care centres and old-age care services. The projects have often produced significant environmental results, such as lower electricity consumption, but several of them were non-recurring projects. It was not possible to ensure that the institutions continued their work on environmental improvement year after year.

The Public Authorities are the key-players in promoting and enforcing policy and tools for the sustainable development. This role is emphasized in many international documents: (i) the *ONU Conference on Environment and Development* in Rio de Janeiro (1992) through the Agenda 21

Program (chapter 28), continued in the *Conference on Sustainable Development* in Johannesburg (2002); (ii) the *Aalborg Charter of European Cities and Towns towards sustainability* and (iii) the *Sixth Environmental Action Program* of the European Union.

The current scenario in sustainable planning processes introduces a variety of methodological procedures and action plans, integrating, whenever possible, different approaches towards the development of the whole area.

Two of the most widespread methods in planning the actions at national and CE level are:

- the Local Agenda 21 process (from a public sector's point of view);
- the environmental certification based on ISO 14001 standard and EMAS Regulation (both from the enterprises' and public sector's point of view).

2.1. The Local Agenda 21

Concerning the territorial management, the EU with action programs has introduced specific guidelines for the achievement of **Local Agenda 21** and sustainable development principles; the environment is a fundamental way of improvement for all the entity involved in the management of a territory.

The main issues concerning a such process could be (Andreis *et al.*, 2000):

- territorial planning aimed at sustainable development;
- global approach at urban problems;
- effective management of coastal areas;
- development of management systems for vulnerable and natural areas.

Of great importance are other aspects related to pollution reduction, energy efficiency, optimisation of water use and waste management.

Chapter 28 of Agenda 21 binds Local Authorities to implementing at a local level the commitments made towards sustainable development by international community.

A Local Agenda 21 is an approach through which a Local Community defines a sustainable development strategy and an action program to be implemented. This approach is usually initiated by Local Authority, which provides leadership for the process. Its success hinges on close cooperation between the population, NGOs, private enterprises and other local interests.

Because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and cooperation of local authorities will be a determining factor in fulfilling its objectives. Local authorities construct, operate and maintain economic, social and environmental infrastructure, oversee planning processes, establish local environmental policies and regulations, and assist in implementing national and sub national environmental policies. As the

level of governance closest to the people, they play a vital role in educating, mobilizing and responding to the public to promote sustainable development.

Each local authority should enter into a dialogue with its citizens, local organizations and private enterprises and adopt “a local Agenda 21”. Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organizations and acquire the information needed for formulating the best strategies. The process of consultation would increase household awareness of sustainable development issues. Local authority programs, policies, laws and regulations to achieve Agenda 21 objectives would be assessed and modified, based on local programs adopted. Strategies could also be used in supporting proposals for local, national, regional and international funding.

LA21 follows the principles of sustainable development and the goal of ensuring a better quality of life for everyone, both now and in the future. It focuses on an economic, social and environmental agenda, and develops solutions to problems through encouraging better, more efficient practices. It realises that sustainable development is achievable, without sacrificing the quality of our lives. However, sustainable development can only be achieved if we learn to think more sustainability and adopt more sustainable behaviour.

Local Agenda 21 is an involving process that aims at (i) the definition of sustainability objectives, (ii) the adoption of action programs and (iii) the implementation of a structured method of monitoring (Doria, 2001).

2.2. The Environmental Management Systems (EMS)



On the other hand, **environmental management systems** (EMS), such as EMAS (the EU’s voluntary eco-management and audit scheme) and ISO 14001 began to spread, because they secure the continued work on environmental improvement. Furthermore, people with responsibility for regularly setting new goals and preparing new action plans are appointed. Finally, EMSs place responsibility with specific persons.

EMAS has been available to public institutions on a trial basis since 1996. For example, several of England’s local authorities have been registered under EMAS. But EMAS II, the revised scheme in 2001, has made EMAS registration available to all types of organizations. Until now, EMAS II has been adopted by the Council of Ministers, but the scheme still needs to be submitted for consultation in the European Parliament, before it can be finally adopted. Local and county authorities have only embarked on EMSs to a limited extent.

One of the successes of previous environmental management projects has been a high degree of staff participation. It is important to bear in mind that environmental efforts are a process about

changing attitudes and behaviour. Staff participation and good dialogues about objectives, activities and results are one of the ways in which to introduce EMS successfully (Ielasi *et al.*, 2001).

The EMS can then be used to establish a set of procedures to ensure policy deployment and objectives being reached. Communication is a vital factor, enabling people in the organization to be aware of their responsibilities, aware of the objectives of the scheme, and able to contribute to its success. This is facilitated through the dissemination of the policy but also as part of effective environmental training given to staff as an ongoing and or an induction program.

In the Italian experience, all towns and territorial planning tools have been used inside the mechanism of “command and control”. The zone division, imposed by national and regional laws, has set rules for the use of the territory; other environmental bonds have been introduced at regional level. As a consequence, territorial planning instruments need to be verified in order to recognize which environmental outcomes could be involved. It is important to rethink traditional territorial planning instruments as part of a unique system that could easily lead to an environmental certification, respecting the principles expressed in the Local Agenda 21 process (Citterio *et al.*, 2003).

3. ENVIRONMENTAL CERTIFICATION PROCESS IN THE PUBLIC SECTOR

The environmental certification seems to increase more and more in importance in the territorial strategy, in order to enhance the development of the area.

Over the past few years, there has been the spread of ISO 14001 certifications or EMAS registrations not only in the enterprises, but also in Public Authorities, joining the territorial aspect of the environmental management and the continual improvement of the environmental performances.

That implies the growth of the value and the attractiveness of the territory, towards actual or potential stakeholders, through the development of the internal offer and the promotion of the internal resources.

In particular we want to put the attention on the implications of EMAS registration and how local and county authorities may benefit from that. However, it is important that they contribute to determining how EMAS can and should be used over the coming years, so the requirements of EMAS and local and county traditions for control and management can meet. EMAS could prove to be the management tool that many local and county authorities need to manage a large organization working in many different fields and considering an increasing number of demands for quality and cohesion (Jokumsen *et al.*, 2000).

EMAS secures an unambiguous division of responsibility and clear decision-making processes, which may be very important, because environmental efforts will often span across administrations and involve several administrations.

At the same time, EMAS prioritises environmental efforts and focus on the most important issues, thus making efforts more effective.

Through the various roles and tasks of local and county authorities, committees and administrations make many decisions and agree on various plans with a number of consequences for the environment. EMAS may help to make sure that the work on indirect environmental issues and activities is included on the agenda across administrations and traditional decision patterns to a much greater extent than is the case today (Andriola *et al.*, 2002). The chances of exerting and increasing influence on environmental stress through these indirect issues and activities are substantial.

EMSs are tools for both environmental management and increasing environmental performance. The most evident benefits of the system for Local Authorities are transparency and liability which are supported also by the reporting mechanism.

In the early Nineties, due to the publication of EMAS regulation and ISO 14001 standard, the industrial activities had been considered as the by far most problematic area from an environmental point of view (Ielasi *et al.*, 2001).

During the first year of implementation of the environmental certification, in many countries of the Union, the importance of encouraging application of EMS in other activities became evident.

The earliest experiences in environmental certification in the Public Authorities were in UK, but now there are many cases also in Germany, Austria and Italy. Analysing the Public Authorities certified, two different approaches emerges: (i) environmental management systems applied at one single unit or activity or distribution services enterprise (i.e. energy, water, water treatment plant, waste management, public transports) or (ii) environmental management systems applied to the whole organization so as to have the global vision of all the services and the problems connected.

The approach to EMAS registration as a whole organization will consider the aspects related to all the activities and to the specific units involved, in order to obtain benefits for cost savings (from waste reduction, energy saving and lower resource use), for improvement of the territory's image and for the spread of a new culture in citizens towards environmental topics. (Citterio *et al.*, 2003).

The creation of unique competencies in the valorisation of resources may result, at the end, in a source of competitive advantage over the competitive territories.

Those getting their common registration must be able to demonstrate a common responsibility (policy, procedures, etc.) for the management of significant environmental aspects and impacts including, in particular, the setting of objectives and targets and corrective actions.

The advantages derived by the application of a certified EMS could be:

- decreasing of environmental risks;
- detailed description of the state of the environment in the area;
- promotion of the territory;
- continual improvement of environmental performance;
- involvement of citizens, employees, enterprises..., favouring the dialogue;
- planning and management of emergencies;
- optimisation of energy use, water consumption, transports management, water treatment plants efficiency...;
- facility in EC projects;
- guarantee of efficient management of environmental issues, towards citizens;
- precise definition of roles.

The European analysis demonstrates a huge deficiency in the process, that is the insufficient involvement of citizens, a key factor in the EMS implementation.

A research made by FocusLab in 2002 on territorial environmental certifications in Italy shows that 19 are the territories certified by ISO 14001 or EMAS, with almost one million of inhabitant living in. 63% of organizations has less than 10.000 citizens and 9 out of 19 are located in Liguria (one of the most popular seaside region) and most of them has a tourist vocation.

ISO 14001	Population
Municipality of Apricale (Imperia)	563
Municipality of Cesana Torinese (Torino)	969
Municipality of Toirano (Savona)	2.070
Municipality of Laigueglia (Savona)	2.259
Municipality of Santa Caterina dello Ionio (Catanzaro)	2.288
Municipality of Celle Ligure (Savona)	5.402
Municipality of Ceriale (Savona)	5.556
Municipality of Andora (Savona)	6.761
Municipality of Capri (Napoli)	7.277
Municipality of Vado Ligure (Savona)	8.191
Municipality of Cavriago (Reggio Emilia)	8.897
Municipality of Quattro Castella (Reggio Emilia)	11.164

Municipality of Jesolo (Venezia)	22.905
Mountain Community Alta Val Polcevera (Genova)	58.181
Municipality of Grosseto (Grosseto)	72.803
Province of Trento – Forests section (Trento)	477.859
EMAS	Population
Municipality of Varese Ligure (La Spezia)	2.375
Tourist area Bibione (Venezia) – Municipality of San Michele al Tagliamento	11.775
Province of Viterbo – Environment Council	291.277

Table 1: Public Authorities certified in Italy (2002)

According to the answers given during the research made by an appropriate questionnaire, the basic reasons for implementing an EMS certified are: (i) manage, in a better way, the internal organization and the environmental impacts; (ii) increase the effectiveness of territorial and environmental policies; (iii) improve the image, the communication and the transparency of the organization.

The obstacles met by the Public Authorities certified during the EMS implementation were:

- lack of knowledge and awareness inside the organization;
- resistance in changing;
- few financial resources;
- shortage of political support;
- difficulty in the data collection during EMS implementation.

Concerning the improvements due to the environmental certifications, we can divided them into two different categories. From the “managerial” point of view, we can list:

- improvement of objectives and target of environmental policy;
- training of employees on environmental topics;
- “best practices” example;
- better knowledge of environmental weakness of the territory;
- stimulus for the environmental certifications in enterprises operating in the territory;
- better communication towards stakeholders;
- improvement in the responsibility of co-workers.

Regarding improvements related to environmental topics, many of the certified Public Authorities have noticed: (i) a rise in differentiated waste collection percentages; (ii) a improvement of environmental quality in the territory; (iii) a reduction in water consumption and (iv) energy savings.

It is important to note that 8 out of 19 have implemented a Local Agenda 21 process, and all of them are aware of the value of integrating all the territorial planning systems.

A better promotion and diffusion of Public Authorities certified in environmental field have to foresee different improvements (FocusLab, 2002):

- better information about advantages of EMAS and ISO 14001 inside and outside the public offices;
- diffusion of results of pilot project and best practices in environmental certification;
- training aimed at the integration of territorial planning systems and the co-ordination of local sustainable development policies;
- more involvement of the different subjects involved: employees, enterprises, citizens, universities and all the stakeholders;
- special terms or simplifications for public authorities certified at both provincial and regional levels.

4. METHODOLOGY

Because of the lack of state of the art about this topic, the case study approach is an appropriate choice for developing theory. 3 semi-structured in-person interviews were conducted with all the certification process owner of Municipalities from July 2003 through October 2003. Respondents were asked questions related to three main issues a) certification aims, b) initial environmental problems and c) results (expectations) connected with the EMS. The interview was supplemented whenever possible through the use of both internal and public data, sometimes available in the Web. The development of the findings was done through an iterative process of ongoing comparison between the existing data and the emerging constructs (Eisenhardt, 1989). The emerging data was related to the received literature pertaining to certification issues and the focus on the questions. After, a more systematic comparison was made between data and the emerging findings, and the concept developed was discussed with several respondents.

5. THE EMPIRICAL ANALYSIS

In the paragraph we want to introduce three case studies of EMAS registration applied to the Public Authorities in Italy, and in particular:

- a tourist area of Bibione;
- the first Municipality certified in Italy (Varese Ligure);
- the project for the environmental certification of 2006 Winter Olympic Games territories.

5.1. The tourist area of Bibione

Based on the awareness that tourists do not choose their holiday destination by assessing individual services but rather by the evaluation of the whole area, the town council of San Michele al Tagliamento relies on the respecting of environment, in order to attract tourists (coming from all over Europe) and improving the quality of life in the whole area. The municipality decided to implement an EMAS registration to a tourist resort (Bibione), with defined territorial border (it is a peninsula in the upper Adriatic sea. This may result at the end in a major economic profit, respecting the main principles of territorial marketing.

The competitiveness of Bibione (one of the most popular Italian sea resorts) has developed from the capability of taking advantage from its environmental and cultural identity. It is the first example of application of an Environmental Management System to a territory.

Indicator	Value (2001)
Territorial extension	30 sq. km
Tourists per year	6 millions
Apartments	20.000
Hotels	92
Estate agencies	60
Commercial premises	958
Tourist beds	70.000

Table 2: Bibione data (Bianchi G., 2001)

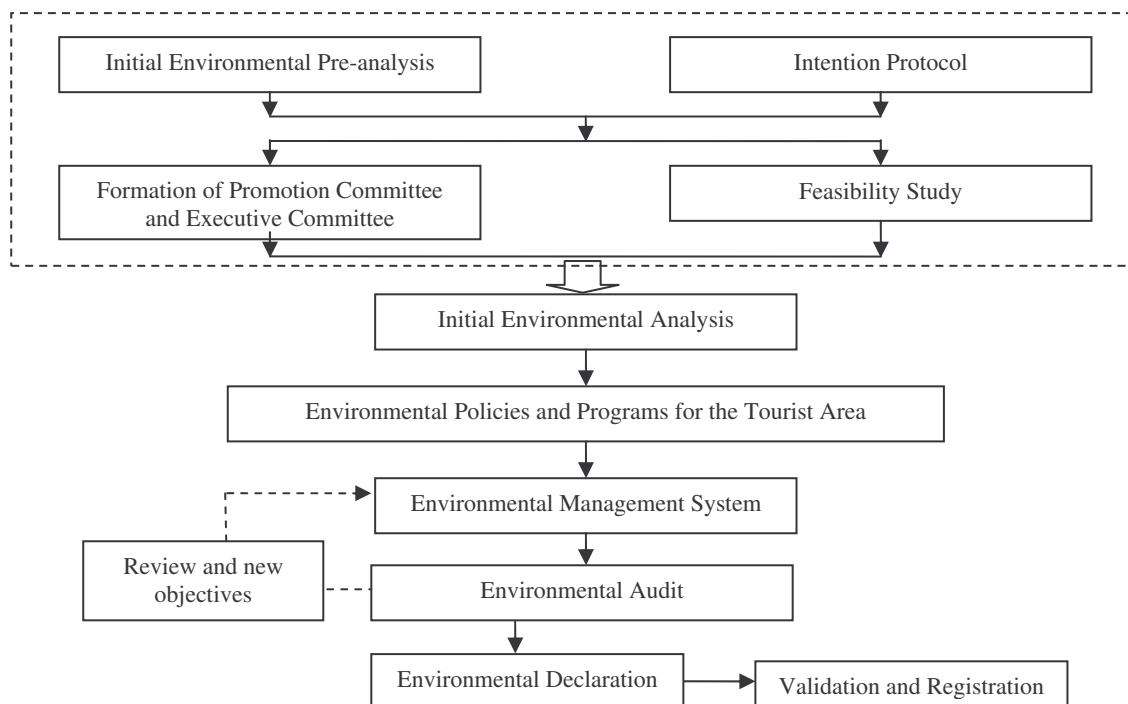
The project (in collaboration with the Environmental Quality Study Centre of the University of Padua) received the approval and the encouragement of the Italian Ecolabel and Ecoaudit Committee as a pilot project for boosting other analogous initiatives in Italy and Europe. The EMAS Registration could be used to create an environmental brand that identifies areas where local players put together their efforts to improve environmental quality of the territory.

The EMAS Regulation (instead of other labelling systems) was chosen because it guarantees a higher commitment to people's expectations and interests, due to the verification process by an accredited third party and the recognition of the registration at national and European level. Furthermore, the environmental declaration required by the scheme is an effective and objective communication tool that explains the activities carried out in the territory and the initiatives undertaken in order to minimize their environmental impacts.

The method is based on a multiple analysis considering different aspects:

- Environmental data (i.e. air emissions, waste water, soil and subsoil sampling, natural resources consumption, solid wastes, etc...);
- Creation of specific environmental indexes to classify and monitor them;
- Stakeholders' awareness of the state of the environment;
- Economic and city-planning development;
- Classification of aspects and impacts.

Figure 1: Application phases of EMAS scheme in the pilot project at Bibione (CESQA, 2002)



The study has revealed an area without the specific impact due to industry and manufacturing, whereas the typical impact of densely populated areas has been registered: waste management, waste waters in suitable receiving bodies, exploitation of sand, water consumption, and use of natural resources in general (Scipioni *et al.*, 2002).

The specific improvements due to the implementation of an EMAS registration could be divided into: global environmental development (new bike paths, optimizing in water consumption, increasing in percentage of waste collection...) and growth in managerial activities (actions for reaching environmental objectives, stimulus for environmental certifications in production activities in the area, “best practice” example, awareness and involvement of citizens, operators and employees, effective communication instrument...).

The introduction of an Environmental Management System consents to plan, manage and carry out the environmental policy aiming at territory's protection integrating sustainable development principles with the grow of tourism pressure.

The project has a double involvement: from one hand it responds to the wider need of environmental protection from all the "clients" of all type of organizations involved, from the other it shows the demand of promotion of an area characterized by natural beauties, particular tourist attractions and precise tourist typology.

At this time the increasing in tourism is not easily linkable to the EMAS registration; a new Customer Satisfaction Questionnaire will soon distribute to citizens, tourists, economic operators and local authorities in order to value the improvement derived from the implementation of the environmental management system and which field could be improvable.

One of the main results reached is the active and synergic involvement of all the subjects operating in tourism sector for reaching a common objective and the awareness of citizens, employees and tourists towards environmental topics for the improvement of the whole area.

Future developments (apart from the EMAS requirements of system maintenance and continual improvement) concern initiatives to communicate and inform:

- *tourist operators* on the advantages resulting from the implementation of EMAS (in order to create a chain reaction for the global sustainable development);
- *employees* on their important involvement in the achievement of common advantages;
- *citizens* for increasing good relationship with Public Authorities and taking part in territorial improvement;
- *tourists* on the activities in environmental safeguard for their participation, in order to create a strong link with the territory.

In the long term other initiatives for increasing the value of natural areas are planned (Citterio *et al.*, 2003).

5.2. The Municipality of Varese Ligure

Varese Ligure is a small town in Vara valley, Liguria Region, in north-eastern part of Italy. Caused to its location (about 40 km far from the sea and between the mountains) it never assisted to an industrial or tourist development. From 1990, the Council of the Municipality started an environmental program with the aim of use it as opportunity for an economic and sustainable development of the small village, that was slowly dying because young people went away from Vara Valley. In fact at the beginning of the XX century they were about 8.000 people. The following table shows the most important current quantitative data.

Indicator	Value (2001)
Population	2.400
Density	17,14 (inhabitants/sq. km)
Territorial extension	140 sq. km
Urban area	7 sq. km.
Percentage of urban area over all territory	5 %
Linear length	400 Km

Table 3: Varese Ligure data

On the territory of the Municipality there are developed agricultural and tourism, but are completely absent industrial settlements. Moreover Varese Ligure participated to one of the first initiative of Aeolian power plant.

Few years ago, the Administration had the initiative to convert the weakness of the territory into strength points in fact, thanks to these favourable features, the town started, first, the environmental certification following the standards of ISO 14000 series; the original idea was to exploit the certification and the natural characteristics for an economic revival of the town.

The following step was the EMAS certification, that allows to attain the enrolment in the European register of the sites and the utilization of the European environmental logo.

Target of the EMAS is stimulate the constant improvement of the environmental efficiency of the organizations, by the adoption of:

- advanced instruments of environmental management;
- periodic and systematic evaluation of the environmental yield;
- objective and verified information of the public on strategy, programs, established systems and results reached.

The committee has controlled that the town administration really takes care of the quality of the air, the water, the land, biological products, the selective disposal of waste and other environmental, direct or indirect, aspects.

It was the first municipality in Europe that achieves environmental ISO 14001 certification (1999), issued by RINA (Italian Naval Registry), and EMAS certification (2002), issued by Ecolabel - Ecoaudit Committee, that assessed the environmental efficiency, the absence of polluting agents (carbonic dioxide, acoustic and electro-magnetic pollution), the quality of urban services (waste management, water treatment, enterprise services, transportation and landscape protection) and tourist appeal and value.

The cost of the project was partially covered with financial resources that EU allocates in favour of the certification project.

During the certification process all the environmental activities that are related with the Municipal administration (direct aspects) or take place on the municipal territory (indirect aspects) of the municipality were characterized when directly related to the environment as, i.e, for direct aspects:

- solid waste management;
- management of the service of collection differentiated of glass, paper, cardboard, plastic, cumbersome, ferrous refusals, durable goods (which percentage has significantly grown in the last year);
- outcome and income waters analysis from the treatment systems;
- maintenance of the roads;
- urban hygiene activities (roads, public green, cemeteries,..);
- management of the sport systems;
- management of lighting system;
- territorial planning;
- environmental education and training;

and for the indirect aspects all the economic activities that are on the territory of the Municipality, as:

- agriculture and zootechny activities;
- tourist activity.

According to the data and declarations of the mayor and town's administrators, the results, that were obtained through the certification, are several, but these are considered as the most remarkable:

- (i) first of all, as in many other cases, there was a higher efficiency that leads to cost saving for water, energy, solid waste disposal, heating, fuel;
- (ii) the role of the environmental certification as starting point of a total resumption of entire territory. In fact this is what is progressively happening in Varese Ligure, beginning from the certification of the Municipality.

An other phenomena, that is actually emerging, is the certification of Municipality's suppliers; in fact, thanks to the green procurement initiative, the green criteria for the evaluation pushes all these firms, suppliers of services or goods, to prove their "green" commitment through a certification.

The results are the following: (i) the old medieval centre of Varese Ligure is now completely renovated; (ii) the town is still an agricultural town, but it has improved its production (i.e. biological cheese and meat) respecting the environment. At the moment there are 52 small farms in

Varese Ligure specialized in this kind of production, plus 2 cooperatives for the transformation of the agriculture products, certified by the Italian Ministry of Agriculture.

Varese Ligure is now a so called “Ecovillage” which has already given new jobs to 200 people and is attracting more and more visitors and customers from other Italian regions and from abroad, especially from Germany.

This case study can be considered as a case of territorial marketing, where the certification was used as a tool for the promotion of the entire territory and to promote the effort of the administration for an environmental development of the local firms and economic activities.

5.3. The 2006 Winter Olympic Games territories

TOROC, the organizing committee of the Olympic Winter Games in Turin 2006, has recently started to register the Winter Games 2006 territories for EMAS; its environmental policy is based on a fundamental principle: organizing the XX Olympic Winter Games in accordance with the criteria of sustainability. The principle can be translated into the development of environmental programs, projects and actions which are implemented on an extensive scale, ranging from the local to the global context:

- on a **local level**, TOROC sets itself the objective of minimising the overall environmental impact of the event on the area affected by the Games, influencing the management of the games’ organizational structure, the control of facilities and competitions, monitoring of infrastructure construction activities, organization of the events that accompany the Games and the development, in collaboration with the local authorities, of initiatives aimed at promoting sustainability;
- on a **more extensive level**, TOROC intends to demonstrate its commitment to the parties involved to protecting the environment, leaving behind it a legacy of good practices, together with eco-compatible behaviour models and new ways of conceiving, designing and managing mass sports events.

Organizers are aiming to ensure that the Torino 2006 - XX Olympic Winter Games are based on sound environment-friendly principles; to this end the EMAS project will help to certify Olympic venues and services in terms of strict environmental standards. The initiative costing some 280,000 euros and involves:

- municipalities where Olympic events will be held during the Games (Bardonecchia, Cesana Torinese, Claviere, Oulx, Sauze di Cesana, Sauze d’Oulx, Sestriere, Pragelato);
- TOROC (Torino Olympic Organizing Committee);
- Province of Turin;

and some other partners.

Environment began this program after signing an agreement with the Ministry of the Environment and Piedmont Region. The environment is monitored by 16 indicators determined by European Community and Ministry of the Environment. These include the following elements:

- water cycle;
- air quality;
- land use;
- energy consumption;
- waste production;
- ecosystems;
- landscape;
- urban environment and quality of its facilities and installations.

In order to organize, analyze and sort through complex environmental data, TOROC is designing an Environmental Management system (EMS) that was outlined according to the European Commission in observance of the EAMS regulation and obtain ISO 14000 certification with registration as per the criteria defined by the European Commission through EMAS. TOROC's activities are organized within the context of an environmental management system, in accordance with the requirements of UNI EN ISO 14001 standards and EC 761/01 EMAS Regulations. EMAS was chosen as the most suitable tool to manage and interrelate all environmental activities and to communicate to stakeholders all achievements and performances.

The frame of reference from which TOROC's environmental policy draws inspiration comprises various elements:

- the commitments contained in the Environmental Action Plan (Green Card), presented during the candidature phase;
- the principles set out in Agenda XXI of the Olympic Movement;
- the indications given in the IOC Environment and Sport Manual;
- the contents of the Charter of Intentions;
- the process of Strategic Environmental Evaluation (SEE) applied to the Olympic Program.

In addition, the Committee also has developed sustainability relations, initiatives and projects with local and international organizations and institutions.

Developing an Environmental Management System (EMS) for TOROC's activities constitutes a fundamental stage along the road to achieving the sustainability of the Olympic Games.

The latter has been identified as the most suitable instrument in managing and improving the environmental elements linked to the organization of the XX Winter Olympic Games, as well as in co-ordinating all the environmental initiatives being developed by TOROC.

The realization of the Environmental Management System has been divided into two subsequent phases:

- *Project design and approach*: comprising all the activities prior to the direct management of the venues, including, where they are in TOROC's responsibility, the project design and realisation of the building structures involves. First, registration will be sought for the planning and arranging of the event. This phase includes the activities preceding the management of the competition venues and focuses especially on the event's planning and the venue's arrangement, including their design and building. TOROC aims at developing an EMS by September 2003 and at publishing the Environmental Statement by spring 2004.
- *Direct management of the event*: comprising all the activities related to the holding of the competitions, as regards the Test Events, Olympics and Paralympics. In a second step this registration will be expanded to the management and running of the event. The existing EMS from the first phase will be expanded accordingly. A renewal of the registration covering the additional aspects of the event management is targeted for March 2005.

The activities, launched in October 2002, comprise:

- completion and functioning of the EMS by September 2003;
- achievement of ISO 14001 certification by December 2003;
- environmental Declaration and EMAS registration by the Spring of 2004;
- extension of EMS to include event management by March 2005;
- extension of the Environmental Declaration and renewal of ISO 14001 certification and EMAS registration by June 2005.

In addition, TOROC will present an annual environmental performance report and a Sustainability Report of the Olympic Program where environment and ethical-social performances will be described. The ceremony also served as the occasion for the signing of a Memorandum of Understanding between TOROC and UNEP (United Nations Environmental Programme) regarding environmental education and communication on the Olympic site and in the Olympic area localities.

6. CONCLUSIONS

EMAS at territorial level is becoming spread in Italy; Municipalities, tourist areas, industrial areas, parks and other organizations are getting an EMAS registration in order to:

- create a new culture for environmental protection;

- promote the territory, increasing the value of natural resources and improving the image of the area;
- manage the environmental impacts in a better way;
- improve the satisfaction of tourists and the quality of life for citizens;
- enhance the cooperation among stakeholders for a common purpose.

It implies a great effort in terms of political and technical implications due to the multi-dimensions of environmental issues. The control on indirect aspects and the reaching of environmental objects are the potential weakness in the maintenance of the system.

From many directions, the integration between Local Agenda 21 and EMAS is recommended, but the conceptual and methodological differences between the tools have to be faced. EMAS is developed in the context of productive site certification, while LA21 is a typical scheme of territorial planning systems involving several stakeholders.

LA21 is an open process with no-temporal prospect, EMAS' aim is the registration of the organization and the continual improvement of environmental objectives.

In many cases, EMAS is only a tool of the LA21 actions; the new approach could consider LA21 as a supplier of knowledge and experiences about communication among stakeholders (and in particular citizens and economic operators).

The theme of communication could be an interesting chance of relationship and comparison between the tools of territorial planning: LA21 is addressed to local community for the effective linking of all the subjects operating in the territory, EMAS (by the logo) has a great strength, in terms of visibility, at European level, for promoting the territory and motivating local actors, for the environmental certification of their productive sites.

LA21 process has to develop the communication program, managing the possibilities and the difficulties of the integration.

NOTES AND REFERENCES

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