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THE PAN-EUROPEAN VIABILITY OF ENVIRONMENTAL CERTIFICATES, TRANSVERSAL TOOLS TO SUPPORT THE ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT AND IMPROVEMENT OF LOCAL RESOURCES

The development of environment management systems in Europe in the last few years, according to EMAS and ISO 14000, has been exponential. For example in the last few years, more than twenty Public Administrations throughout Italy have chosen to adopt an Eco-Certificate. Those who have gained certification to ISO 14001 are working to maintain it, while many of those not yet certified plan to achieve it. A number of departments are incorporating environmental considerations into other management guidelines and manuals.

INTRODUCTION

The implementation of the Environmental Management Scheme could stand for an opportunity to redefine the environmental and local development strategies. In light of current increasing demands for accountability, transparency and social responsibility of managers and business, contrasting perspectives on reporting, verification, codes and indexes have been critically analyzed. Since environmental reporting, sustainable development, environmental justice, environmental management are different faces of the same matter that identifies the broader implications of the Aarhus Convention. Central and Eastern Europe still faces a complex set of environmental challengesi such a hazardous waste sites in residential areas, low energy efficiency, urban air pollution and deteriorating water and sewage systems. The situation has improved in those CEE countries that have adopted or are striving for adoption of European Union environmental regulations. The aim of this paper is to demonstrate how the implementation of the Environmental Management Scheme could stand for an opportunity to redefine the environmental and local development strategies for Central and Eastern Europe cities. There is also a real chance to examine the major approaches to sustainable development and to adopt in Central and Eastern Europe with the regard of the local planning system. In fact, the integration of Eco-certificates into planning/programming may, in some countries, require establishment of flexible framework. But the E. M. S requires a relationship between substantive tasks in the planning/programming process and analyses.

The eco-certification, with its methodological and procedural limits, represents an answer to a growing question of environmental quality that is mainly provided through local authorities' planning systems. Certification, therefore, is an effective commercial instrument which offers companies a considerable number of economic advantages derived from reduced management costs and optimization of management systems. This inevitably leads to a return in terms of image and credibility which consequently increase city competitiveness. Though, urban planning stakeholders are still rather sceptic about the value of verifications provided by accountants.

This paperii is based on data collected from select cases studies for a further investigation on the logic of such experiences and on the reclaimed strategic dimension assumed on some particular scenarios. My principal research hypothesis deals with the relationship between certification and environmental performance of traditional urban plan. The experiences in many countries suggest that sustainable EMS is becoming a more and more popular issue, and it could be an innovative and powerful tool for Central and Eastern European systems of planning. In fact, numerous technical and technological innovations for sustainable management of cities have been developed in the past decade. Despite all these innovations and policies, EMS has not become common practice.

URBAN SUSTAINABLE DEVELOPMENT AND MANAGEMENT

The traditional urban plan lacks sufficient tools to monitor the objectives of achievement, so there is a common need of a platform for sustainability and good management of the city plan guidelines. Usually the monitoring of Sustainable Urban Management is rather difficult, because there are no absolute thresholds and quantitative targets for the particular aspects and also no good aggregate methods for the assessment of the overall quality management and its effects and effectiveness. As a consequence, the monitoring and indicators in the field of urban management must concentrate on the process and implementation rather than on the content, achievement of objectives and quality. Phenomena and variables will be measured, which everybody agrees upon in principle (e.g., adoption of integrated plans, Local Agendas and public participation in planning) but with which it is much more difficult to reach consensus. How much of it (e.g. of plan integration or public participation) is needed and whether the pertinent local arrangements contribute to the achievement of agreed objectives are of good quality. But there is no planning without objectives!

Europe's urban areas face a number of environmental challenges including poor air quality, high levels of traffic and congestion, urban sprawl, greenhouse gas emissions and generation of waste and waste water. These can cause

environmental damage and affect human health. Partnerships between business and local authorities are essential to sustainable urban development; well defined and inclusive governance and management structures based on clear roles and responsibilities are cornerstones of the successful implementation of these partnerships for sustainable urban development.

The massive need to develop and improve urban areas and facilitate mobility in developing countries must be met in a sustainable manner through partnerships between government at all levels, the private sector and all civil society stakeholders. Urban and rural areas should recognise the mutual benefits of interdependence. Urban areas in particular should develop partnerships to create buffer zones and / or green belt areas for biodiversity, recreation, human wellbeing and quality of life. Networking between farmers, producers, trade and consumers can promote sustainable agriculture and support local and regional production and marketing.

Businesses and municipalities should contribute to securing appropriate health services, particularly for the poor. Securing clean water and decent access to potable water is a key responsibility of business municipality partnerships as well as their concern for preventing and terminating air pollution. Businesses and local authorities should work with their communities in partnership to devise integrated waste management strategies aimed at waste minimisation, energy recovery and recycling, including the development of new markets for recycled materials. These activities should include aspects of combating poverty and necessities of increasing demands in developing countries. Partnerships between businesses and municipalities should aim at climate protection and minimising energy demand by introducing energy efficient technologies and service structures and redirecting supply towards renewable energy resources for the sake of long term urban sustainability and in coherence with needs to satisfy demands of cities in less developed parts of the world. Local authorities, enterprises and financial institutions should work in partnership to define criteria for ethically, socially and environmentally sound investments which can properly be included in their pension fund portfolios. Encouragement should be given to fund managers to investigate the possibilities of investing in sustainable ventures. International social, environmental and ethical management standards should be implemented by public authorities and businesses. Small and medium-sized enterprises and local authorities in many countries need professional and technical assistance to enable them to improve their environmental performance and address all aspects of sustainability.

EMS EVOLUTION IN THEMATIC STRATEGIES FOR THE URBAN ENVIRONMENT

An environmental management system is the process used by an organization to manage, review, correct and improve the organization's approach to business. Employees are asked to consider how they affect the environment every day. An EMSiii offers a structured way to incorporate environmental considerations into day-to-day operations; it promotes continual improvement of the environment and human health. An EMS is defined by the International Organization for Standardization (ISO) as "the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy. " Environmental policy is defined as the "statement by the organization of its intentions and principles in relation to its overall environmental performance, which provides a framework for action and for the setting of environmental objectives and targets" (ISO, 1996). Most EMSs follow the structure provided by ISO 14001. This structureiv is commonly referred to a Plan Do Check Act and requires the demonstration of measurable continual improvement. Environmental Management Systems (EMS) are considered key to implementing local sustainable development. Current experiences are focused on the environmental dimension, but there are arguments for employing EMS experiences to encompass broader sustainability dimensions. Municipal utilities, like other business enterprises, are constantly looking for ways to better serve their customers, improve their efficiency, and maintain regulatory compliance. The environmental Management System (EMS), developed by some local authorities, is used to continually improve environmental performance. In the meantime, the important role of many local authorities as active players in sustainable development actions implementation and as potential cultural bridges connecting Eastern Europe and Southern Mediterranean-North Africa countries is clearly emerging in this area.

This use of Eco-certification for local authorities is also formulated in Thematic Strategiesv on the Urban Environmentvi, since UE encouraged the development of EMSs by private and public entities to prevent pollution, improve environmental performance and comply with regulatory requirements. The thematic strategy on the urban environment is a tool with help of which the Community aims to contribute to the realisation of the goals of sustainable development of cities and high quality of life for Europe's urban citizens.

An environmental management system (EMS) is a principal means available to organizations by which environmental concerns can be integrated into corporate decision-making. It involves organizational changes in management systems, such as introducing environmental staff and directors, setting environmental objectives, and

establishing monitoring and audit systems. It is also focused on continually improving its impact on the environment, preventing pollution, and ensuring compliance with relevant environmental legislation and regulation, as well as with other requirements.

Successful environmental improvement, however, requires an integrated practices or systems approach to planning, implementation and monitoring. Thus, it is informative to investigate the determinants of variations in the comprehensiveness of EMSs rather than the adoption decision of a single environmental practice. The EMS provides an organized, structured approach to managing environmental affairs. The integrated systems approach includes the staff, processes and principles that accomplish local authorities' business objectives and environmental missions. The major steps involved in EMS development activities included a gap analysis, team chartering, awareness training, EMS manual development and sustained implementation. The EMS has as its cornerstone an environmental policy that addresses the organization's public commitment to environmental compliance, continual improvement and general environmental performance whilst providing a framework in which to identify new ways to improve performance. The EMS benefits the environment, employees, ratepayers and the local community. The benefits are based upon an incremental approach. So it is suitable to many situations, and a support mechanism for developing Local Agenda 21 strategies and environmentally responsible urban management.

RESEARCH OUTCOMES

The following discussed research outcomes are the result of an effort to demonstrate the pan European applicability of EMAS for local authorities as a conceptual framework for managing and improving local environmental performance. The research outcomes include: a) a demonstration of the value of EMAS for local authorities, in their efforts to improve their environmental performance, b) the development and dissemination of a conceptual framework together with a set of practical tools ensuring the increased involvement of local authorities in environmental management and c) the support for local authorities in their desire for a consistent, concerted and coordinated approach to management of environmental problems.

The purpose of this research was also to test the viability of the scheme and demonstrate how EMAS can help Local Authorities to improve their environmental performance, by showing examples of good practice, projects and case studies. There is evidence that EMAS can successfully be integrated into existing management systems: the simpler the municipal management system is, the earlier the benefits are felt.

It is widely recognized that local authorities are major players in the local economy and, as the government level closest to the citizen, have an important influence on the environmental behaviour of the general public. EMAS for local authorities can help to achieve this by providing a structured framework for managing and improving the local authority's own performance and integrating sustainable development aims into the authority's policies and actions. EMAS, in close relationship with Agenda 21, is acting as a reference for the sustainability strategies at various territorial levels and an innovative "territorial approach" to the scheme is emerging, based on the integrated efforts of a multiplicity of local organizations. EMAS is the vehicle for uniting environmental initiatives and measuring their contribution to planning policies; it enables all sections of the community to participate in decision making that effects their local environment.

CERTIFICATION'S VIABILITY FOR MUNICIPAL PLANNING

Why should the city embark upon EMAS? Municipalities are major players in the local economy and the level of government closest to the citizen. They have an important influence upon the environmental behaviour of the general public and have a significant direct impact on the environment through their delivery of services. In a good environmental scheme you have to analyze the way it deals with all significant environmental aspects, including waste, energy efficiency and the protection of the countryside, waste reduction and recycling, innovative schemes, greening public procurement, and information and communication.

Up to now, the main legislative references which enable organizations to obtain recognition of the environmental efficiency of their performance consist, at EU level, of EMAS Regulation 761/2001 and internationally of ISO 14001. One of the most important contributions to sustainability for local authorities is related to continuous improvement. These objectives generate incremental and measurable reductions to adverse impacts in the areas represented by individual indicators for air, land, water and their human interaction. The indicators identified include, where possible, indicators that are already in use as metrics for other departmental reporting, thereby minimizing any additional workload for departmental staff.

Local authorities have to go through a comprehensive preparatory review designed to identify all relevant environmental aspects connected with the existence of the organization. They also must establish procedures, work instructions and controls to ensure success as well as simultaneously maintaining constant communication with the community and within the organization in addition to annual report and audits every three years. The inventory looks at several broad categories: health, education, safety, the economy, housing and demographics. Those

measurements will be used in city planning and management because the city master plan is still the primary resource for determining the goals for each sustainability category (key areas of sustainability focus). Though, Eco-Certificates are beneficial for municipalities only if they work in conjunction with the planning system. Various co-ordination models are possible to help authorities address the environmental actions needed to be undertaken in terms of Local Agenda 21, enhancing partnerships with citizens and business and industrial groups in order to make sustainability a real community effort. Cities have chosen EMAS as the best tool to limit environmental impact and improve performance. Before a department or unit can start the process towards obtaining a registration there must be an environmental policy for the full local authority. The policy (written, adopted, reviewed and revised) is the key instrument to communicate the local authority's environmental priorities to management, staff and general public. It should contain the following two elements: compliance with existing relevant environmental legislation and commitment to continuous improvement. It is important that the issues and impacts are ranked so that the local authority can decide which to address first. The fields covered should include the internal (direct) and the external (service) effects. Direct effects are those arising from the day-to-day operation of the unit (energy use, transport, waste etc.). Service effects are those arising from the services/policies delivered/developed by the department/unit. This later could include, for example, the effect of car use in urban planning policy. Additionally, a list would need to be compiled of all environmental legislation in the local authority for assessment purposes. Less emphasis is given to the "direct effects" of the local authority, recognizing that more impacts occur as a result of the services which a city provides. That is environmental impacts can be measured through key performance indicators (KPI) and, in many cases, one can make use of collected data.

EMAS can be implemented as an alternative or in addition to the ISO 14001. EMAS is geared toward helping organizations and city governments, which can use it to minimize pollution, to create a cleaner and healthier environment, and to operate more efficiently. It can help to minimize energy and water usage, and save natural resources and reduce waste whilst limiting their production and processing costs and reporting their environmental improvements openly in an environmental statement. Moreover, it can ensure that the general public is informed of their dedication to and achievement of environmental sustainability, developing a trusting and open relationship with the public by addressing their environmental concerns in a measurable way. These objectives are rarely achieved in the urban planning process.

ROLE OF LOCAL AUTHORITIES

In the last five years local authorities world-wide have followed private sector trends and have implemented standardized environmental management systems in their organizations. This raises questions on the reasons for implementing an EMS and, not least, about the roles and contributions of an EMS in municipal environmental policy and management. Drawing on EMS research and experiences in several countries, this paper aims at providing a critical overview of this new phenomenon and reflects upon the potentials and drawbacks of EMS as a tool for local authorities to use in environmental management. It is argued that an EMS would primarily be regarded as a technical management tool for analytical action that helps to plan, systematize and evaluate the environmental management tasks in an organization. From a critical-emancipatory perspective, it could also, however, be interpreted as a tool for communicative action that may enhance co-operation in the municipal organization. Used in an innovative way and being aware of the potential pitfalls, the EMS may provide information, structures and processes that could help municipal actors to (re)consider their ideologies and socio-cultural structures related to environmental management.

Voluntary approaches to environmental protection are sometimes called the "next generation of environmental policies" (Esty and Chertow, 1997). In contrast to traditional mandatory policies such as direct regulations, these approaches rely on voluntary actions of firms to improve their environmental performances. Examples include unilateral commitments by business firms, public programs in which the government encourages businesses to voluntarily achieve specified goals, and information disclosure strategies such as environmental labelling. The establishment of an environmental management system is one form of many possible voluntary approaches to ensuring environmental sustainability.

Local authorities have a decisive role in improving the urban environment. The diversity in terms of history, geography, climate, administrative and legal conditions calls for locally developed, tailor-made solutions for the urban environment. Application of the subsidiary principle, where action should be taken at the most effective level, also implies acting at the local level. Local authorities have a decisive role to play in implementing environmental legislation and improving the environmental performance of a city. The best performing cities have developed integrated approaches to urban management where daily decisions are guided by a strategic vision and objectives. These can improve quality of life and the city's economic performance, which in turn can attract new residents and businesses.

While local action is essential, public authorities at regional, national and European levels also need to be proactive. The EU can provide support by promoting Europe's good practices. And it can do so best by encouraging effective networking and exchange of experience between cities. Many solutions already exist in cities but they are not sufficiently disseminated or implemented.

TOWARDS INTEGRATED ENVIRONMENTAL MANAGEMENT

All European cities have and use different types of local plans and toolsvii for management of their urban environments. The most important local policy sectors in connection with the EMS are clearly transport, environment and land-use. Adopting an integrated approach to the management of the urban environment helps avoid conflicts between the range of policies and initiatives that apply in urban areas and helps achieve a long-term vision for the development of the city.

An Environmental Management Plan is understood in the broad sense of the term as the organization of all urban matters related to the environment. It should aim towards environmental sustainability by supporting a more comprehensive or holistic approach to public policy, so tackling the contradictions arising from sectoral policy compartmentalisation. The EMP should assure the definition and management of local environmental plans (waste, water management, etc.), and integrate environmental considerations in the city administrative non-environmental policies on tourism, education and industry, for example. But it also must assure the measuring of overall progress.

Integrated approaches result in better planning and more significant results. Clearly defined objectives, targets, accepted responsibilities, procedures for monitoring progress, public consultations, project reviews and audits, and reporting norms are crucial for the effective implementation of EMP measures. Many successful cities have implemented environmental management systems such as EMAS or ISO 14001 to ensure the delivery of policy objectives and provide public scrutiny of its progress.

There are several benefits to local authorities that an EMS certification guarantees: the improved environmental performance in terms of rationalization and efficiency, the optimization of company management and work processes, the greater capacity to plan internal resources and the greater credibility towards community and institutional world. The mid-term benefits include a more sustainable use of resources, improved relations with environmental regulators through regulatory compliance, with environmental laws and cooperation with voluntary or contractual agreements, improved response to growing expectations and pressures for environmental reporting, and a more motivated staff as a result of their inclusion in EMS delivery. But it is clear that many of the improvements will be realized over the long term: EMAS is about undertaking long-term actions and realizing long-term benefits. Implementing such schemes ensures financial savings from reduced costs of waste disposal, generates income from sale of waste as a raw material, reduces litigation and penal costs, and reduces the consumption of natural resources, water, fuel, energy, paper and furniture. And in addition to cost savings, EMS delivers a wide range of benefits to municipalities, some of which have received little attention in research and manuals of best practice. Moreover, better management control of the environment enhances the image of cities, enabling their greater access to funding as well as securing more independently verifiable evidence of consistent performance. All successful initiatives will be supported by complex institutional networking and multi-level initiatives, involving local authorities and socio-economic actors through a coherent strategy and explicit responsibilities. From this perspective, it may be possible to identify an important opportunity for integrating EMAS with other areas of EU environmental and territorial policy.

BENEFIT OF IMPLEMENTING EMS NEXT TO TRADITIONAL URBAN PLAN

Should we go on thinking that Environmental Management Schemes are exclusively a technical matter for environmental conservation and quality of life, as opposed to one that also helps to achieve economic and social development goals? Once we agree that maintaining and improving quality of life should be what shapes environmental policy, we can assume that all Environmental Management Schemes will be a major step toward achieving that goal. By doing so we raise important questions about how cities are being managed.

Strategic planning involves defining objectives and developing strategies to reach those objectives. It may employ methods such as SWOT analyses to help clarify objectives and strategies, using "the big picture" to pursue large scale, long term objectives. This is in contradistinction to "tactical" planning, which has to focus on short term, smaller objectives. "Long range" planning typically projects current activities and programs onto a model of the external world, thereby predicting likely results. 'Strategic' planning tries to create more desirable future results by influencing the outside world or adapting current programs and actions so as to have more favourable outcomes in the external environment. In fact, the European Commission's Communication of February 2004viii identifies sustainable urban management as a key issue for improvement of the overall quality and sustainability of urban areas and environments in Europe.

Therefore, how can cities ensure sustainability through the management of the environmental impacts of all activities within their urban area? Cities are complex and dynamic. The everyday choices of small and large activities all add positively or negatively on the urban area's total impact on the environment. At the same time, local government's management requirements increase. And cities need to make sure that they fulfil legal compliance. The least of which includes numerous EU-Directives such as the Strategic Environmental Assessment, Air Quality Directive, Water Framework Directive or Fauna Flora Habitat Directive and others. This process of legal compliance particularly involves the application of management elements, namely the assignment of monitoring and reporting duties to local authorities.

Once established, an EMS should identify areas where efficiency can be improved and savings made. Tangible benefits and financial savings can be achieved in waste management, energy consumption, transportation, packaging and materials use. The other major benefits related to adoption in local authorities are:

- Improving the environmental condition; Encouraging environmental and monetary resource savings;
- Improving public health;
- Improving compliance with legislation;
- Enhancing of environmental awareness within local community;
- Demonstrating environmental commitment to stakeholders;
- Establishing green credentials to attract investors; and
- Minimizing accidents and problems.

Once EMS is properly adopted it must establish a close relation with local urban planning issuesix because it must investigate the environmental effects of urban plan decisions. The resultant environmental policy sets out how a local administration will protect the environment and makes sure that any future development will continue to do so; it also says we will comply with all relevant legislation and encourage everyone living and working in a place to play their part in looking after the environment.

It should be emphasized that almost all institutions that implemented sustainability practices experienced clear benefits. However, at this stage, the measurement of the financial benefits of sustainable finance seems to be a challenge due to the lack of sustainability management and reporting systems. Nevertheless financial institutions experienced non-financial benefits from achieving more sustainable outcomes in the way of improved risk management and cost savings. Thus EMAS has a significant role to play in stimulating environmental improvement, particularly in relation to facility-related aspects of waste, and water and air pollution. EMAS-registered organizations find that it is a useful tool for improving environmental performance both in the short and long term. The fundamental problem that emerges from the literaturex review is that managers perceive the "certificate" as an end in itself rather than a means to an end.

It is also widely recognised that the most successful local authorities use integrated approaches to manage the urban environment by adopting long-term and strategic action plans in which links between different policies and obligations at different administrative levels are analysed in detail. In fact, obligations imposed at local, regional, national or European levels (e. g. land-use, noise, air quality) can be more effectively implemented at the local level when integrated into a local strategic management framework. For example, nearly half of all Swedish local authorities use environmental management systems (EMSs) in their environmental work. The ISO 14001 is the most frequently used standard. But standards generally are used as guidelines when designing EMSs, suggesting that certification/registration is not an overall objective among Swedish local authorities.

THE MUE -25 EXAMPLE

The modelxi for an integrated management system for urban areas developed within MUE-25 enables cities to reduce the added impact of all activities within the whole urban area. It is suggested that a system for the integrated management of urban areas should be gradually expanded in scope and content. This includes the gradual integration of sustainability aspects into urban management and suggests allowing the system to evolve from environmental to sustainability management. The ultimate aim is a good quality of life for all citizens and subsequent generations. it is important to understand that it may not be possible to achieve all objectives in the immediate stages of the process. Guidelines on this process are outlined with the Aalborg Commitments (2004).

The Aalborg Commitments should be regarded as a thematic framework/basis for integrated systems managementxii. The model would have to be further developed during the project on the basis of individual cities' experiences and feed-back. The goal, however, is to propose an improved system and implementation methodology by 2008 – a system that can potentially be used in all cities of Europe.

The Aalborg Commitments aim to guide cities on how they can help systemise the efforts of public institutions, the private sector and households to manage their activities. An integrated management system must enable cities to reduce the added impact of all activities within their jurisdiction as far as urban areas are concerned. A key aspect for meeting these guidelines is to incorporate different policy sectors, like industrial and economic development, in cities' environmental management programmes.

Therefore, it is suggested that an integrated management system for urban areas should be gradually expanded in scope and content. This would include the gradual integration of sustainability goals into urban management, encouraging urban management systems to evolve from an environmental to a sustainability management focus. The integrated management system also should allow the management of social and economical dimensions, pursuing a quality of life for all citizens and subsequent generations. An important assumption, in this respect, is that it may not be possible to achieve all objectives in the immediate stages of the integrated management process.

This raises questions concerning the reasons for implementing an EMS and its role and contribution to local environmental policy and urban management. Furthermore, it is time to provide a critical overview of this new phenomenon and reflect upon its potential and drawbacks as a tool for local authorities' responsibility to environmental management. If used in an innovative way, an EMS can provide a publicly-informed and systematically managed process of environmental management.

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