



SEVILLA 2007

Taking the Commitments to the Streets

21-24 March 2007, Seville, Spain

PONENCIAS SELECCIONADAS

A 01 Session name

Sustainability in action!

Hans Otto Lund

Member City Council/Chairman Board Pl.& Techn.affairs

Politician
Municipality of Kristiansand
Box 417
4604 Kristiansand
Norway

Tel: +4738075000 / mobile +47 90870550

Fax:

e-mail: hans.otto.lund@kristiansand.kom
mune.no

www: kristiansand.kommune.no

City Profile*: Kristiansand, Norway

* only relevant if city/local government is presenting

Short city/region profile:

Southern Norway - region Agder

Number of inhabitants:

280.000

Social, economic and environmental background:

Industry, Trade, Administration, Education and Tourism

Summary:

Executive Summary of your Abstract:

The municipality of Kristiansand presents its experiences working towards a more sustainable future in the last years, shown through best practice within accessibility, sustainable transport, citizens dialogue and implementation of an Eco Management System (EMS) for all private and public enterprises as well as presenting the results of a political Ad Hoc Committee to follow up the Aalborg Commitments.

Abstract:

The presenter:

Hans Otto Lund, (56) Educated as graduate in Economic and IT from the University College of Agder - Kristiansand, Norway- 1972, Several management positions within marketing from multinational companies as IBM, Xerox and Canon. For the last years position as Marketing manager in the Eco Lighthouse Foundation as well as several board-positions due to member of City Council in Kristiansand as politician. The presentation will be given with a PP presentation, which will be registered in the conference secretariat. Main elements: What have Kristiansand experienced, examples of Best Practice, how do we plan to get the Aalborg Commitments in to action - with examples - and how to follow up.

Resumé:

See - The presenter

Further recommended reading: look in to www.kristiansand.kommune.no or www.eco-lighthouse.com

A 01 Integration and leadership-governing sustainable cities

City on the Move: Implementing Aalborg Commitments in the daily life of a small town in a transition country

Zvonimir Mrcic

Mayor

Municipal Authority
City of Koprivnica
1, Zrinski trg
48000 Koprivnica
Croatia

Tel: +385 48 279 555

Fax: +385 48 279 543

e-mail: gradonacelnik@koprivnica.hr

www: www.koprivnica.hr

City Profile*: City of Koprivnica,
Croatia,

* only relevant if city/local government is presenting

Short city/region profile:

Seat of Koprivnica-Krizevci County in North-West Croatia

Number of inhabitants:

33200

Social, economic and environmental background:

High quality of life has been achieved through successful development of industry (food, pharmaceuticals, beer, wood, paper) and boosting SMEs. Future development is planned in the area of education and small entrepreneurship based on sustainable use of rich environmental assets (arable land, rich reserves of thermal and drinking water, woods and minerals).

Summary:

Aalborg Commitments implementation as the leading principle of development has contributed to the increase of quality of life for all citizens of Koprivnica.

Executive Summary of your Abstract:

Aalborg commitments need to be translated into immediate action in order to be implemented at the local level. This process is successful if local authorities in transition countries learn from the challenges already met by the more developed countries but have to adapt the procedures to their own level of development and rely on all allies in their own circumstances.

Abstract:

The seat of Koprivnica-Krizevci county in north –western Croatia, Koprivnica is presently the moving force of economic development of the region with economy based on processing industry, food industry, pharmaceutical industry, wood processing and paper industry, trade and agriculture. Food industry is the leading branch of processing industry and achieves more than 50% of total economy revenues. Multinational food company “Podravka” is the

foundation of the economic development of the region. Koprivnica is also the national and regional seat of the Danish brewery "Carlsberg" and paper industry company "Hartmann.

At the national and regional level, Koprivnica is rated as a small town with high quality of life for all citizens. It has a lot to offer in the domain of sports, culture, education and youth programmes. All levels of education, ranging from kindergartens and primary and secondary schools, language schools to university courses in IT, management and economics, offer various possibilities for life-long learning. Sports facilities range from football grounds, handball and basketball halls to the newly-built swimming pools. The town is proud of its social programme including the 5-year Disabled Citizens Strategy which has been a basis for the employment schemes and Accessibility programme, developed in partnership with citizens action groups.

Signing Alborg Charter in 2001 symbolically determined the sustainable orientation of the Municipal Authority of Koprivnica. This act was immediately translated into action for sustainable urban transport, enthusiastically supported by various citizen groups and education institutions. The level of partnership and public participation considerably increased when Koprivnica joined European Mobility Week initiative. Through planning, negotiation and implementation of several four- or five- year programmes the level of public awareness has been constantly growing. "City on the move" has successfully used the partnership schemes of Municipal Authority with industry and local entrepreneurs as well as educational and cultural institutions established in the action for better mobility in order to achieve further development in other areas, especially in the action for health, social equity and justice and physical planning. The positive response by the citizens and momentum gained in the development of the better mobility schemes was used for the launching of the Local agenda 21 process, as the first programme of sustainable development planning in the country. It has included a wide range of stakeholders, from public administration, businesses and citizen groups to individual citizens.

Mobility Week has been firmly established as the annual exhibition of achieved goals and new development plans, not only in the area of sustainable mobility, but also local action for health, social equity and justice and physical planning. Throughout the year, new developments are being planned by Environmental forum and presented to the Town Council. Public debate of possibly controversial issues is facilitated through local media, citizen committees and municipal web site, which has received several national awards for its design and prompt information flow.

Hand-on approach of the local authority, its support to non-governmental sector and total transparency of decision-making processes has contributed to the public ownership of new schemes and development programmes. Recognition at the European level of positive results of the European Mobility week initiative in Koprivnica and implementation of Local agenda 21 have enabled the local authority to negotiate sustainable solutions in various areas of life. Threats of unsustainable development remain an issue, especially in the business and transport sector but new solutions are being sought through the application of new technologies and promotion of sustainable solutions.

Resumé:

Zvonimir Mrcic has been the mayor of Koprivnica in his second four-year term of office. University of Zagreb graduate in politics, he has also been a member of Parliament since 2004. He has been awarded Leading Light 2006. Award by World Finance magazine for successful and inspiring promotion of his town and innovative development programmes (first municipal bonds, first public-private partnership scheme in Croatia).

Further recommended reading:

Koprivnica-sustainable urban mobility Champion, ICLEI Newsletter, Issue no 27, autumn 2006

SMILE programme, European Mobility Week initiative, www.mobilityweek-europe.org

Local agenda 21 in Croatia -challenges for sustainable development in local communities, REC for Central and Eastern Europe, Country office Croatia

World Finance Magazine, August 2006.

A 02 Integrated Management Systems

EMAS for small municipalities in Eastern Europe

Fiona Glover

Consultant

Global to Local Ltd.
20 Harrowby Lane
Grantham
NG31 9HX Grantham
UK

Tel: 01534 840896

Fax: 08717153600

e-mail: fiona.glover@globaltolocal.com

www: www.globaltolocal.com

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Experiences with EMAS for smaller under-resourced local authorities. Focus shall be given to the question of how an EMS can best support sustainability management and the implementation of the Aalborg Commitments.

Abstract:

Networking for Sustainable Development (NEST) is an EU Life funded project to develop innovative approaches and tools to ease the implementation of Environmental Management Systems (EMS) in small and under resourced local authorities. The NEST project has eleven participating local authority partners, within four European member states, with Kirklees Metropolitan Council in the United Kingdom as the beneficiary and lead partner. Kirklees Council is registered to the Eco- Management and Audit Scheme (EMAS) and has extensive experience in EMS implementation and development. Technical advice, training and support are provided by Global to Local Ltd with communication and dissemination support provided by the Council of European Municipalities and Regions (CEMR).

The key elements of the NEST project are: development of a simplified EMS toolkit, training and capacity building, working through mentor and peer networks and implementation and sharing of good and best practice.

The participating municipalities have formed three network groups in Hungary, Poland and Greece with Kirklees Council in the United Kingdom acting as a benchmark and mentor to

the project. The networks provide the overall framework for implementation of the NEST project EMS toolkit. The streamlined EMS implementation approach has been developed based on the toolkit which will be made available on the project website as a final output.

A simplified approach to an EMS: The EMS toolkit

The project has developed a simplified EMS recording system and guidance document, which forms the EMS toolkit. The toolkit is based on an excel spreadsheet recording system which enables each municipality to record their EMS implementation progress. It links activities (environmental aspects) to the environmental impacts, applicable environmental legislation, control procedures and objectives and targets. This clearly shows how the municipality is currently managing its activities to reduce its environmental impacts and how it plans to improve performance in the future through objectives and targets.

Excel was chosen as it is widely available software that most European municipalities already utilise. There is no additional cost or training requirement for the implementation of new software and it builds on existing skills and technologies.

The spreadsheet recording system is easy to use and understand and encapsulates the majority of the EMS records required into one document. This avoids bureaucratic paper-based documentation systems and duplication of effort.

In addition the toolkit includes an extensive linked guidance document, which includes both model systems and operational procedures for adaptation and adoption. The procedures have been simplified into a one-page document based on images. These act as 'picklists' from which the municipality can select the most relevant actions.

Training and Capacity Building

Training and shared learning has been a key aspect to the knowledge building process in the project. Throughout the duration of the project there will be six full training sessions involving all municipalities and a number of country-specific technical training sessions.

EMS Implementation through Networks

EMS networks have been established within the countries and among countries to provide a mechanism for exchange of experience and transfer of knowledge and good practice. Within each country network there is a national environmental coordinator providing support and advice and ensuring the flow of information within the group. The national coordinators are a vital part of the network ensuring the momentum of the project is maintained and country specific issues are taken into consideration. They have also provided assistance with the translation of training materials.

Sharing Good and Best Practice

One of the key objectives of the NEST project is to collect a series of environmental best practice examples based on the needs of the partner municipalities. These examples help the partners to learn from other European local governments and benefit from their experiences. Council of European Municipalities and Regions (CEMR) and Global to Local Ltd are responsible for the best practice work and will prepare a series of 20-25 best practice examples. The examples will be discussed and presented within the project reflecting key areas of environmental management.

A series of eight fact sheets will also be developed to support the implementation of best practice. The fact sheets will give guidance to local government on what type of actions and measures need to be taken. Best practice examples have been presented and discussed at two of the project training sessions; Kirklees (UK) in autumn 2005 and Miskolc (Hungary) in spring 2006. Both training sessions have also included study visits and feedback sessions to discuss the possibilities of implementing similar actions and projects in the participating municipalities. Best practice work is ongoing and it provides 'state of the art' thinking and ideas for the participating municipalities. This will enable the participants in the networks to

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

move forward and implement best practice based on the experiences of other local governments elsewhere.

The initial testing of the toolkit was carried out in country specific training sessions held in Poland, Hungary and in Greece in spring 2005. The new spreadsheet was also tested during the annual EMAS verification visit to Kirklees Council in April 2005. This meant that the NEST project could be confident that the new system is robust and meets all the requirements of the EMAS Regulation. The spreadsheet was well received by all users, as it guided them firmly through the process. The toolkit is available in four languages - English, Hungarian, Polish and Greek and has been successfully implemented, illustrating that the approach works in different local authorities, each with different cultures, differing political make-up and administrative organisational structures. The municipalities in the NEST project have all now successfully utilised the toolkit to develop their own EMS. As part of the developmental process, periodic methodology reviews have been undertaken to obtain feedback from the partners. This feedback has been used to further develop the toolkit and to ensure improvement, demonstrating continuous feedback as a key element of the NEST project. All the municipalities subsequently completed their environmental review and legal registers within nine months of commencement of the project.

The NEST project is developing EMS auditor networks within and between participating countries, building auditing capacity and skills. Each municipality will identify members of staff who will be invited to participate in locally delivered environmental audit training in the autumn 2006. EMS auditor exchanges will then take place so that audit staff from one municipality may be able to audit another. Staff will 'shadow' the audit process and will then make a return visit to undertake an audit of the other municipality. These exchanges will build on the strengths of the NEST network and will increase the transfer of knowledge, learning and experience between partner organisations.

Conclusion

All participating municipalities will soon have an internally audited EMS in place in one department which will be ready for external verification in spring 2007. This will highlight the success of the simplified methodology and approach which has been developed and hopefully encourage other small under resourced local authorities to follow suit.

The project has helped identify the critical success factors of EMAS implementation in small under resourced local authorities. These include: political and senior management support and commitment in the municipalities; enthusiasm of the lead officer implementing the EMS, simplicity of the approach and on going training and support during implementation.

Another key outcome of the project is a critical assessment of the EMAS methodology, which will be fed back to the EU EMAS team who are looking to NEST for ideas and innovations for the improvement of the EMAS Regulation. NEST will be of direct relevance and significance to all European member states including UK local authorities.

In the future the NEST project management team hope to develop the EMS toolkit further and apply the networking approach to other new European member states to encourage even more uptake of EMAS.

Resumé:

(2-3 sentences: education, responsibilities, personal interests...)

Further recommended reading: Further information on the NEST project is available on the project website www.emasnetwork.org

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

A 02 Integrated Management Systems: operating at the heart of the city

Implementing the AC through an integrated management approach

Vilija Guzyte

Schief specialist

Environmental protection
Kaunas City Municipality Administration
Laisves al. 96
44251 Kaunas
Lithuania

Tel: +370 37 424706

Fax: +370 37 423724

e-mail: vilijag@kaunas.sav.lt

www: www.kaunas.lt

City Profile*: Kaunas, Lithuania

Number of inhabitants:

362 thousand

Social, economic and environmental background:

48 thousands students;

7 Universities;

Kaunas area – 157 km², density – 2427 persons per km².

Green areas cover 60 % of total area;

Waste production – 300 kg person /per year ;

Water consumption – 80 litras/per day/per person;

Total drinking water supply per day – 61.5 thousand m³;

335 vehicles per 1000 inhabitants;

Summary:

Sustainable development principles implementation into city management is very important for Lithuanian cities. Well organised cross-sectorial collaboration and information exchange within City Administration and politicians is a very important achievement and challenge

Executive Summary of your Abstract:

Sustainable development principles implementation into city management is very important for Lithuanian cities. Well organised cross-sectorial collaboration and information exchange within City Administration and politicians is a very important achievement and challenge.

Abstract:

Kaunas city is among the first ones in the country that started implementing systemically the principles of sustainable development. The first steps were made in 1999 while implementing the PHARE project "Agenda 21". Then "Kaunas City Environmental Policy" was prepared and approved by Kaunas City Council. It was based on the environmental protection strategy

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

and action programme of Lithuania as approved by Seimas of the Republic of Lithuania in 1996. The aim of it was to form the background for the sustainable development of the country.

The aim of Kaunas City Environmental Policy is to assure a wholesome environment for the city citizens encouraging the harmonious development of economy and society, improving the quality of the environment, protecting the biodiversity and saving the natural resources.

The priorities of Kaunas City environmental policy are as follows: the application of environmental criteria in administration and planning of the city; protection of the quality of Kaunas environment and its improvement; protection and strengthening of public health; protection of Kaunas City biodiversity; rational usage of natural resources; waste management; environmental education of the society (training, education, information), seeking responsibility for the conservation of environment.

In 2004-2006, the city started to be developed systemically, following the Strategic plan of the city, strategic documents of various fields (Environmental Protection Strategy, Public Transport Strategy, Social Service Development Strategy, Housing Development Strategy, programme "Transport and environment", etc.). The principles of sustainable development are stressed in all the documents, therefore by the decision of the City Council as of July 20, 2006, it was decided to unite the sustainable developing cities and sign the Aalborg Commitments, prepare and implement the strategic city development programme. The methodological support is provided by the UBC involved in the project "Managing Urban Europe-25".

However, the biggest challenge in Kaunas is that the different departments involved in the city management processes work separately and therefore lack of satisfactory level of cooperation and mutual understanding. Consequently, a cross-sectorial coordination board was established for the purpose of MUE-25 implementation. The board includes representatives from the environment, transport, social, health, economy and strategic planning departments and is headed up by the Director of the City Development Department.

Although all ten Aalborg commitments are admitted to be crucial for the goal of sustainability to be achieved, five of them were agreed to focus on five of them. The most important ones for Kaunas would be: Local management towards sustainability; Better mobility, less traffic; Planning and design; natural common goods and Social equity and justice.

It was also concluded that the Local management towards sustainability needs the most attention and Kaunas actions towards sustainability have to start with making effective structure and political support and active citizens, stakeholders participation is crucial important. City Council decision of 20 July 2006 was to establish Kaunas Sustainable development Coordination Council. The Council coordinates the future activities of Sustainable Development programme preparation, approval by the City Council and implementation.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

A 02 Integrated management systems

Developing ecoBUDGET towards a sustainability management system

Anna Karlsson

Research officer

Planning department
Växjö kommun
Box 1222
351 12 Växjö
Sweden

Tel: +46 470 415 94

Fax: +46 470 415 80

e-mail: anna.karlsson4@kommun.vaxjo.se

www: www.vaxjo.se

City Profile*: Växjö, Sweden

* only relevant if city/local government is presenting

Short city/region profile:

Växjö is an entrepreneurial centre in south Sweden. The main economic activities are (notably forestry) manufacturing industry companies with hi-tech profiles and commerce. The unemployment rate is low, 3,8%. University has 10 000 students

Number of inhabitants:

80 000

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Currently, ecoBUDGET manages the environmental dimension. The first step in Växjö, towards a sustainability management system, is to incorporate the areas of gender equality, integration, public health and children and youth's rights into ecoBUDGET.

Abstract:

ecoBUDGET extends focus from environmental towards sustainability

Växjö signed the Aalborg commitments in 2004 to lay the foundation for a sustainable development in Växjö. To manage and strengthen the environmental work, Växjö uses the environmental management system ecoBUDGET. The simplicity of the system and the fact that it can be incorporated into existing structures made the choice easy.

Växjö is city partner in European project Managing Urban Europe-25 that supports the development and expansion of EMS, in this case ecoBUDGET, towards a sustainability

management system. Currently, ecoBUDGET manages the environmental dimension. The first step in Växjö, towards a sustainability management system, is to incorporate the areas of gender equality, integration, public health and children and youth's rights into ecoBUDGET.

For the purpose of the development of ecoBUDGET, a cross-sectorial co-ordination team has been established, with representatives from the social welfare administration, the integration office, the gender equality committee, the strategic environmental office, the financial department and the administration for leisure and culture. Working together in a cross-sectorial team strengthens the overall view and creates synergy effects.

For the budget of 2008, indicators for the "new" areas will be incorporated into ecoBUDGET. The work on selecting indicators for these areas has already started. Studying indicators from other municipalities, national indicators and European common indicators is an important input to this work. A main challenge is to identify indicators which can represent the targets in the local plans and programmes. The first "sustainability budget" will contain only a few indicators per area but more indicators will be developed along with the programmes and plans being revised and after which they will contain more measurable targets. Therefore the process with developing a sustainability budget will go on for some years ahead.

The ambition and work on a sustainability budget is in compliance with a national directive on economising, which indicates that all municipalities shall set targets for long-term economising. The national directive indicates that economising is far from a one-dimensional financial issue, but is rather a matter of long-term sustainable development, and therefore supports the local work in Växjö.

By covering all aspects of sustainability in the ecoBUDGET system, the aim is to show that protection of human resources, economic resources and environmental resources are equally important for a long-term local sustainable development and that the three areas reinforce each other in a positive way.

Resumé:

Social scientist, working as a research officer/project co-ordinator in the planning department in the city of Växjö.

Further recommended reading:

A 03 Water: saving a natural common good with the citizens

Consumo responsable del agua: actividades del gobierno local y participación ciudadana

Name: José Manuel de la Puente Méndez

City Profile*: City /Seville, Country: Spain

Function/Title: Commercial Director

* only relevant if city/local government is presenting

Department

Short city/region profile:

Organisation: EMASESA

Street: Escuelas Pías, 1

Postal code 41003 City: Sevilla

Country: España

Number of inhabitants:

700.000

Tel: 34 955 020 445

Fax: +34 955 020 478

e-mail: jpuente@emasesa.com

www: www.aguasdesevilla.com

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Responsible consumption of water: local government activities and citizens' participation

Abstract:

.

CITIZEN PARTICIPATION IN A RESPONSIBLE CONSUMPTION OF WATER

The contribution will report on a new water consumption culture. We must introduce a new water culture. We must present water as a scarce resource and improve its responsible consumption

Therefore, taking into consideration the imbalance between supply and demand for water, in order to stabilise this disequilibrium, we are conscientious that we need to act not only from an offer perspective, constantly looking for new resources, but also from the demand side. From the demand perspective our goal is to improve the responsible consumption of water, supporting sustainable development. This has become known as our company's philosophy.

We shall define the water demand in two parts: firstly the water used in the process, i.e. in transport, treatment and distribution (internal demand); and secondly the water which is

consumed directly by the public (external demand). We will distinguish between two types of actions:

A) Actions designed to reduce the internal demand

- 1.- modelling of the measuring and information systems
- 2.- renewal of meters
- 3.- control of unaccounted for water. network sectorisation and diagnostics
- 4.- plans for improvement. renovation of networks
- 5.- using non-treated water for public spaces irrigation, street cleaning and industrial use (Isla de la Cartuja pipelines)

B) Measures aimed at stabilising external demand.

- 1.- pricing policy
- 2.- water saving devices
- 3.- scheme for individual meters in housing blocks

This is therefore a problem with two facets: in a city where water is a scarce resource, individual efforts to reduce consumption made by those living in a housing block with a collective meter are not reflected directly in their bills, and the dissuasive effect of progressive pricing is also less effective.

The social injustice of a system in which one tenant is obliged to pay for the water wasted by others in many cases produced situations of conflict among tenants, since the rate of non-payment or late payment was high. As a result, a few of the tenants were obliged to pay the whole bill, or the supply would be cut off for non-payment.

Collaboration agreements

In support of the dissemination of the Scheme, collaboration agreements were signed with the following bodies that cooperate in the dissemination and development of the campaign:

- Provincial Federation of Tenants Associations.
- Seville Association of Consumers and Users (ACUS).
- Provincial Association of Housewives, Consumers and Users (HISPALIS).
- Spanish Consumers' Union, in Seville (UCE).
- Provincial Association of Authorised Installers of Seville, (EPYME).
- Provincial Association of Authorised Installers of Heating, Air Conditioning, Plumbing, Gas and Similar, Seville, (CES).
- Official Association of Industrial Engineers and Technicians, Seville.
- Association of Industrial Engineers of Western Andalusia.

The dissemination campaigns used the press, radio, local TV stations, leaflets, buses and urban furniture, information kiosks, the "water bus", the www.aguasdesevilla.com web site, and assistance in meetings of Owners Associations.

4) Awareness Campaigns:

Decreasing consumption is impossible without the collaboration of the population. The people of Seville are very conscious of the lack of water after intensive saving campaigns during the drought years, but we continue with communication campaigns in wet periods, with messages like "WATER IS LIFE", "EVERY DROP COUNTS", etc.

The new model of sustainable development looks for a stable and voluntary system for responsible consumption. That model is implemented through Sustainable Demand Management.

We are convinced that combining the interests of all parties concerned in the process is the way to improve service quality and a sustainable water use

Profile:

Name of country: Spain

Name of municipality: Seville

Brief description of the organisation: EMASESA manages the water cycle as a joint stock company owned by the municipality of Seville. For more than 25 years EMASESA has provided water for more than 1 million inhabitants in 12 different cities. EMASESA also supplies raw water to more than 200.000 inhabitants

Project to report on:

Objectives: Improve the Water Responsible Consumption

Successful: Saving result until 2005: 53hm³, compared with 91:

- Population served: 8% increase
- Volume of water taken: 25% reduction
- Volume consumed per person: 22% reduction

Innovative: Actions in the demand. Citizen participation

Contribution to overall objectives of the conference: Sharing a good experience in Responsible Consumption.)

Resumé:

A new water culture. Responsible consumption of water

Further recommended reading:

A 03 Water: saving a natural common good with citizens

Agua, Territorio y Ciudad

Name Guillermo Mariano Irós

Function/Title Tenure Professor and City Councilor

Department Design
 Organisation Universidad Nacional de Córdoba
 Street Reynafe 1921
 Postal code 5009 City Córdoba
 Country Argentina

Tel: +54-351-4811936

Fax: +54-351-4822035

e-mail: guillermoiros@yahoo.com.ar

www:

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

La propuesta se orienta al desarrollo social de las comunidades asentadas en las márgenes de los canales de riego. Complementariamente, se busca mejorar el rendimiento hidráulico y la integración urbanística del sistema de riego.

Abstract:

BREVE DESCRIPCIÓN

El trabajo plantea una advertencia sobre la destrucción del sistema de riego y las tierras productivas en la ciudad de Córdoba. El diagnóstico destaca la ausencia de planes para armonizar el desarrollo urbano con este sistema, y el llamado "cinturón verde"; describe la ocupación de los canales con "villas de emergencia" y la degradación de las condiciones de hábitat. En este contexto, la propuesta se basa en la integración social y urbanística de estas comunidades, para superar y revertir el proceso de decadencia señalado. Se descarta la erradicación como metodología, apartada del marco conceptual adoptado. Como soporte para el desarrollo social, se plantea un emprendimiento productivo comunitario vinculado a la agricultura frutihortícola bajo riego. Además de advertir, la propuesta pretende dejar establecidos algunos criterios orientadores, para la planificación urbana y el desarrollo social de estos sectores con premisas de sostenibilidad. Esta propuesta se encuentra respaldada por la experiencia desarrollada en el Plan de Recuperación del Río Suquia en la Ciudad de Córdoba, con una obra de gran impacto urbano, paisajístico y ambiental que será presentado como antecedente del trabajo de los Canales.

PRODUCCIÓN, INFRAESTRUCTURA DE RIEGO Y HÁBITAT

El concepto de reurbanización ya ha sido sostenido como una metodología apropiada para resolver la situación de asentamientos irregulares como el que nos ocupa pero en este trabajo que ponemos a consideración, se presenta como actitud innovadora la interpretación integral del problema y también la integralidad con que se formula la propuesta de solución.

En efecto, se parte de una lectura ambiental y productiva del extenso entorno regional de tierras bajo riego, ponderando la significación de esta gran superficie de quintas y huertas que además de constituir una importante fuente de recursos y empleo de mano de obra, otorgan a la ciudad un soporte ambiental que debe preservarse.

El segundo componente valorado es la infraestructura de riego con más de un siglo de existencia, conformado por una importante obra de captación y una extensa red de canales que requieren de un mejoramiento hidráulico para evitar un enorme desperdicio del agua, que en escaso porcentaje llega a las quintas.

Por último se considera la grave situación en que se encuentran las comunidades asentadas en los márgenes de estos canales con condiciones de hábitat que configuran un alto riesgo social y sanitario.

MODELO DE GESTIÓN, DESARROLLO SOCIAL Y URBANÍSTICO

Se parte del enorme potencial que ofrecen las tierras ociosas para el desarrollo socioeconómico de las comunidades que, a manera de extensas villas de emergencia lineales, acompañan a los causes de estos canales de riego. No se piensa en un plan que tiene como protagonista al Estado. Se piensa en un impulso y en una apoyatura inicial del Estado para posibilitar el protagonismo de una comunidad organizada según modelos asociativos de gestión, para desarrollar un emprendimiento productivo que abarque todos los eslabones de una cadena que comienza en el cultivo y concluye en la comercialización de productos con la mayor incorporación de valor y mano de obra.

Complementariamente, se plantea una integración urbanística que en un proceso continuo favorece la integración social. Enunciado este que puede invertirse en las distintas fases del desarrollo, indicando que una integración social, favorece la integración urbana, todo esto orientado hacia el objetivo de revertir la situación de aislamiento y fragmentación que genera ghettos de pobreza y marginalidad.

PARA CONCLUIR

El trabajo plantea tres ejes:

- Social
- Productivo
- Urbanístico

Entendemos que la consideración integral y complementaria de estos aspectos mencionados, permite arribar a un resultado sostenible en el tiempo. No sería viable la propuesta (además de socialmente injusta), si no se tomara en consideración las precarias y riesgosas condiciones de habitabilidad y sanitarias de las comunidades que habitan en las tierras fiscales sobre los márgenes de estos canales. Otro tanto puede decirse sobre la necesidad de promover una organización social para impulsar emprendimientos productivos con capacidad de empleo. Esto a su vez, se relaciona con el mejoramiento de la infraestructura para el cuidado y el aprovechamiento del agua y la integración física de la red de canales al tejido urbano de la ciudad.

Resumé:

GUILLERMO MARIANO IRÓS

- Arquitecto graduado en la Universidad Nacional de Córdoba (Arg).
- Profesor Titular de Diseño Arquitectónico. Univ Nacional de Cba. (Arg).
- Profesor Titular de Urbanismo. Universidad Blas Pascal. Cba (Arg).
- Investigador de la Universidad Nacional de Córdoba (Arg).
- Ha desarrollado una extensa actividad como arquitecto y urbanista.
- Se ha desempeñado en diversos roles de gestión: Secretario de Desarrollo Urbano de la Municipalidad de Córdoba; Senador Provincial; Ministro de Obras, Servicios Públicas y Vivienda y Concejal.
- Ha publicado libros y numerosos trabajos sobre desarrollo urbano.
- Ha actuado como conferencista en eventos nacionales e internacionales.

Further recommended reading: Jáuregui Jorge "Estructura Urbana y Exclusión", SCA, Revista de Arquitectura Sociedad Central de Arquitectos, 205, pag. 30, Octubre 2002

A 03 Water: saving a natural common good with the citizens

La reutilización de aguas residuales como sistema de racionalización hidrológico

Carmen Inés Ruiz de la Rosa

Function/Title: Profesora de Universidad
Department: Economía Financiera y Contabilidad
Organisation: Universidad de La Laguna
Street: Escuela Universitaria de Ciencias
Empresariales. Campus de Guajara, s/n. La
Laguna.
Postal code City: 38071
Country: España

Tel: 922317054
Fax: 922317132
e-mail: ciruiz@ull.es
www:

Abstract:

Vivimos actualmente una etapa en la que la problemática asociada al tema del agua exige precisamente una gestión racional de este recurso, como única forma de garantizar un aporte constante de este bien que, sin pecar de fanatismo, podríamos afirmar que es el más preciado de cuantos existen en la naturaleza.

Los sistemas convencionales de captación de agua presentan, fundamentalmente, dos tipos de limitaciones; unas naturales, y que se deben a una disminución en el rendimiento de las explotaciones hidrológicas producidas por un desequilibrio entre la extracción de agua y la recarga natural, y otras de carácter económico, puesto que la disminución sistemática de la rentabilidad de los aprovechamientos, según la relación cantidad-calidad de agua extraída, tiene como consecuencia directa un aumento del precio del agua de abastecimiento.

Frente a los problemas asociados a los métodos convencionales de obtención de agua, la actual situación hidrológica de muchas áreas que, por circunstancias climáticas y geográficas, no pueden abastecerse del agua de lluvia, obliga a recurrir a los sistemas no tradicionales con el fin de solucionar esta problemática hídrica. Nos encontramos, de esta forma, con dos alternativas industriales de producción de agua a las que, poco a poco, se van dedicando mayores esfuerzos, tanto económicos como humanos, y sobre las que se han depositado grandes esperanzas de cara al futuro: la desalación y la reutilización.

De entre estas dos opciones el proceso de depuración de aguas residuales y su posterior reutilización se nos presenta como un sistema único de racionalización del agua que, al

apostar por la regeneración del recurso, supone un aumento importante de la oferta hídrica dentro de los programas de sustitución que se recomienda en la gestión de la demanda.

De hecho, entre las ideas y propuestas que hacen Estevan y Naredo (ESTEVAN, A. y NAREDO, J.M. (2004): Ideas y propuestas para una nueva política del agua en España. Editado por Bakeaz y Fundación Nueva Cultura del Agua, Bilbao. pag.42.) para una nueva política del agua en España, incluyen la de cerrar los ciclos del agua, justificado que en "una planificación integrada del agua, los efluentes urbanos e industriales no deben considerarse como residuos, sino como recursos destinados a ser regenerados y reutilizados, con el fin de rebajar la presión extractiva y de vertidos sobre los ecosistemas acuáticos. Ello exige incluir todos los efluentes (ya sean retornos agrarios o aguas residuales urbanas e industriales) en los balances de recursos en la planificación a escala de cuenca, adoptando las medidas necesarias para protegerlos y para evitar cualquier pérdida o deterioro adicional en su recogida y transporte hasta las instalaciones de regeneración".

Por lo tanto, dentro de esta nueva inquietud por llevar a cabo una gestión eficiente del ciclo, el proceso de depuración y reutilización de aguas residuales cobra especial importancia en cuánto que supone; por un lado, un ahorro importante de este bien, al permitir reutilizar el agua depurada en determinadas actividades y, por otro lado, una forma de garantizar el tan preciado equilibrio ecológico, al someter al agua ya utilizada a un tratamiento de limpieza antes de ser vertida al medio.

En definitiva, con esta actividad el ser humano consigue cerrar un ciclo que hasta hace poco era la propia naturaleza la única que tenía facultades para llevarlo a cabo. Sin embargo, hemos percibido que, a pesar de los problemas de disponibilidad de agua que sufren muchas regiones del planeta se prefiere utilizar para el riego agrícola y de jardines agua de galerías y pozos, e incluso la obtenida por medio de desaladoras, antes que fomentar el uso de agua regenerada.

Por lo tanto, creemos que resulta fundamental, de acuerdo con la filosofía que defiende la nueva cultura del agua concentrar nuestros esfuerzos en fomentar el uso de técnicas como la reutilización de aguas residuales con las que, en definitiva, se consigue liberar parte de la presión que se está ejerciendo sobre los sistemas convencionales de obtención de agua.

Teniendo en cuenta estas reflexiones, y en relación con la necesidad de poner en marcha planes estratégicos que permitan la construcción de sociedades sostenibles, se propone, a través de este trabajo, incorporar el agua regenerada como un recurso más en los distintos balances hidrológicos lo que exige un nuevo replanteamiento a la hora de poner en marcha un sistema de gestión racional del ciclo hidrológico.

A 04 100 kg less waste as a local policy target

The Waste Prevention Kit for Enterprises, Education and Households

Elina Karhu

Project Analyst

Waste Management
Helsinki Metropolitan Area Council, YTV
Opastinsilta 6 A
00520 Helsinki
Finland

Tel: +358-9-156 1663, +358-45-657 7375

Fax: +385-9-156 1657

e-mail: elina.karhu@ytv.fi

www: www.ytv.fi, www.ytv.fi/fiksu

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The Waste Prevention Kit for Enterprises, Education and Households (WastePrevKit) is a three year long Life Environment project, which started in 2005. The aim of the WastePrevKit -demonstration project is to reduce waste production through regional and national guidance, household campaigns, with different types of educational materials and best practice models produced and distributed in the project. The project is targeted to the residents, enterprises and the public sector in the Helsinki Metropolitan area.

Abstract:

Background

Helsinki Metropolitan Area Council (YTV) has set as target that in 2007, less waste will be generated in the metropolitan area per inhabitant and workplace than in 2000. The board of YTV has accepted, until 2007, the strategy of waste prevention at source. This was the foundation for a five-year project, which is supported by the EU's Life Environment funding in 2005-2007, as the WastePrevKit project. The strategy is to utilise regional and national advice and guidance in order to motivate residents, enterprises and the public sector to avoid the production of waste.

In the hierarchy of the EU waste legislation, waste prevention is the primary objective, followed secondarily only by reuse, recycling, use of waste as fuel for energy and final disposal.

Actions and Expected Results

Action 1: Waste Benchmarking Service for companies, the public administration and education

YTV's Waste Benchmarking Service Petra compares the waste amounts generated by a private company or public administration with other companies and organisations in the same field and similar types of properties. The service is being developed by improving the technical implementation and by adding automatically updated graphic displays on the development of the waste quantities of different sectors. The service will be translated into English and presented to co-operation partners.

Expected results: The Waste Benchmarking Service is functional and commonly used within the area. It aims effectively to decrease the waste amounts generated by companies and organisations.

Action 2: Smart Ways of Action in enterprises and public administration

The Best Practice models of operation for the prevention of waste at source for retail stores, the building trade, offices, educational institutions and day cares will be made and tested in co-operation with operators in the field.

Expected results: Commonly known and utilised models for the reduction of waste have been made for chosen sectors. The amount of waste in retail stores and offices is reduced from 2003 to 2006 by 3 %.

Action 3: Material efficiency in general education and vocational education

Teaching materials on the prevention of waste and eco-efficiency are supplied to pre-primary schools, comprehensive schools and vocational education institutions fields of food and nutrition industries plus the institutional catering, welfare and health care. Materials will be produced and tested in co-operation with them.

Expected results: The teaching materials are widely used. Pupils graduating from comprehensive school have had instructions in the prevention of waste at least twice. 50 % of the teachers in general education have been acquainted with the material; they touch on the topic 10 % more often during lessons than in 2003. The teaching materials for vocational institutions are used in 80 % of the institutions in the area.

Action 4: Development of the Documentation Portal

The portal is an electronic data system in Finnish, Swedish and English where the models and other materials of the project will be put (www.ytv.fi/fiksu). The functional and interactive qualities of the system will be improved. An English version of the portal will be made and Swedish pages will be extended.

Expected results: The Web-portal is technically practical and functional; its contents are extensive and inspire users to act. The portal is extensively used by different target groups.

Action 5: Dissemination of the deliverables

Information on the produced material will be distributed to households in the area. Educational events and seminars will be arranged and informational visits made to enterprises, educational institutions and to the public administration. Supported methods and materials will be introduced in seminars both nationally and in the EU-area.

Expected results: Results have been spread effectively. Cooperation with the networks continues. Target groups have been reached through attitude campaigns to households; the information gained has guided them in making choices that lead to the production of less waste.

Resumé:

Elina Karhu; MSc (Environmental Sciences, University of Jyväskylä, Finland), is employed in the Waste Management sector of the Helsinki Metropolitan Area Council (YTV). Karhu is a member of the Consultation Unit and has worked as a Project Analyst in the Waste Prevention Project from 2005. During 2003-2004, Karhu was employed in the University of Jyväskylä and her research subject was Methane-oxidising Landfill Biocovers.

Further recommended reading: www.ytv.fi/fiksu

A 05 Sustainable (re-)designing of districts

Angers, designing a sustainable neighbourhood of 20,000 inhabitants

Gilles MAHÉ

**Deputy Mayor of Angers,
Angers City,**

BP 23527
49035 ANGERS CEDEX 01
France

Tel: 33 2 41 05 40 43
Fax: 33 2 41 05 39 04
e-mail: gilles.mahe@ville.angers.fr
www: angers.fr
angersloiremetropole.fr

City Profile*: ANGERS, FRANCE

* only relevant if city/local government is presenting

Short city/region profile:
Loire Valley, 90 min far from Paris

Number of inhabitants:
270 000

Social, economic and environmental background:
Plants and agriculture: centre of international competitiveness ; 30 000 students ; a region certifiably natural

Summary:
Angers, a sustainable town

Executive Summary of your Abstract:

Taking sustainable development into consideration in developing the Mayenne and Capucins plateaux (10,000 homes on 240 hectares):

1. Developing the mix between habitation, economic activity, shops, services and leisure facilities;
2. Preserving the place's identity, memory and the landscape elements that give it structure;
3. Integrating environmental quality into the buildings, with 3 priorities: water, energy and noise;
4. Reducing vehicle traffic in favour of more gentle modes of transport (cycling, walking, tram);
5. Consulting with and involving the inhabitants in the development of the project;
6. Integrating the major infrastructure projects: the first tram line and the A11 motorway bypass;
7. Responding to housing needs with a diversified range favouring a varied social mix.

Abstract:

PRESENTATION OF ANGERS

Situation, principal characteristics.

ANGERS, A SUSTAINABLE CITY

Short abstract of Angers engagement for sustainable development.

DESIGNING A SUSTAINABLE NEIGHBOURHOOD FOR 20,000 INHABITANTS

To the north of Angers, the Mayenne and Capucins plateaux (240 hectares) are undergoing a global development project in accordance with the principles of sustainable development: combining quality of life, social balance and economic dynamism.

The first buildings, beginning in 2007, will be completed in 2009, and the last will be finished by 2020.

7 OBJECTIVES OF SUSTAINABLE DEVELOPMENT

1. Developing the mix between habitation, economic activity, shops, services and leisure facilities;
2. Preserving the place's identity, memory and the landscape elements that give it structure;
3. Integrating environmental quality into the buildings, with 3 priorities: water, energy and noise;
4. Reducing vehicle traffic in favour of more gentle modes of transport (cycling, walking, tram);
5. Consulting with and involving the inhabitants in the development of the project;
6. Integrating the major infrastructure projects: the first tram line and the A11 motorway bypass;
7. Responding to housing needs with a diversified range favouring a varied social mix.

AN ENVIRONMENTAL APPROACH TO TOWN PLANNING - AEU

Developed by the ADEME (environment and energy control agency), the AEU enables energy and environmental concerns to be incorporated at an early stage of urban planning and development projects. About the Mayenne and Capucins plateaux, the AEU is currently in progress and involves three phases:

1. Diagnosis of the impact of the project, evaluation of future requirements, identification of environmental issues;

2. Operational recommendations, in terms of technical and financial resources; whether based on incentives or coercion, they will be incorporated into the terms and conditions; thus the conditions for the acquisition of the land will be extended with the objectives and arrangements to be implemented by the contractors according to the priorities determined by the local authority;

3. Monitoring and evaluation of the project according to the various sustainable development targets.

The first construction programmes oblige all building contractors to obtain the Habitat et Environnement label. This certification is based on seven themes:

- the environmental management of the operation
- a clean building site
- energy and reduction of the greenhouse effect
- choice and sources of construction materials
- water
- comfort and health
- green actions

GENERATING A SOCIAL MIX WITH DIVERSE URBAN FORMS

10,000 housing units planned in total, from town houses to blocks of flats, with all types of habitat coexisting. Social housing will sit alongside the flats in the private park, encouraging a wide social and generational mix. In order to satisfy the housing needs of Angers' citizens but also of future populations, the types of housing planned on the Mayenne and Capucins plateaux offer arrangements that will facilitate access to property purchase or rental for low-income households.

AN ARCHITECTURAL PRINCIPLE: GREEN BANDS

The development principles of the Mayenne and Capucins plateaux respond to each other perfectly. The green bands in the landscape provide structure and are the basis of the urban planning operation.

The green bands respect the site, the identity of its landscape and its agricultural setting. They organise the layout of the various built spaces, public facilities, vehicle and pedestrian routes and leisure areas. This series of elements guides the transition from town to country, from the built environment to natural spaces. These lines of force organise the plateaux into a series of distinct spaces referred to as "islands".

LIVING NEIGHBOURHOODS

Neither dormitory towns nor garden suburbs but living neighbourhoods, combining high-quality living conditions, social balance and economic dynamism. Ensuring the quality of life of present and future generations guides the development according to evolutions in lifestyle and in the town itself. This future part of the city has the vocation of integrating and uniting the neighbouring districts. In the heart of the development, the main square is designed to become the new town centre. The tram network will link the new areas directly to the city centre and the TGV station. The six tram stops serve all the shops, town halls and libraries of the development, the crèches and nurseries, schools and sports facilities. Economic activity centres give an extra degree of structure to the project. They will house tertiary activities, healthcare facilities, shops and services.

THE POSITIVE-ENERGY TRAM MAINTENANCE CENTRE

When put into service in early 2009, the tram maintenance centre will provide facilities for the maintenance and parking of the whole tram fleet and part of the bus fleet. It is the subject of an environmental quality approach with the aim of creating a positive-energy site, i.e. a site that creates more electricity than it consumes.

Angers Loire Métropole is looking at several solutions: wood-burning boilers, boilers with air/water heat pumps, photovoltaic solar energy (minimum surface area of 400 m²), thermal solar energy (with exchanger panel area of 15 m²), recycling of at least 50% of washing water, an "Ecosedum" or vegetative roof terrace system.

TERRA BOTANICA

Terra Botanica will be the first educational theme park dedicated entirely to plant life. Open to the public from spring 2009.

THE MAYENNE AND CAPUCINS PLATEAUX IN CONSULTATION

Consultation with the inhabitants is part of a general policy context of transparency, manifested in a variety of ways: providing an information file in the town hall, many public meetings, urban planning information for inhabitants, exhibitions, urban workshops, exchanges with the geography faculty etc.

Resumé:

51 years old, psychologist, Gilles Mahé has been an activist in favour of environment for 20 years. He has been deputy mayor in charge of environment and quality of life since 2001.

Further recommended reading: This presentation will be in French accompanied by a PowerPoint Presentation in English.

A 06 Better mobility - less traffic

Milan: Pollution Charge - a road policy system

Edoardo Croci

City Councillor

Department Environmental and mobility
Municipality of Milan
Via Beccaria 19
20122 Milano
Italy

Tel: 0039 02 88453305

Fax: 0039 02 88453317

e-mail: assessore.croci@comune.milano.it

www: www.comune.milano.it

City Profile*: Milan , Italy

* only relevant if city/local government is presenting

Short city/region profile:

Milan is the heart of Italy's largest metropolitan area, this urban region represents the country's most complex productive and strategic functions concentration, except for the national government institutions. The municipality of Milan covers a surface area of almost 180 km²; most of which consists of urbanised land and infrastructures. In the northern sector, the city blends into the surrounding municipalities without any interruption from east to west.

Number of inhabitants:

1.283.396

Social, economic and environmental background:

Milan population density is particularly high (about 7000 ha/km²). The urban structure stands in a radial scheme: though integrated function co-exist in the compact core, lying within the inner circle road built on the site of ancient city walls, the density of employee of this area (6 time the city average) underlines the strength of the service industry that developed here since the post-war years. Outside the circle, the functional mix is less homogeneous. The northern sector features a significant concentration of business headquarters, management and financial activities. The entire western sector is characterised by a system of large public park extended towards the western ring road and the city's most outlying districts. The southern sector is distinguished by the presence of historical water and rail communication routes, which in the past centuries were used to transport goods from the agricultural land, and by the suburban emerging industry. The eastern sector is crossed by the eastern ring road, along which lie Parco Forlanini, Parco Lambro and the new developments constructed on derelict land. Lambrate railway station and the Polytechnic campus are the most important facilities in the innermost band.

Summary:

Milan is the heart of Italy's largest metropolitan area, this urban region represents the country's most complex productive and strategic functions concentration. The municipality of Milan has 1.283.396 inhabitants and covers a surface area of almost 180 km²; most of which consists

of urbanised land and infrastructures.

Executive Summary of your Abstract:

To solve the problem of air pollution, the City of Milan intends to introduce a road pricing system. The price to come in the city will be based of vehicle categories and their contribution to pollutant emissions. This system is inspired by European "Polluters Pay Principle"

Abstract:

In the transport and environmental management strategy of the current Administration, the significant reduction of air pollutant emissions in the urban area - mainly of fine particulate matter, that represents the primary problem for human health in Milan - is the main objective.

The main source of the fine particulate matter (PM10) is the urban traffic (that contributes to the emissions at 72%). The urban area is interested by incoming traffic flows of over 650.000 vehicles per day, about 450.000 of which are driven by people do not reside in Milan.

To solve this problem the Administration intends to introduce a road pricing system. The price to come in the city will be defined on the base of vehicle categories and their contribution to pollutant emissions. This system, called "pollution charge", is inspired by European "Polluter Pays Principle".

The "Pollution Charge" targets are:

- a reduction of 30% in the vehicles coming in the urban city;
- a contextual reduction of the almost 25% in the primary emissions from traffic and transportation;
- to promote the more obsolete vehicles exclusion from the urban traffic.

The "Pollution Charge" aims to achieve the further objectives:

- to improve the speed and paths covered from public transport means;
- to invest the profits in activities that increase the public transport use and environmental protection.

The Pollution Charge is an innovative application of the road pricing system, because in this case the price to come in the city will be defined on the base of vehicle contribution to pollutant emission, not only on the base of vehicle category.

The implementation of this innovative system in the city of Milan could be an example for other cities that have the same environmental problems and could promote similar initiatives.

The project contributes to the overall objectives of Conference because:

- it develops a new tool to deal with the air pollution problem that affects an urban area;
- Resumé:**
- it aims to accelerate local sustainability in Europe.

Edoardo Croci has a degree in economics and socials subjects at the Bocconi University of Milan. He is the City Councillor of the Municipality of Milano since June 2006.

His skills and competencies are:

Definition of transport, mobility and environmental policies to improve the quality of life and health protection of the citizens.

Promotion and development of initiatives to reduce urban traffic and to improve the environmental quality.

Promotion of environmental policies related to air pollution, noise and energy consumption.

A 06 Better mobility - less traffic

London: Low Emission Zone

Nick FAIRHOLME

Head of London Low Emission Zone (LEZ)

London Low Emission Zone
Transport for London
Wilton Road
SW1V London
England

Tel: + 44 (0) 20 7027 9230

Fax: + 44 (0) 20 7027 9475

e-mail: nickfairholme@tfl.gov.uk

www: tfl.gov.uk

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The London Low Emission Zone will deter the most individually polluting vehicles from driving within Greater London. By so doing, it will improve the health and quality of life of people who live and visit London, through improved air quality.

Abstract:

Information about the proposed London Low Emission Zone

To improve air quality in London, which is currently among the worst in Europe, the Mayor of London, Ken Livingstone, is proposing to designate Greater London as a Low Emission Zone (LEZ). Air pollution affects the quality of life of a large number of Londoners, especially those with respiratory and cardiovascular conditions. It is estimated that every year some 1,000 premature deaths and a similar number of hospital admissions occur due to poor air quality in the Capital. Many more people experience discomfort as a result of pollutants aggravating existing conditions.

Two of these pollutants, PM10 (fine particles) and NO₂ (nitrogen dioxide, formed from emissions of oxides of nitrogen, NO_x), are particularly harmful to health. Road transport is responsible for around half of all emissions of PM10 and NO_x in London. The Mayor has a legal obligation to take steps towards meeting those national and EU air quality objectives

which are designed to protect human health. Encouraging certain vehicles to meet emission standards to drive within the LEZ would reduce the concentration of PM10 and NOx in the air and thereby improve the health of people living in, working in and visiting the Capital. In order to maximise the health and air quality benefits of the LEZ, the zone would operate 24 hours a day, 365 days a year and cover the Greater London area.

As the LEZ is designed to discourage the use of the most individually polluting vehicles in London, the scheme is targeted at older diesel-engine heavy good vehicles (HGVs/lorries), buses, coaches, heavier light goods vehicles (LGVs/vans) and minibuses. Operators of vehicles that did not meet certain emission standards, known as Euro standards, would have to pay a significant daily charge to drive within Greater London.

Vehicles to be included in the LEZ

The following vehicles would be included from:

- Early 2008: heavier HGVs (over 12 tonnes)
- Mid 2008: lighter HGVs (over 3.5 tonnes) and buses and coaches
- Late 2010: heavier LGVs and minibuses

The LEZ would apply to both UK and non-UK registered vehicles. A small number of vehicles would be exempt from the LEZ. These include agricultural vehicles, military vehicles, historic vehicles not used for hire or reward, non-road going vehicles which are allowed to drive on the highway, and certain types of mobile crane. The health and air quality benefits of the LEZ would be eroded if there was an extensive range of exemptions. Proposed emission standards: The proposed minimum emission standards for a vehicle to be able to drive within the LEZ without charge are as follows:

- From February 2008, a standard of Euro III for particulate matter (PM) for HGVs over 12 tonnes.
- From July 2008, a standard of Euro III for PM for HGVs over 3.5 tonnes, buses and coaches.
- From October 2010, a standard of Euro III for heavier LGVs and minibuses.
- From January 2012, a standard of Euro IV for PM for HGVs over 3.5 tonnes, buses and coaches.

The LEZ scheme would be based on Euro standards, which are a set of requirements which define the acceptable limits for exhaust emissions for new vehicles sold in EU Member States. All HGVs, buses and coaches bought new in Europe since October 2001 comply with the Euro III standard or a higher Euro standard. All new LGVs sold in Europe from January 2002 must comply with at least the Euro III standard. All new HGVs, buses and coaches sold in Europe from October 2006 and all new LGVs sold in Europe from January 2007 will be required to comply with at least the Euro IV standard.

Vehicles will be required to comply with the LEZ emission standards for PM. There are no plans to extend the emissions standards to include emissions of oxides of nitrogen (NOx) at this stage however TfL is continuing to consider how a NOx standard might be implemented and would consider moving to implement a NOx standard in future should this become feasible.

Daily charge and penalty charge: Operators of vehicles that do not meet the proposed emissions standards will be required to pay a daily charge to drive within Greater London. The daily charge would be set at £200 for non-compliant HGVs, buses and coaches, and £100 for non-compliant LGVs and minibuses. The level of charge has been set to provide an economic incentive for operators to clean up their fleets, while at the same time allowing operators of non-compliant vehicles to drive within the LEZ on an exceptional basis, albeit at a cost.

Should an operator of a non-compliant vehicle not pay the daily charge for driving within London, a penalty charge would apply. This would be £1,000, reduced to £500 if paid within 14 days for HGVs, buses and coaches and £800, reduced to £400 if paid within 14 days, for heavier LGVs and minibuses.

Information on operator options: Under the proposed LEZ, operators would have a range of options available to them for making their fleets compliant with the LEZ, such as replacing or re-engineering their vehicles, fitting particulate abatement equipment, reorganising their fleets so that only compliant vehicles operate within the LEZ or paying the daily charge to operate non-compliant vehicles within the zone. The costs of each option are dependent on vehicle type.

Next steps

TfL consulted the public and stakeholders detailed proposals for a LEZ, as set out in a Scheme Order. TfL will prepare a report to the Mayor incorporating comments received during this consultation. The Mayor will then decide whether or not to confirm the Scheme Order, with or without modifications, in order to implement a LEZ for London. If the Mayor confirms the Scheme Order, a significant operator information campaign would take place to help ensure that operators are aware of the LEZ. The earliest a LEZ could be operational in London would be February 2008.

More information on the proposed LEZ

More detailed information on the LEZ proposals is available from Transport for London's website at www.tfl.gov.uk/lezlondon.

Resumé:

Nick is a qualified town planner and has an MSc in Urban Planning and a BA (Hons) in Geography.

Nick is responsible for the delivery of the LEZ, including revising and consulting upon the Mayor's Air Quality and Transport Strategies, developing and consulting upon an Order to allow for the LEZ, and depending upon the outcome of consultation, delivering the infrastructure and processes to enable the scheme to go-live in early 2008.

Further recommended reading: More detailed information on the LEZ proposals is available from Transport for London's website at www.tfl.gov.uk/lezlondon

A 07 Local action for Health

How to Use Health Impact Assessments in Strategic Decision making

Elisabeth Bengtsson

Function/Title

Head of Department/Healthy Cities coordinator

Department for sustainable Development

City of Helsingborg

City Hall

251 89 Helsingborg

Sweden

Tel: +46 42 10 49 11

Fax:

e-mail: elisabeth.bengtsson@helsingborg.se

www: www.helsingborg.se

City Profile*: Helsingborg, Sweden

* only relevant if city/local government is presenting

Short city/region profile:

Land area: 346 sq km

Inhabitants /sq km: 353

Net migration 2005: + 851

Foreign born 17% (Sweden 12%)

Mean income 23 800 euro.

Arable land 70 %

Built area, roads etc 20 %

Forest, meadows, wetland 10 %

Number of inhabitants:

Population 2006: 123 389

Social, economic and environmental background:

Health risk factors

Average life expectancy 1999-2003

Women 81,6 (Sweden Women 82,1)

Men 77,0 (Sweden Men 77,5)

Smoking prevalence 2004:

Women 21% (Region Women 19%)

Men 17% (Region Men 16%)

Binge drinking prevalence 2004:

Women 10% (Region Women 9%)

Men 17% Region Men 15%)

Overweight prevalence 2004

Women 39% (Region Women 39%)

Men 56% (Region Men 55%)

Environmental indicators:

Amount of collected recyclable waste from households:
114 kg per resident and year

Amount of collected organic waste from households:
16 kg per resident and year

Amount of collected residual waste from households:
268 kg per person and year (decrease from 380 kg 1991)

Number of buses fuelled by gas:

69 local and 30 regional buses – and ever increasing

Renewable fuels in the district heating system 2006: 91%

Renewable fuels in electricity production 2006: 80%

Summary:

Helsingborg is an old city situated by the northern part of the Öresund Region (an expanding region with a population of 3,6 million) where the strait between Sweden and Denmark is at its narrowest. This location makes Helsingborg an excellent national and international transport hub with an ever-increasing trade and commerce. The advantage of hosting transport routes also has its disadvantages. The impact of Heavy car-, lorry- and ferry-traffic in the city centre impacting the air is the main environmental challenge for Helsingborg. Other important aspects are eutrophication of the sea and the relatively small areas for recreation. The biodiversity is still high in a Swedish perspective, but many species are threatened. Socially and economically segregated neighbourhoods and a population with lower education than other comparable Swedish cities give way to further challenges in the fields of health and social welfare.

Executive Summary of your Abstract:

A brief summary of the concept of Health Impact Assessment and a case study showing how to get started. Local experience from the City of Helsingborg - a city within the WHO Healthy Cities Network

Abstract:

From the Gothenburg Consensus Paper on Health Impact Assessment, written in Dec 1999 (WHO Europe and European Centre for Health Policy) we have learned that :

“Health Impact Assessment is a combination of procedures, methods and tools by which a policy, program or project is judged as to its potential effects on the health of a population and the distribution of those effects within the population”.

Helsingborg City Council, being committed to the Aalborg Commitment and the WHO Healthy Cities principles, has decided to further develop the tools and applications of Health Impact Assessment in different thematic/sectoral areas of work within the public administration. Helsingborg is experimenting with and promoting the introduction of HIA in decision-making processes locally and its application to different types of policies and projects.

This development is taken place within the local city administration and in collaboration with the WHO European Network of Healthy Cities. The network activities are mainly to develop case-studies, share experience and organise training and learning events.

Based on international and national HIA theory and experience, Helsingborg has developed a locally adapted toolkit for the implementation process and the use of HIA within the strategic decision making process. Several plans and proposals are now undergoing the processes of HIA. The case study being presented at the conference will show how a health impact assessment was carried out on a new Traffic plan.

The success in Helsingborg so far is to have achieved an overall political commitment towards the use of HIA in the decision-making processes. The case study shows important cross-sector work, a raised awareness of how different factors (social, environmental, economic) influence city planning and sustainable development and the importance of addressing health inequalities within local areas.

Health Impact Assessment has been a theoretical concept for some time but very little has been achieved on the local, operational level so far. Helsingborg has now taken this concept further on to the practical level involving local politicians, city administrators and professionals within different fields of competence. In the frame of the concept, citizens and other stakeholders are also getting more and more involved.

Resumé:

My academic merits are a Diploma in Social Work and Public Administration, and a degree in Social Anthropology. My work experience relates to 25 years in local public administration with added experience from national and international work regarding public health policy making. Today I am head of the Department for Sustainable Development at the city Council of Helsingborg and I am the city coordinator for the WHO Healthy Cities project.

Further recommended reading:

WHO/European Commission

"Promoting and Supporting Integrated Approaches for Health and Sustainable Development at the Local Level across Europe (PHASE) project"
(available through www.euro.who.int/healthy-cities)

The Swedish Institute for Public Health

"A guide to health impact assessment" (available through www.fhi.se)

A 10 Global responsibility: Ambitious CO₂ reduction targets

Title of presentation **Minus 10% every 5 years**

Name Urbainczyk, Gerhard

Project manager

Department of Health and Environment
City of Munich
Bayerstraße 28 a
D-80335 München
Germany

Tel: +49-89-233-47709

Fax: +49-89-233-47705

e-mail: Gerhard.Urbainczyk@muenchen.de

www: www.muenchen.de

City Profile*: München, Germany

* only relevant if city/local government is presenting

Short city/region profile:

The City of Munich, with a population of about 1.3 million, is the capital of Bavaria in Southern Germany. It is Germany's third largest city after Berlin and Hamburg.

Population:

1.326.206

Social, economic and environmental background:

Munich represents a highly productive and still growing (controlled) European city. Nearly 80 % of all Munich households are 1- or 2-persons-households. Ca. 14 % of the citizens are children and youths (under 18). The gross domestic product of the city amounts to ca. 54,000 € per capita. Unemployment is only about half of the national rate and the city is fortunate that poverty only affects a small proportion of the population. Munich deserves its reputation as a really green city due to the "English Gardens", the world-wide largest inner-city public park covering an area of 373ha. Statistically speaking, there is more than one car for every two residents. On the other hand, Munich operates one of the best and most utilised public transport systems world-wide.

Summary:

Executive Summary of the Abstract:

Within the framework of the study "Local strategies to bring down CO₂ emissions by 50 % as demonstrated by the City of Munich", measures were identified by which the CO₂ reduction target can be met by 2030. Three scenarios were worked out including a "target scenario", describing a development where the 50 % of the target is met. Furthermore, 38 fields of action were analysed, 14 of them were studied in greater detail and will be part of the measures to be implemented in the foreseeable future.

Abstract:

10% lower emissions every 5 years

In May 2006, the City of Munich, being a member of the Climate Alliance, committed itself to bring down CO₂ emissions by 10 % every five years, and by 50 % by the year 2030.

Meanwhile it became evident that this ambitious target could not be met without further climate protection efforts, in addition to current activities including those of the past 15 years.

The foundation of a committed municipal policy of promoting renewable energies of the City of Munich was already laid in the late eighties, when the energy saving concept was developed. In Munich the main emphasis of support activities was initially put on solar thermal systems, which have been promoted since the early nineties (pilot projects and a wide range of subsidies). Since 1995, photovoltaic systems were also included in the target programme of various subsidy measures. For example, the city and the municipal utilities company are promoting "Citizens' Solar Power Plants" where Munich citizens can buy shares of PV installation units. Meanwhile, more than 1,060 PV plants with a nominal power of more than 10 MW_{peak} have by now been installed within the supply area of the Munich utilities, including ca. 910 plants of ca. 9.2 MW_{peak} within the city boundary. About one third of the nominal power installations are Citizens' Solar Power Plants, about one half is installed on the rooftops of municipal buildings. Large-scale power plants are promoted as well: A one-megawatt solar power plant was installed in 1999. Another one-megawatt plant was installed in mid 2002.

Since 1989, the City of Munich has financed the so called Subsidy Programme for Energy Conservation with a budget of about 2.0 million Euro at present. Every Euro spent within this subsidy programme is generating additional investments of more than 10 Euros within Greater Munich.

At the end of 1999, the City Council approved the "Extended Climate Protection Programme 2000 – 2004". At the same time the council approved total funds of ca. 9 million Euro to promote and support the programme. Ca. 4 Million Euro were earmarked for renewable energies. This programme was meanwhile extended for an unlimited period of time.

As new focal point the energetic use of biomass was included in both programmes.

For many years, the City of Munich has been committed for the development and maintenance of an attractive system of public transport. The use of this public transport system is also promoted by offering a so-called "job ticket", a subsidised ticket made available to employees of the City of Munich.

At the end of 2002, a Renewable Energy Partnership Agreement was signed involving the partners of the already existing "Munich Ecology Alliance" (MONACO). In the same year, the "Best Local Renewable Energy Partnership" award was bestowed upon the City of Munich for its activities in RES (Renewable Energy Sources) and RUE (Rational Use of Energy).

Despite the above-described range of activities, strong additional efforts are required if the above ambitious CO₂ reduction target is to be met.

To this end a study was commissioned to the Ecological Institute/Institute for Applied Ecology Freiburg (Öko-Institut Freiburg).

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Within the framework of the study “Local strategies to bring down CO₂ emissions by 50 % as demonstrated by the City of Munich”, measures were identified enabling the eventual achievement of the CO₂ reduction target. Furthermore, an ambitious strategy adapted to current and near-future frame conditions was developed enabling the City of Munich to approach this target as soon as ever possible.

Three scenarios were developed, a “reference scenario” (“a business as usual-scenario”), an “active scenario”, involving local possibilities of action, which seem feasible on current frame conditions, and a “target scenario” describing a development in which 50 % of the target can be met by about 2030.

38 fields of action representing all important energy sectors were analysed by the Ecological Institute. 14 of them were studied in a more detailed manner and will constitute measures to be implemented in the near future. These 14 fields of action are presented in the following table, in addition to the CO₂ avoidance potential and the share of the total CO₂ avoidance potential.

The results of the above study are not only valid for the City of Munich, they are also applicable to other European cities of a comparable size.

	Heat applications in households, services, business and commerce	CO₂ avoidance potential (t/a)	% of the total CO₂ avoidance potential
1	Refurbishment of old buildings (external)	ca. 818,000	ca. 20.5 %
2	Energy-saving construction methods (new buildings)	ca. 134,000	ca. 3.4 %
3	Improvement of the energetic object supply (incl. hot water)	ca. 161,000	ca. 4.0 %
4	Services, business and commerce: change of user behaviour (incl. low-budget measures)	ca. 209,000	ca. 5.2 %
Power supply of households, services, business and commerce			
5	Communication and media technology in private households	ca. 61,000	ca. 1.5 %
6	Office and communication technology in administration buildings	ca. 31,000	ca. 0.8 %
7	Lighting in administration buildings, commerce and schools	ca. 112,000	ca. 2.8 %
Power and heat supply in real estate management of the city of Munich			
8	Energy conservation and management in real estate of the city of Munich	Included in “Electricity and heat consumption of services, business and commerce”	

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Fields of action: transformation sector (utilities)			
9	Expansion of fossil co-generation (district heating)	at least 55,000	minim. 1.4 %
10	Using biomass for co-generation	minimum 340,000	minim. 8.5 %
11	Extension of power supply from renewable energies	minimum 21,000	minim. 0.53 %
Fields of action: passenger transport			
12	Promotion of pedestrian traffic	4,000	ca. 0.1 %
13	Bicycle traffic	50,000 – 170,000	1.25 – 4.3 %
14	Traffic avoidance	25,000	ca. 0.63 %

Resumé:

Dr. Gerhard Urbainczyk, Environmental Scientist (European Degree) is working in the Department of Health and Environment, section "Anticipatory environmental protection", unit "Energy, Climate protection" of the City of Munich. He is responsible i.a. for networking activities on the local, national and international level.

Further recommended reading: www.muenchen.de/rgu

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

B 01 BASELINE REVIEW - KNOWING WHERE TO START

A Methodology for Assessing Urban Sustainability: The Aalborg Commitments Baseline Review for Riga, Latvia

Laimonis Osis

Riga City Council
Sustainability Management Centre Agenda 21
Ratslaukums 1
LV-1539 Riga
LATVIA

Tel: +371 7012993
Fax: +3717012994
e-mail: laimonis.osis@riga.lv
www: www.agenda21riga.lv

City Profile*: City of Riga, Latvia

* only relevant if city/local government is presenting

Short city/region profile:

Capital of the Republic of Latvia. The central and largest city of the Baltic States. Located on the southern shores of the Baltic Sea at the mouth of the River Daugava. Founded in 1201.

Area 304.5 km² (water area 15.8%). Divided into 6 administrative districts.

City Council consists of 60 deputies elected for a 4 year term.

Number of inhabitants:

727,548 (city, 2006) and 1,148,003 (metro., 2005)

Social, economic and environmental background:

GDP per capita 8,368 EUR (2004).

Unemployment rate 4.1% (2005).

Natural heritage: 13 lakes, length of rivers 96.4 km., 10 forest massifs. Protected areas 6.04%. Public gardens and parks 280 ha.

Cultural heritage: the Riga Historical Centre is on the UNESCO List of World Heritage Sites(1997). Riga is well-known as a metropolis of Art Nouveau architecture.

Environmental problems: green field and car dependant development that causes poor air quality, traffic jams and noise.

Summary:

After Latvia joined EU in 2004, Riga has been experiencing rapid development and is facing problems similar to those of other European cities. More pronounced, however are social problems as a significant part of the population is living under the poverty line.

Executive Summary of your Abstract:

The methodology for assessing urban sustainability developed and applied in Riga, Latvia as part of the Aalborg Commitments baseline review is a useful tool for the systematic analysis of the responsibilities and competencies of the municipal government and administration, the policy goals and measures of municipal planning documents, and the availability and suitability of indicators. Insight into the policy-making and decision making process is an additional result.

Abstract:

Even though the City of Riga has put its signature on a number of international commitments to sustainable development and has incorporated the concept of sustainable development into city development planning documents and sector plans, sustainable development is not part of the mainstream of development planning policy formulation and political decision-making. In 2005 Riga undertook a baseline review of the environmental and development policies and trends as the first step in the implementation of the Aalborg Commitments. This paper presents the methodology and summarises the results of the Aalborg Commitments baseline review and sheds light on governance factors contributing to a weak orientation towards sustainable development in Riga.

The Aalborg Commitments baseline review included the following tasks:

- Analysis of the statutes of the municipal government and administration to define the distribution of administrative responsibility in relation to the Aalborg Commitments;
- Analysis of the goals and measures in municipal sector plans and the new Riga Development Plan (2006-2018) against the Aalborg Commitments to determine the level of coherence;
- Analysis of two indicators sets (European Common Indicators (ECI); State of the Environment in Riga 2001 (CEROI)) presently used by the municipality for their ability to reflect the implementation of the Aalborg Commitments.

The baseline review revealed that the municipal administration statutes do not reflect or only partially reflect a majority of the Aalborg Commitments issues and that there exists a limited degree of coherence between the Aalborg Commitments sustainability criteria and Riga environmental and development policies and policy outcomes. The policy goals and measures defined in sector plans provide development in Riga with only a weak orientation towards sustainable development. Similarly, the new Riga Development Plan does provide a clear and concerted sustainability focus.

The CEROI and the ECI indicators used by Riga are not directly linked to the development goals of the city. They are mostly informative in nature and do not fulfil a reporting/monitoring function regarding development trends. Analysis of these indicators against the Aalborg Commitments indicates that in their present form they are only partially capable of monitoring the implementation of the Aalborg Commitments.

To gain insight regarding the sustainable development policy-making and implementation context in Riga, City Council deputies, municipal government administrative units and personnel were surveyed to determine their views regarding various urban sustainability issues. The survey revealed that one of the reasons sustainable development is not a policy priority in Riga and why it is poorly reflected in the statutes of the municipal government/ administration, in sector plans and in the new Riga Development Plan is that Riga City Council deputies and administration personnel have a limited understanding of the relevance of sustainable development and its role in urban planning and development today. Knowledge is lacking concerning the meaning of sustainable urban development with respect to specific urban challenges and issues.

The survey indicated insufficient inter-sector cooperation in the formulation of integrated development goals and measures. Similarly, cooperation between the municipal administration and the community and different social groups is predominantly related to

short-term activities and not joint work in working groups or some other form of long-term cooperation. Public input/opinion to policy formulation and implementation is not always welcome by municipal administration staff. Municipal administration personnel lack sufficient awareness regarding the need for public participation and knowledge concerning consultative methods for involving and soliciting information from the public. Presently, the municipal government as a whole and individual units of the municipal administration do not use management instruments to organise and systematise the formulation, implementation and monitoring of sustainable development policies.

Resumé:

Laimonis Osis works as a Deputy Director at the municipal Sustainability Management Centre Agenda 21 and is responsible for the international cooperation issues. Member of the EU Expert Group on the Urban Environment (2003-2005), city co-ordinator of the project "Managing Urban Europe-25" (from 2005), officer at the project "Integrated Solutions for Sustainability Management in Baltic cities" (from 2006). Editor of the biannual publications "Environment and Sustainability Profile for Riga" and "Riga. A Detached View: Comparative City Statistics"

Further recommended reading:

B 03 Participation and Policy - A new governance culture for the city of tomorrow

Title of presentation.

Local Agenda 21 of the Province of Rome: state of implementation and promotion on the territory

Name: Francesca MARINI

City Profile*: Province of Rome, Italy

Function/Title

Responsible of "Sustainable Development Office"

Department V Environmental Service
Province of Rome
Street Via Tiburtina, 691
Postal code 00159

City Rome
Country Italy

Tel: +39-06-67663186

Fax: +39-06-43562105

e-mail: f.marini@provincia.roma.it

www: www.provincia.roma.it

* only relevant if city/local government is presenting

Short city/region profile:

The territorial area of the Province of Rome, stretches about 5,300 kmq and encompasses 121 municipalities including the Municipality of Rome

Number of inhabitants:

The Province of Rome has 3,831,959 inhabitants, of which 2,547,677 reside in the municipality of Rome.

Social, economic and environmental background:

The Province represents a territory diversely articulated both from an environmental and historical-cultural viewpoint. During the last few years, a strong increase in tourism has been registered. The socio-economic analysis highlights the presence of a productive structure that has been able to reinforce its position in both national and international markets, investing in quality and technological innovation.

Summary:

The Local Agenda 21 of the Province of Rome was started up in June 2004. About 400 stakeholders are actively involved in the process and 4 thematic working groups have been formed. The actual definition of objectives and actions of the Local Action Plan shall be achieved in the next few months. The diffusion of Local Agenda 21 in the territory has also been favoured by the provincial call for tender for co-financing local agenda 21 processes in the municipalities.

Executive Summary of your Abstract:

The implementation of Local Agenda 21 of the Province of Rome started in June 2004 with the signature of the Aalborg Commitments. Four thematic groups are now working on the definition of objectives, actions and roles for the Local Action Plan and several Local Agenda 21s have been activated at municipal level thanks to provincial co-financing.

Abstract:

The Provincial Administration has started up the Local Agenda 21 in June 2004, when the Aalborg Commitments were also subscribed. First important steps have been: the creation of a directing committee, training of internal staff and of stakeholders, permanent communication through the Technical Secretary, a section of the website of the Province of Seville and the newsletter.

Currently, the Administration is continuing its effort towards the implementation of local Agenda 21 and most of all towards the promotion of this tool by other local bodies. On the 16th December 2005 the 1st plenary ecological Forum was held and saw the participation of about 240 stakeholders, among which citizens, labour organisations, park authorities, universities, mountain communities, environmental and voluntary organisations, school representatives, local development bodies. Choose your future is the slogan that the Administration has chosen to raise the awareness of the local community as a whole and to stimulate participation in the first public meeting. The objective was that of starting up a common path aimed at the definition of an Action Plan, that would lead to the implementation of the Aalborg Commitments, to the definition of clear objectives and the identification of action and priorities aimed not only at improving the quality of life of citizens but also at building a path for cultural and social growth. An important result of the permanent communication was the increase, after the first plenary meeting, of about 36% of total adhesions to the Forum (the Forum has today 384 adhesions) and the fact that 645 subjects have in various ways got in touch with the local Agenda 21 process of the Province.

Since March 2006, three thematic sessions have been organised formed by four groups: "Common goods", "Territory of living and planning", "Sustainable local economies", "Policies for welfare". 118 objectives were selected by the 4 thematic groups and presented at the 2nd plenary ecological Forum that was held on 23 November 2006. Those proposals will be integrated with the acknowledgement policies activated by the Administration, in coherence with the Aalborg Commitments and with the elaboration of the State of Environment Report performed in according to 10 themes of Aalborg Commitments. In March and April the 4th and 5th thematic Working Groups Meetings of the Local Agenda 21 Forum will take place. They shall lead to the actual definition of actions to be implemented and to the individuation of those in charge of their implementation.

The analysis of actions and policies implemented by the Province and coherent with the Aalborg Commitments has allowed for a transversal reading of the way in which the Administration works towards sustainability. Outcomes of the investigation were that the Administration has started some initiatives that foresee the adoption or the diffusion and the enhancement of tools such as Green Public Procurement (GPP), Environmental Management Systems, organic agriculture and biodynamics, activation of Forum or public Assemblies on specific themes, promotion of responsible behaviour among public employees to reduce the consumption of energy and paper, the promotion of environmental management systems and of technological innovation by SMEs, the realisation of important interventions for life quality and equal opportunities, the dissemination of best practices conducted by the Environmental Education Laboratories (LEA).

This leads not only to an improved knowledge but also to a better valorisation of existing planning with the possibility of developing future synergies.

In fact the participation in organised working groups has given rise to new initiatives that use the Local Agenda 21 methodology. Examples are: the Provincial Energy Plan; a specific Action Plan for the reduction of greenhouse gas emissions as foreseen by the Kyoto Protocol in collaboration with the Department for Environmental Protection Policies; the realisation of a thematic forum on the General Provincial Territorial Plan.

The 21st December 2004 the Department of Policies for Agriculture and the Environment published a call for tender for the implementation of Local Agenda 21 by municipalities and unions of municipalities, mountain communities and park authorities. The total amount of financing was € 682, 691.41. Out of the 27 project proposals received, 14 were co-financed, among which 12 for the start up of the local Agenda 21 process and 2 for its implementation.

A further objective of the Administration is now to open an active desk for local Agenda 21 and the other voluntary tools that will be constituted by a database, a collection of best practices of local actors and the provision of direct assistance by qualified staff to promote Aalborg Commitments implementation.

As the Administrations have to face increasingly complex problems with less resources, it is necessary to elaborate strategies that do not only go in the direction of better quality and more efficient services but also towards the realisation of public policies that are able to face more complex and articulated decisional paths that require a dialogue between the different actors that operate in the same territory and that can be affected by the consequences of taken decisions. Local Agenda 21 can be a tool that goes in this direction, that is the management of inclusive decision making processes. The inclusion represents an opportunity for stimulating new relations among participants or strengthening the existing ones, an important social capital that goes over the inclusive process itself. The Administrations should not only serve the community but mostly making it responsible. Obviously, it is important that the proposing Administration gives the good example.

Resumé:

Ms. Francesca MARINI, biologist, responsible of the " Sustainable Development Office". She coordinates: the local Agenda 21 of the Province of Rome together with other initiatives such as: the project to promote organic agriculture in the six protected areas of provincial interest, the implementation of Green Public Procurement; the promotion at SMEs level and category association of EMS and EMAS regulation.

Further recommended reading: http://www.provincia.rm.it/siti_esterni/Agenda21/home1.html

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

B 03 Participación y Política: una nueva cultura de gobierno para la ciudad del mañana

Proceso de participación pública en el Plan de Acción de la Agenda 21 Local de Madrid

Ángel Sánchez-Sanz

Function/Title

Director General de Sostenibilidad y Agenda 21

Ayuntamiento de Madrid. Área de Gobierno de Medio Ambiente y Servicios a la Ciudad
Bustamante 16
28045 Madrid
España

Tel: + 34 91 480 41 32

Fax: + 34 91 588 06 82

e-mail: dgsostenibilidadya21@munimadrid.es

www: munimadrid.es

City Profile*: Madrid Spain

* only relevant if city/local government is presenting

Short city/region profile:

Madrid

Number of inhabitants:

3.229.593

Social, economic and environmental background:

Madrid es la ciudad más poblada de España y se encuentra cerca del centro geográfico de la península ibérica. Su área de influencia abarca una extensa área metropolitana que alcanza los 5,5 millones de habitantes. Como capital del estado español es el centro económico político y administrativo del país con una economía diversificada principalmente basada en el sector servicios. Destaca el hecho de ser uno de los principales destinos turísticos del mundo gracias principalmente a su patrimonio histórico y a su amplia oferta cultural y de servicios. Es una ciudad cosmopolita y abierta siendo una de las ciudades europeas más dinámicas y competitivas en la que la conservación y mejora del medio ambiente urbano destaca como una constante en la gestión municipal.

La administración municipal se estructura en ocho Áreas de Gobierno que prestan los distintos servicios a la ciudad. Existe una descentralización en 21 distritos que ejercen determinadas competencias en su ámbito territorial a través de las respectivas Juntas Municipales de Distrito.

Summary:

Executive Summary of your Abstract:

La ciudad de Madrid está elaborando los Planes de acción de los distritos dentro de la segunda fase de su Agenda 21 Local. Esta presentación describe el modelo de participación aplicado y en particular como aspecto relevante la consulta pública que se ha efectuado para una elaboración plenamente participativa de los planes de acción de distrito.

Abstract:

La implicación de la ciudad de Madrid con el desarrollo sostenible parte de la firma de la Carta de Aalborg con la cual inició el desarrollo e implantación de su Agenda 21 Local. Este compromiso se ha reafirmado a través de la firma de los Compromisos de Aalborg.

El modelo de Agenda 21 Local aplicado en Madrid ha de tener en cuenta necesariamente dos aspectos: la propia dimensión de la ciudad y su descentralización territorial en distritos. Por ello concluida la primera fase de diagnóstico se ha venido trabajando a lo largo de los dos últimos años en la elaboración participativa de los planes de acción de los distritos que componen la ciudad.

Necesariamente esta participación ha de adecuarse a la normativa existente en el Ayuntamiento de Madrid en la materia el Reglamento Orgánico de Participación Ciudadana que establece como órganos de participación territorial los Consejos Territoriales de Distrito. Estos Consejos tienen una composición plural estando representados en ellos los partidos políticos las asociaciones de vecinos y otras entidades ciudadanas del distrito así como vecinos a título individual. Los representantes de las entidades ciudadanas son elegidos entre las distintas asociaciones inscritas en el distrito en un proceso electoral abierto por la Junta de Distrito con carácter previo a la constitución del Consejo Territorial. Los vecinos individuales son designados de forma aleatoria entre los censados en el distrito.

Estos consejos desarrollan sus tareas a través de Comisiones Permanentes y Grupos de Trabajo que abordan temas específicos. En cada distrito se ha creado una Comisión Permanente de Agenda 21 cuyo objetivo es la elaboración y seguimiento del Plan de Acción.

Para el trabajo en las Comisiones de Agenda 21 se parte de un documento base que tiene una estructura común en todos los distritos y que comprende 6 áreas de trabajo: estructura urbana desarrollo económico recursos naturales y entorno urbano equipamientos básicos y vivienda mercado laboral y servicios sociales y participación ciudadana. Estas áreas se dividen a su vez en distintas líneas estratégicas y programas de actuación.

A lo largo de las distintas reuniones de las Comisiones de Agenda 21 sus miembros van incorporando dentro de los distintos programas las acciones concretas que constituyen el borrador de plan de acción. Estos documentos recogen un conjunto numeroso de propuestas y dentro de ellas las 15 acciones consensuadas como prioritarias. Previa aprobación por el Consejo Territorial este documento es sometido a un proceso de consulta pública. Dicha consulta tiene por objeto extender la participación a todos los ciudadanos del distrito de modo que éstos puedan aportar individualmente su opinión sobre las acciones contenidas en el plan y valorar la priorización efectuada por la comisión.

Así pues en el ámbito de los distritos la participación ciudadana se articula en dos elementos fundamentales: las Comisiones de Agenda 21 y el proceso de Consulta Pública. De este modo se aplica un modelo combinado que busca por un lado la participación de los distintos agentes sociales y del movimiento asociativo en general a través de las Comisiones de Agenda 21 y por otro ofrece al ciudadano individual la posibilidad de incorporación de sus propuestas a través de la Consulta Pública.

Estas propuestas se materializan con la cumplimentación de un cuestionario que ha de depositarse en urnas colocadas al efecto en diversos centros municipales o bien remitirse por vía electrónica a través de la página web oficial del Ayuntamiento de Madrid.

La consulta pública se mantiene abierta durante el plazo de un mes analizándose tras este periodo técnicamente los resultados obtenidos en la misma.

Al hilo de dichos resultados la Comisión de Agenda 21 vuelve a reunirse y reelabora el documento definitivo de Plan de Acción del Distrito incorporando nuevas acciones modificando las existentes y revisando finalmente la priorización. Posteriormente se procede a su aprobación formal por parte del Consejo Territorial y finalmente por el Pleno de la Junta Municipal de Distrito.

Uno de los aspectos más destacables de la consulta pública es su carácter abierto con preguntas en las que el ciudadano puede aportar su opinión sobre las acciones priorizadas así como proponer nuevas acciones y eliminar o modificar las existentes. Es decir no se trata de un plebiscito sino de un proceso de mayor entidad. Si comparamos la consulta pública de la Agenda 21 de Madrid con procesos participativos celebrados en otras ciudades ha de concluirse que el que se está realizando en la ciudad Madrid es de todo punto singular y plenamente participativo.

La celebración de la consulta pública Pública va asociada a un proceso de información y promoción de la participación que comprende la edición de folletos divulgativos notas periódicas de prensa carteles informativos publicidad en mobiliario urbano cartas y sesiones informativas dirigidas a los ciudadanos y la colaboración con las asociaciones de vecinos en la difusión del proceso. Así mismo toda la información y documentos asociados se encuentran disponibles en la página web oficial del Ayuntamiento de Madrid ([www.munimadrid.es/Agenda 21](http://www.munimadrid.es/Agenda21)).

La consulta pública sobre los Planes de Acción se ha efectuado ya en 1 distritos y se está llevando a cabo actualmente en otros 3 con lo cual se dispone ya de un conjunto amplio de resultados de los cuales pueden extraerse algunas conclusiones generales:

- La participación media en el conjunto de los distritos se sitúa en torno al 65% de su población total. Aunque pueda parecer poco elevada en un primer análisis no lo es en comparación con otros procesos participativos de llevados a cabo anteriormente sobre Agenda 21 y planificación local. Hay que tener en cuenta por otra parte que en su conjunto supone la participación de más de 12.000 ciudadanos en la elaboración de los planes de acción de los distritos.
- Se presenta una alta coincidencia en términos generales entre las propuestas de la comisión y los vecinos del distrito. La gran mayoría de las acciones prioritarias propuestas por la comisión recibieron puntuaciones muy favorables en la consulta.
- La celebración de la consulta ha supuesto en la práctica totalidad de los distritos la inclusión de un número reducido de acciones nuevas o la matización de algunas de las ya existentes.
- En cuanto a la temática de las acciones propuestas se concentran sobre todo en las áreas de estructura urbana y de equipamientos básicos y vivienda.
- Si consideramos los grupos participantes se observa una participación ligeramente superior de las mujeres (entre un 5 y un 10 %).
- En cuanto a los modos de participación el formato electrónico a través de Internet ha sido preferido por algo menos de la mitad de los ciudadanos participantes que se concentran en el grupo de población comprendido entre 30 y 45 años con un porcentaje algo superior para los hombres en este caso.

El futuro desarrollo de la Agenda 21 de Madrid pasa por la integración de las Agendas 21 de distrito en el proceso global de la ciudad. Para la elaboración del Plan de Acción de la ciudad de Madrid se ha aprobado la creación del órgano de participación correspondiente denominado Foro de Sostenibilidad de la Ciudad de Madrid órgano colegiado que articulará la participación de los distintos agentes sociales en la elaboración y seguimiento del Plan de acción de la Ciudad.

El Foro de Sostenibilidad de la Ciudad de Madrid marcará los objetivos de sostenibilidad de la ciudad y las líneas de actuación que han de aplicarse para alcanzarlos con una visión estratégica teniendo en cuenta los documentos ya elaborados de los planes de acción de los distritos las propuestas de los distintos agentes sociales integrantes del Foro así como las aportaciones que realicen los ciudadanos individuales en un proceso de consulta pública que se desarrollará en el conjunto de la ciudad de características similares al ya aplicado en los distritos.

Resumé:

El Ayuntamiento de Madrid está promoviendo un proceso de Agenda 21 abierto que busca no sólo la participación de los agentes económicos y sociales sino también la de todos los ciudadanos en un proyecto común para la construcción del futuro de la ciudad.

Further recommended reading: www.munimadrid.es/Agenda21

B 04 European Urban thematic strategy - Moving from tools to systems

Idems Life Project: towards an integrated environmental management system

Alessandra Vaccari-Gianluca Draghi **City Profile*:** Ravenna, Italy
(joint presentation)

* only relevant if city/local government is presenting

Director
Department:environmental AL21
Ravenna municipality

Short city/region profile:
kmq

654,88

Number of inhabitants:
149.084

Tel:
Fax:
e-mail: a.vaccari@unife.it
www:

Social, economic and environmental background:
Ravenna, a chief town of Emilia-Romagna region, stands in the Northeast plain of Romagna, borders on the provinces of Forli and Cesena southward, and Bologna and Ferrara northward. It is an ancient town, situated on the Adriatic Sea

Summary:

Executive Summary of your Abstract:

IDEMS project aims:

- to provide four local governments (Developer Cities) with an integrated environmental management system and to obtain the EMAS certification;
- to improve the urban environment governance through the integration of environmental management and reporting systems (EMAS, CLEAR and EcoBudget®);
- to produce guidelines for the dissemination of the integrated management system;
- to structure and coordinate different methods of environmental management systems already established;

- to furnish the European Commission with preliminary information to explain the realization of the Urban Environmental Management Plan

Beneficiary of the project is the Municipality of Ravenna (I); partners are the Municipalities of Amaroussion (GR), Dresden (D), Ferrara (I), Heidelberg (D), Mantova (I), Växjö (S) and the Italian local Agenda 21 network; External assistance is provided by ERVET Emilia-Romagna Development Agency on EMAS, ICLEI on ecoBudget® and Alessandra Vaccari on CLEAR (City and Local Environmental Accountability and Reporting)

Abstract:

IDEMS (Integration and Development of Environmental Management Systems) is a cofinanced by European Commission project through the Programme Life Environment.

Beneficiary of the project is the Municipality of Ravenna (I); partners are the Municipalities of Amaroussion (GR), Dresden (D), Ferrara (I), Heidelberg (D), Mantova (I), Växjö (S) and the Italian local Agenda 21 network. IDEMS project proposes to integrate environmental management systems and environmental accountability and budgeting systems, namely: EMAS (Eco-Management and Audit Scheme), ecoBudget® and CLEAR (City and Local Environmental Accountability and Reporting) according to the need to adopt an Urban Environmental Management Plan as stated by the European Commission Communication on Thematic Strategy on the Urban Environment {SEC(2006) 16}. The project will last for 32 months (October 2005 – May 2008) and develops the following tasks: 1. Comparison and integration of management systems of the Developer Cities; 2. Local pilot demonstration of the integrated system; 3. Analysis of results and definition of final Standard; 4. Dissemination of results; 5. Project Management. The partners of the project will have different roles. The Developer Cities (Municipalities of Ravenna, Ferrara, Mantova and Amaroussion) will implement the integrated management system, giving a demonstration. The Reference Cities (Municipalities of Växjö, Dresden and Heidelberg) will assist and support the

Developer Cities. The integrated system will be an answer to some well-known environmental problems: - difficulty in integrating environmental problems in the internal decisional process; - difficulty in adapting new methods for the private sector versus the public; - necessity of having available indicators, concrete and based on the actual experience of the new methods; - necessity to have channels to address the

political sphere of command with improvement plans based on the approach of plan-do-check-review. The model of integrated system has therefore to be essentially based on two development lines: • areas which would need to be strengthened in each tool, due to new claims (specificity of the Local Governments, Local Action Plan change, urban environment thematic strategy, environmental emergencies) • areas which, if developed within one of

the tools, can be taken as separate elements of the new system, because of their completeness and effectively application. In the first case (requirements to be strengthened/improved) 6 possible fields of intervention have been identified: Important and general ones:

I. POLICY MAKING

II. ORGANISATIONAL CRITERIA AND
STRUCTURE

III. STAKEHOLDER ENGAGEMENT

Specific ones:

IV. DATA QUALITY

V. ASSESSMENT

VI. TOP DOWN SUSTAINABILITY

PLANNING (FROM NATIONAL
AND REGIONAL LEVELS TO
LOCAL LEVEL):

- 1 management of the entire chain of governance: connection system with hierarchically dominant and submitted public bodies and participated) - 2 constant and progressive integration of social variables and trade-offs management In the second case (relevant exchangeable elements between one or more tools), instead, we propose:

VII. INITIAL ENVIRONMENTAL
ANALYSIS

VIII. COMPLIANCE WITH LEGISLATION

IX. MONETARY ACCOUNTS

X. CONTINUOUS IMPROVEMENT

XI. COMMUNICATION AND INFORMATION

Resumé:

(Alessandra Vaccari Clear Lifeproject technical coordinator, INDICA Srl Director, Ferrara University professor, Member of Italian Economic ministerial commission for environmental accounting law)

Further recommended reading:

B 05 Session name

GPR Building: A proven and practical tool for building a sustainable city

Name

Paul Scherrenberg

Environmental programme manager

Environmental Department

City of Tilburg
Stadhuisstraat 1
5000 AS Tilburg
The Netherlands

Tel: 0031135428061

Fax: 0031135428510

e-mail: paul.scherrenberg@tilburg.nl

www: www.tilburg.nl

City Profile*: City of Tilburg, The Netherlands

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Tilburg, with ± 200.000 inhabitants, is the 6th largest city in the Netherlands. The Netherlands, one of the smallest and most densely populated countries in the world. The city is located in the south of the country. Within the city's boundaries, there are ± 100.000 jobs, mainly in industry, commerce, financial services and logistics. Tilburg is also an important centre for education (University of Tilburg and various colleges), health care (2 hospitals) and culture. Tilburg values the natural environment and its biodiversity and was the first city to sign Countdown 2010. In 2005 and 2006, Tilburg was awarded the title of most sustainable city in The Netherlands.

Executive Summary of your Abstract:

Presenting a practical tool for urban planning and realisation of housing, schools and offices. The tool consists of 6 modules (energy, materials, water, waste, health, comfort). The tool setting performance goals which can be realised in a flexible way, resulting in a consumer label.(2-3 sentences; may be same as executive summary in session description)

Abstract:

With the presentation/workshop we aim to inform and inspire conference participants "hands-on" about the feasibility of using a performance based sustainability tool for urban planning and building in a multidisciplinary and multi-stakeholder environment.

The "GPR Building" (see also www.gprgebouw.nl) is a digital urban sustainability design tool developed by Tilburg. It is in its 11th year of use and has been continually improved ever since. Complex issues such as national building legislation, innovative building techniques, materials, energy, waste, water, Life Cycle Assessments, climate change and CO2 impact, health, social safety, living quality and green financing have been brought together in a user-friendly manner. It challenges designers, city planners and developers and others to exceed standard building legislation and add extra quality to their project.

At present it is subject to a large national pilot project on performance based working methods using sustainability tools. This project is financed by the Dutch ministry of Housing, Urban Planning and Environmental Care. In the project, originally 18 Dutch municipalities participated. A number that has grown to over 50 municipalities at this moment, with ## architects, developers using it. Preliminary results are available and are very positive. In march 2007, final results of the project will be available. These results show that "GPR Building" is a powerful tool for cities to define sustainability goals and - more importantly - reach these goals. At the moment the tool is being translated into English and German, as a result of shown interest from cities in Great Britain and Germany.

The main quality of the GPR building tool is that it brings ecological, social and economical issues together in a user-friendly tool right at the design stage. The "GPR Building" is not a fixed list of "Do's and Dont's", but a module based performance tool that offers options. The following modules are incorporated: Energy, Materials, Water, Waste, Health, Comfort and is operational for new dwellings (housing), schools and offices. A version for existing dwellings, schools and offices is currently being made. Desired performances are established for each module, sometimes with, sometimes without urban developers, and developing parties are flexible and free in the manner in which they reach the agreed performances. This leaves the developing parties free to take these measures that fit their specific way of developing/building, as long as performances are met.

Resumé:

Paul Scherrenberg,

has a BSc in Forestry and Nature conservation, a MSc in Environmental Science and a MSc in Occupation Health and Safety. Worked for different NGOs nationally and internationally, has been an environmental and occupational health and safety consultant for industries and is presently working as environmental programme manager within the city of Tilburg, the Netherlands.

Further recommended reading:

Innovative planning and design in cities

Urban Sprawl in Europe

Marjo Kasanko

Researcher

Institute for Environment and Sustainability
Joint Research Centre of the European Commission
Via E. Fermi 1, TP-261
21020 Ispra
Italy

Tel: +39 0332 786 158

Fax: +39 0332 789 085

e-mail: marjo.kasanko@jrc.it

www:

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Urban sprawl is a wide-spread problem in Europe. In order to raise the awareness of the magnitude of the problem, its causes and impacts the European Environment Agency and the Joint Research Centre of the European Commission have published in 2006 a report on Urban Sprawl in Europe. To tackle the problems sprawl causes concerted actions are needed at local, regional and European levels. Local and regional authorities are the key actors in promoting a compact and sustainable urban form.

Abstract:

Urban sprawl is a widely spread phenomenon threatening the sustainability of towns and cities all over the world. The presentation deals with the main findings and conclusions of a recent report prepared jointly by the European Environment Agency and Joint Research Centre of the European Commission called 'Urban sprawl in Europe - The ignored challenge'.

Urban sprawl is synonymous with unplanned incremental urban development characterised by low density residential areas and shopping centres spreading in the countryside around urban areas. First signs of urban sprawl were seen in the US in the early part of the 21st century. In Europe urban sprawl was an unknown phenomenon until the 1950's thanks to the traditions of compact cities and the long history of town and country planning. Three main factors, which marked the onset of urban sprawl in Europe, were the rapid urbanisation, rising standard of living and quickly increasing car ownership.

Historical trends, since the mid-1950's, show that built-up areas in European cities have grown on average by 78 %, whereas the population has grown only by 33 %. A major consequence of this is that European cities have become much less compact. During the period from 1990 to 2000 the growth of urban areas and associated infrastructure throughout Europe consumed more than 8 000 km² equivalent to the entire state of Luxemburg.

Urban sprawl is a complex process. Historically urban growth and sprawl have been driven by growing urban population. However, in Europe today, even where there is very little or no population pressure, a variety of factors are still driving sprawl. These factors are rooted in the individual desires to realise new lifestyles in suburban environments. The mix of driving forces include both micro and macro socio-economic trends such as means of transportation, the price of land, individual housing preferences, cultural traditions and constraints, the attractiveness of existing urban areas and, not least, the application of land use planning policies and instruments at local and regional levels.

Urban sprawl is problematic in many ways and has wide-spread impacts. Sprawl threatens the European urban culture, as it creates negative environmental, social and economic impacts for both the cities and the surrounding countryside. Moreover, it seriously undermines efforts to meet the challenge of global climate change. The most important environmental impacts of sprawl are direct and indirect. Building up new less compact urban structures claim more and more land in an irreversible way. This has consequences for the soil sealing, water balance, biodiversity etc. The indirect impacts are mostly related to the increased energy consumption caused by increased transport. The energy consumption per person in very much sprawled US cities is 7 times higher than in a compact European city. Urban sprawl has many socio-economic consequences as well. It generates greater social segregation and hence exacerbates the division of the city into a poorer inner-city area and wealthier areas of detached and semi-detached houses in the surroundings. Urban sprawl is characterized by economic inefficiency, too. It costs more in form of land resources, construction of local roads and water and sewage facilities.

This presentation sheds light on the main findings and recommendations of the 'Urban sprawl in Europe' report. The presentation describes the state of affair regarding urban sprawl in Europe, what are the drivers which feed it and what kind of impacts it causes both locally and in a wider context. In the end various ways of combating the sprawl in collaboration between, local, regional, national and European authorities will be presented. The presentation includes practical examples from European cities illustrating the issue of sprawl.

Resumé:

Mrs. Marjo Kasanko has graduated from the University of Helsinki. She has studied planning geography (Ph. Lic) and international politics (M.Sc). She coordinates the Urban and Regional development group in the Land Management and Natural Hazard Unit. Her research interests are linked to urban development, particularly urban sprawl, and modelling regional development.

Further recommended reading:

Urban sprawl in Europe - The Ignored challenge. EEA Report No 10/2006. Joint Research Centre of the European Commission and European Environment Agency, 2006.

Kasanko, M., Barredo, J.I., Lavalle, C., Demicheli, L., Sagris V., Brezger, A (2006). Are European Cities Becoming Dispersed? A Comparative Analysis of Fifteen European Urban Areas. *Landscape and Urban Planning*, 77: 111-130.

B06: Using public purchasing for cost effective environmental protection and social development

Acciones para implantar la compra verde en municipios de la Red de ciudades y pueblos hacia la sostenibilidad

Maria García Martínez

Jefe de la Unidad de Colaboración municipal Medio Ambiente
Diputación de Barcelona

Red de Ciudades y Pueblos hacia la sostenibilidad

Comte Urgell, 187 (Recinte Escola Industrial - Edifici Rellotge)

08036 BARCELONA
ESPAÑA

Tel: 00 34 93 402 22 22 - EXT 37284

Fax: 00 34 943 402 24 93

e-mail: garciamm@diba.cat

www: www.diba.cat/xarxasost

Barcelona, Espana

Breve Resumen de la ciudad/región:

Diputación de Barcelona; administración supralocal con 311 municipios

Número de habitantes:

5.226.354 hab.

Datos sociales, económicos y medioambientales de la

ciudad: la actividad productiva de la provincia se ha caracterizado por un desarrollo del sector servicios (65% del PIB) y de la construcción (8%). Y el sector industrial, sigue teniendo un papel importante (25%) en el producto interior bruto.

Resumen:

La Diputación de Barcelona ejerce la Presidencia y la Secretaría técnica de la Red de Ciudades y pueblos hacia la sostenibilidad, la cual reúne 220 entidades locales.

Objetivo de la Red: Establecer mecanismos de Cooperación municipal para impulsar políticas locales de desarrollo sostenible, mediante la elaboración de Agendas 21 locales y con la implicación todos los sectores sociales

Breve resumen de su abstract (ponencia):

El hecho de trabajar en una Red de Municipios permite experimentar algunas acciones innovadoras y reporta algunos beneficios. En este caso hemos iniciado un proceso de compra conjunta de papel reciclado con un grupo de municipios, que facilita la gestión especialmente para los municipios más pequeños y consigue cierta mejora por economía de escala.

Abstract:

La Red de Ciudades y Pueblos hacia la sostenibilidad, se creó en 1997 y tiene actualmente más de 220 entidades locales asociadas (198 municipios catalanes y diversos observadores).

Es una plataforma de debate e intercambio de experiencias entre municipios que están trabajando en la aplicación de políticas locales orientadas hacia un desarrollo más sostenible.

En la Red se han formado diversos grupos de trabajo, entre los cuales uno sobre Compra Verde y Consumo responsable.

Este grupo ha iniciado un proyecto para introducir i/o incentivar la Compra verde en los municipios asociados a la Red, así como un proceso de compra conjunta de papel reciclado entre algunos de estos municipios y la Diputación de Barcelona.

Objetivos principales para desarrollar la Compra pública verde:

- Introducir o incentivar la compra de bienes y la contratación de servicios respetuosos con el medio ambiente en los gobiernos locales, como una fórmula más para contribuir a los objetivos de sostenibilidad local y global.
- Sensibilización sobre la contribución que un cambio de nuestro modelo de consumo puede tener sobre los recursos naturales.
- Teniendo en cuenta el elevado nivel de compra y consumo de bienes de la administración en general, ésta debe constituir un ejemplo acerca de cambios de hábitos que favorecen la sostenibilidad
- Incentivar el mercado de productos locales y respetuosos con los principios de sostenibilidad (tanto ambientales, como sociales)
- Impulsar la colaboración transversal en los gobiernos locales, especialmente con los departamentos de compras, puesto que las compras son un claro ejemplo que afecta a toda la organización.
- Facilitar instrumentos prácticos como la redacción criterios ambientales para su incorporación en los pliegos de condiciones de los concursos públicos.
- Iniciar un proceso de compra conjunta, que favorezca la economía de escala y que aporte ventajas también en los procedimientos de gestión.

Contexto favorable para alcanzar los objetivos:

- La creación del propio grupo de trabajo sobre Compra Verde y Consumo responsable en el marco de la Red de ciudades y pueblos hacia la sostenibilidad (marzo 2004)
- La colaboración entre los municipios de la XARXA y la Diputación de Barcelona.
- El Programa de Optimización de Recursos puesto en marcha por la Diputación de Barcelona (2003 – 2007), que contempla un capítulo con 28 acciones a favor de la corporación más sostenible
- La participación en el Proyecto europeo LEAP (Sistema de Gestión Ambiental –EMAS- y Compra verde local), desarrollado por 15 gobiernos locales europeos, liderados por la ciudad de Leicester, entre 2003-2006 y que ha contado con el apoyo del programa LIFE de la Comisión Europea.
- La experiencia de las diferentes autoridades locales y el trabajo en red tanto a nivel local como en el proyecto europeo.

Actividades del grupo de trabajo:

- Valoración de las experiencias existentes de Compra verde en los municipios de la Red
- Ciclo de Jornadas sobre la Compra de los productos más habituales en los ayuntamientos: Papel, Materiales de oficina y equipos de ofimática, madera certificada y servicios y productos de limpieza.
- Elaboración de un documento con la propuesta de requisitos ambientales a incorporar en los pliegos de condiciones para los grupos de productos elegidos en las jornadas

Proceso de Compra conjunta de papel reciclado (realizado dentro del grupo de trabajo)

1. Creación de una Comisión específica con la participación de 15 municipios

2. Estudiar y decidir la mejor fórmula legal para la compra conjunta, con el apoyo de los servicios jurídicos de la Diputación de Barcelona. Se optó por establecer un Protocolo de colaboración que deben aprobar y firman todos los participantes (municipios y Secretaría de la Red).
3. Redacción de un documento de requisitos técnicos para la compra de papel reciclado i/ ecológico TCF, con la ayuda de un equipo externo.
4. Aprobación de ambos documentos por parte de los órganos de gobierno de los participantes
5. Investigación de mercado: Entrevistas y contacto diversos con empresas distribuidoras /productoras de papel reciclado, realizado por la Secretaría de la Red.
6. Convocatoria de ofertas por parte de un coordinador, en este caso la Diputación de Barcelona, por la totalidad de la compra, para obtener un mejor precio
7. Evaluación de ofertas y valoración de las muestras de papel de acuerdo con los requisitos previstos en el documento y selección de la empresa suministradora
8. Suministro individualizado a cada municipio en las condiciones generales presentadas en la oferta.

Resultados:

- Aumento del conocimiento y la sensibilización de las administraciones participantes sobre la Compra verde
- Modelización de criterios ambientales para los pliegos de condiciones.
- Establecer un procedimiento de trabajo para la compra conjunta que incluye: proceso de formación, acuerdo sobre productos y criterios, acuerdo sobre la fórmula de valoración de ofertas, formalización de un convenio de colaboración, etc.
- Análisis de dificultades y propuesta de soluciones para determinadas barreras.
- Colaboración entre responsables de Medio Ambiente y gestores de Compras públicas de los gobiernos locales.
- Sensibilización del mercado local mediante la búsqueda y los contactos con proveedores y análisis de características de los productos ofertados.

Conclusiones:

La experiencia se ajusta al cumplimiento de los Compromisos de Aalborg+10, especialmente con el Compromiso nº 4 (Consumo y formas de vida responsables).

Además, sitúa a la administración local como capaz de poner en marcha cada vez más mecanismos de cooperación y más ejemplos de gestión hacia la sostenibilidad.

Por último, debemos ser conscientes de que se trata de un proceso que acaba de empezar y debería continuar y ampliarse y en el que la administración local puede jugar un importante papel como ejemplo a la vez que impulsora de mercados locales.

Reseña:

Licenciada en C. Biológicas (Universidad Autónoma de Barcelona) y Master en Biología del desarrollo.

Actividad profesional:

Iniciada en un laboratorio universitario de Genética (Universidad Autónoma de Barcelona). A partir de 1985 trabajo en la gestión pública en la Diputación de Barcelona. En 1993 me incorporo al Servicio de Medio Ambiente, donde he desarrollado actividades de educación ambiental, dirección de proyectos de Agenda 21 local y participación en proyectos europeos. Desde hace 5 años colaboro en Secretaría técnica de la XARXA (Red de ciudades y pueblos hacia la sostenibilidad).

B 06 Using public purchasing for cost effective environmental protection and social development

Green purchasing in public administrations

Soledad Sanz Salas

Vice-Director General

Régimen Interior y Patrimonio
Ministerio de Medio Ambiente
Plaza San Juan de la Cruz
2 071 Madrid
España

Tel: 34915976700

Fax: 34915975 06

e-mail: soledad.sanz@mma.es

www: mma.es

Executive Summary of your Abstract:

La contratación con criterios de sostenibilidad en la Administración General del Estado

Abstract:

- En marzo de 2004 la Comisión Europea publica la Directiva 1 /2004 sobre coordinación de los procedimientos de adjudicación de contratos públicos de obras, suministros y servicios.

Tanto en sus consideraciones preliminares como en su articulado, la Directiva fija las condiciones en las que los poderes adjudicadores de contratos podrán introducir requerimientos de carácter ambiental.

En un afán de hacer más asequible para los responsables de la contratación la gestión de los criterios ambientales en todo el procedimiento, la Comisión Europea edita en agosto de 2004 un Manual sobre la contratación pública ecológica: "Buying Green" o "Compras Ecológicas".

Es con ocasión de la presentación de este manual en octubre del mismo año, cuando la Administración General del Estado, a través del Ministerio de Medio

Ambiente, se incorpora de lleno a los trabajos que la Comisión lleva a cabo para la extensión de la compra sostenible a todos los niveles de compra pública y en todos los estados miembros.

- Durante 2005, por encargo de la Comisión, un consorcio de 5 organizaciones europeas realiza un estudio para medir el nivel de la Compra Ecológica en Europa, que fue completado en octubre mediante el análisis de mas de 1000 pliegos de concursos públicos y de 60 cuestionarios que fueron remitidos previamente a organismos públicos de los 25 estados miembros.
- El estudio demostró que existen 7 pa,ses (Austria, Dinamarca, Finlandia, Alemania, Pa,ses Bajos, Suecia y Reino Unido) que actualmente incorporan un mayor número de elementos de Compra Ecológica, lo que significa que tienen un mayor número de licitaciones con criterios ecológicos que el resto.
- El estudio también identificó los obstáculos que los responsables de las compras públicas perciben para su implantación
 1. Mayor coste
 2. Falta de conocimiento sobre el Medio Ambiente
 3. Falta de apoyo a la gestión
 4. Falta de instrumentos prácticos y de información
 5. Falta de información de los funcionarios encargados de las compras públicas

Y como consecuencia, el estudio hizo unas primeras recomendaciones a los responsables de las pol,ticas públicas:

- Colocar la Compra ecológica en la agenda pol,tica
- Establecer objetivos: Planes nacionales ó.
Planes sectoriales
- Elaborar bases de datos de Compra Ecológica a nivel nacional.

En este contexto, el Gobierno de España aprueba dos iniciativas:

- l) Un anteproyecto de Ley de Contratos Públicos que, tras ser aprobado en Consejo de Ministros, entra en septiembre de 2006 en el Congreso de los Diputados, y se encuentra en fase de enmiendas pudiendo estar aprobado a finales de 2007.

El texto incorpora mecanismos que permiten introducir consideraciones de tipo social y ambiental explicitadas a lo largo de su articulado como criterios de solvencia empresarial, como especificaciones técnicas, como condiciones en la ejecución del contrato, etc...

II) A propuesta del Ministerio de Medio Ambiente el Consejo de Ministros aprueba un Acuerdo para la creación de una Comisión Interministerial para la incorporación de los criterios ambientales en la contratación pública.

El Acuerdo se aprobó en mayo de 2006 y la Comisión se constituyó en Septiembre pasado.

Las tareas que el Acuerdo de Consejo de Ministros ordena a la Comisión para el cumplimiento de los objetivos marcados, es la elaboración de un informe sobre la situación actual de la contratación en la Administración General del Estado, y de un Proyecto de Plan Nacional de Contratación Pública Verde con objetivos concretos.

Resumé:

Licenciada en Derecho, Subdirectora General de Régimen Interior y Patrimonio en el Ministerio de Medio Ambiente, responsable de las compras del Ministerio as, como de la contratación de obras y servicios para los edificios administrativos. Vocal de la Junta Consultiva de Contratación Administrativa del Ministerio de Econom,a y Hacienda y Vocal de la Comisión Interministerial para la Compra Pública Verde en la Administración General del Estado.

B 07 Sustainable mobility: Urban Transport Plans

BUSTRIP toolbox for SUTPs

Name Anna Granberg

Function/Title Project Coordinator

Department Commission on Environment
Organisation Union of the Baltic Cities
Street Old Observatory, Vartiovuori
Postal code 207 00 City Turku
Country

Tel: +358 2 2623201

Fax: +358 2 2623425

e-mail: anna.granberg@ubc.net

www: www.bustrip-project.net

City Profile*: ,

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The BUSTRIP sustainable urban transport plan toolbox will be developed as a comprehensive tool that will enable other cities in Europe to develop their own SUTPs following the model and examples developed in the project.

Abstract:

The background of the BUSTRIP -project idea is the acknowledged fact that economic growth leads to intensive transport growth, congestion and traffic jams in cities, weakening the quality of life and causing considerable environmental, social and economic impacts. It is this viscous circle that the BUSTRIP -project seeks to solve. Thus the main objective of BUSTRIP is to provide practical solutions and tools for medium-sized cities in Baltic Sea Region to deliver sustainable urban transport and to feed this into a toolbox that can be used by other European projects to enable them to reach Sustainable urban transport.

All 12 BUSTRIP partner cities (Bremen, Gdynia, Göteborg, Kaunas, Kouvola Region, Liepaja, Tartu, Turku, Pärnu, Sundsvall, Örebro) prepare new or revise their existing models of Sustainable Urban Transport Plans (SUTP) and implement some of their SUTP themes in pilot actions. By doing this, the project aims at improving the state of the urban environment, and addressing social, economic and environmental challenges to enable vibrant and liveable European cities. This is not a stand alone process; in other European projects and in

the EU Commission a guidance development process for preparing SUTPs is also ongoing. The preparation and starting implementation of SUTP in cities is a concrete way to speed up the process of making European cities more sustainable. SUTP addresses not only transport but also social, education, economy, spatial planning, health and has a holistic approach towards the planning of the city. Both the EU Commission and the Parliament acknowledges SUTPs as important tools towards sustainable urban development.

The BUSTRIP SUTP benchmark arises from the final report of EU Expert Working Group on Sustainable Urban Transport 2004. The final report defined the SUTP for EU, and the BUSTRIP cities are among the first ones in Europe to start bringing such SUTPs from theory to practice. This SUTP model is also advocated by the European Commission in the Thematic Strategy on the Urban Environment. The BUSTRIP partner cities are uniquely positioned to show to other European cities how to deliver sustainable urban transport.

The Peer Review approach has been used in the project when exploring the existing situation in the cities and getting them started to bridge the gap towards sustainable urban transport. This has been the first time that the Peer Review method has been used on transport sector as such. The key conclusions from the Peer reviews:

- Cities must be at the heart of sustainable transport to be able to make a change. This implicates that all affected by transport needs to be involved in taking decisions - stakeholders, businesses and citizens. Sustainable urban transport also requires true inter-departmental cooperation within the city and also involving the whole urban area, meaning mainly cooperation with the regional authorities.
- Cities need better information regarding the transport in their cities regarding existing mobility and freight trends and patterns and a better understanding of the options to a car based society and their consequences for the city.
- Cities need to acknowledge that technology alone will not solve urban transport problems - awareness raising, involvement and various incentives need to be put in place to change behaviour. Also information, communication and marketing of the sustainable transport options is needed.
- Integrating spatial planning with transport planning is necessary to reach sustainable urban transport a sprawled infrastructure do not support sustainable transport. Cities need to take the command of their city's development and not let new business and housing development without the necessary public transport, cycle ways and pedestrian facilities be built.

The findings from the Peer Reviews has been fed into SUTP guidance in the form of a toolbox. The SUTP toolbox will be published as a book in nine languages and as a web site. The comprehensive and practical toolbox will be produced in order to disseminate the BUSTRIP model and make it easily available and used by other cities. The toolbox is aimed not only at cities with great capacity but it addresses beginner cities as well. The tools are easy to use for cities that would like to start sustainable transport work as well as there will be well structured and systematic tools and facilitate the process for already advanced cities.

The SUTP Toolbox will enable other cities in Europe to take the same steps as the project partner cities towards sustainable urban transports. The objective of the BUSTRIP toolbox is to create a comprehensive guiding package that will be used by key actors (transport and urban planners) in the cities in cross-sectoral cooperation with other stakeholders in order to plan, make and implement the Sustainable Urban Transport Plan of the city. Another target group for the toolbox is the decision makers in the cities. For them the toolbox will in brief

and easy form explain what the SUTP is, what are its benefits, what it requires costs and how to do it.

The toolbox guide book will be the entrance for the cities to make a SUTP and it will be translated into the nine languages (Finnish, Latvian, Lithuanian, Estonian, Polish, Swedish, German. Deeper information and examples will be found from the web site. The web site will complement the printed book and will be updated continuously. From the web site the key actors will find best practices, links, FAQs, check lists, discussion forum, stakeholder involvement methods, evaluation tools, research, arguments to implement SUTP and other more detailed guidance. Both the book and the web site will content wise follow the BUSTRIP SUTP Benchmark that has been adapted from the EU Expert Working Group's SUTP definition. The toolbox guide book and the web site will be published as well as the partner cities will present their SUTPs and implemented pilot actions in the final conference of the BUSTRIP project in Turku in late October 2007.

BUSTRIP runs from July 2005 to end of 2007 and it is part-funded by the Baltic Sea Region Interreg III B programme. The lead partner in the project is the Union of the Baltic Cities (UBC) Commission on Environment and Agenda 21 Secretariat and two other core partners are UBC commission on Transport and Chalmers University of Technology. Besides there are 12 partner cities from seven BSR countries taking part in the project.

Resumé:

Anna Granberg has a Master of Political Science from University of Umeå. She has been working in city of Malmö for many years with urban sustainable development project. Since 2003 she is employed with the Union of the Baltic cities, Commission on Environment secretariat in Turku Finland. UBC is a city network with 100 member cities in the Baltic Sea Region. At the UBC Ms. Granberg has been coordinating European projects and prepared and are now implementing the BUSTRIP project.

Further recommended reading: www.bustrip-project.net

B 08 INTEGRATED COASTAL ZONE MANAGEMENT IN MEDITERRANEAN

ENVIRONMENTAL CERTIFICATION AS A TOOL FOR COASTAL CITIES SUSTAINABILITY

Valentina Boragno - Researcher

Luigi Bruzzi - Professor

Interdepartmental Centre for Environmental research
Bologna University
Via S. Alberto, 163
48100 Ravenna
Italy

Tel: +39 0544 937307

Fax: +39 0544 937303

e-mail: valentina.boragno@unibo.it

www:

City Profile*: Cervia, Italy

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

27.000

Social, economic and environmental background:

Coastal tourism

Summary:

Executive Summary of your Abstract:

The coastal territory of Emilia Romagna is subjected to a considerable environmental pressure due to seasonal intensive tourism and other anthropic activities developed along the seashore, such as industries, commercial and leisure ports. Public institutions, such as Regions, Provinces and Municipalities have responsibilities in accomplishing a sustainable management of coastal areas where a strong counterposition between human activities and the fragile coastal ecosystem is existing. This paper describes the activities carried on within Cervia municipality to get the Environmental Management and Audit Scheme (EMAS) certification as a tool to improve sustainability of the Cervia territory in the framework of Integrated Coastal Zone Management.

Abstract:

Tourism is an essential element in the local economy for achieving the main objectives of social and economic growth, an adequate degree of occupation for citizens, a satisfactory regional development and a sound management of cultural and natural heritage. The most important pressures exerted by tourism industry on the environment are an increased consumption of natural resources, such as water, soil and energy, a great and uncontrolled use of territory, a large production of wastes and a diffuse atmospheric, acoustic and water pollution. The growing consumption of natural resources represents an obstacle for the

achievement of sustainable development, particularly in small and coastal areas with fragile ecological environment. On the other hand, a quality tourism can contribute to sustainable development of coastal areas by improving the local economy through the meeting of social needs and preserving, at the same time, the cultural and natural environment. Local authorities play an important role in tourism management through their planning activities, policies and programs. It is therefore necessary a comprehensive framework for assuring a balanced and consistent approach to environmental management allowing a systematic, objective and periodic evaluation of the whole authority activities. Sustainability of tourism takes into account not only conservation of resources and social and economic development, but also the perception by the tourists of a clean and pleasant environment. There are many indicators able in principle to define the sustainability degree of tourism activities; the problem is to select the most significant ones and to reach a set of shared indicators that allow to express a relatively objective judgement.

Environmental certification and the Environmental Management Systems are becoming the main tools for the application of sustainable development principles. The European Regulation EMAS and the international standard ISO 14001 both rely on an environmental management system with the aim of preventing environmental impacts and continuously improving environmental performance. The development of EMS procedure includes: a) Initial Environmental Review (IER); b) definition of the Environmental Policy; c) implementation of Environmental Management System (EMS); d) elaboration of Environmental Statement. The Initial Environmental Review represents a very useful and comprehensive picture of all aspects of sustainability regarding the city and the territory: it contains a detailed description of all relevant quality environmental aspects. The significant environmental aspects are identified by using a defined set of sustainability indicators and environmental criteria. This is the basis to define appropriate objectives and targets aimed at improving the environmental performance and developing environmental programme. The IER of Cervia showed the necessity for the City Council to undertake specific actions to improve the general environmental conditions of the territory. In the pinewoods it is necessary to increase the re-qualification activities such as selective thinning, reforestation and remedial treatments. The Saltpan analysis identified the most important measures to preserve the biodiversity increasing at the same time the recreational value for the tourists. The IER has also put into evidence the seasonality of some parameters such as the solid waste collection and the water consumption and the connection with the number of tourist nights spent in Cervia.

The experience and the results obtained with the EMAS Registration of Cervia Municipality, has demonstrated the validity of the method for reaching better environmental and sustainability performances. The experience gained in the certification of the Cervia Municipality has also demonstrated that tourism, if correctly planned and managed, can contribute to the environmental protection, conservation of biodiversity and more generally to the achievement of a better and integrated sustainability. An informed and conscious tourist can help the competent authority to protect and rehabilitate the natural positive features of parks, protected areas, wetlands and coasts and to improve the environmental management by financial contributions and provision for infrastructures. Tourism can also help the local population to raise the awareness of the economic and intrinsic value of their natural and cultural heritage and of the needs to preserve it.

The full cooperation of the Administration staff at management and technical level , with the cooperation of local stakeholders, has been an essential condition for a successful fulfilment of the environmental certification. Finally, In February 2007 Cervia reached the European EMAS Registration.

Resumé:

Boragno Valentina: graduated in Environmental Sciences at Bologna University, at the moment she is working as a researcher the Interdepartmental Centre for Environmental Research in Ravenna, collaborating with Prof. Luigi Bruzzi. Her scientific interests and activities are devoted to environmental issues connected with prevention and management tools and with environmental impacts due to human activities: Environmental Management System, Environmental Impact Assessment, Life Cycle Analysis. From 2003 she is giving technical support to the application of the European EMAS scheme to Cervia Municipality. Her professional interests include also analysis and research on the Integrated Coastal Zone Management (ICZM) in Italy and in Emilia Romagna Region. From 2006 she is a qualified environmental auditor for Environmental Management System in Italy.

Further recommended reading:

B 08 Gestión Integrada de zonas costeras en áreas urbanas y periurbanas del Mediterráneo

Platja Llarga: de zona urbana a espacio natural

Jordi Valls Fuster

Deputy Mayor

Acción Territorial y Medio Ambiente
Vilanova i la Geltrú City Council
Plaça de la Vila 8
08800 Vilanova i la Geltrú
Catalunya Spain

Tel: 34-938169036

Fax: 34-938144864

e-mail: jvalls@vilanova.cat

www: www.vilanova.cat

City Profile*: Vilanova i la Geltrú
(Barcelona), Catalunya,
Spain

* only relevant if city/local government is presenting

Short city/region profile:

Ciudad a 50 km al sur de Barcelona

Number of inhabitants:

65.000

Social, economic and environmental background:

30% de residencias secundarias, industria y sector terciario

Summary:

Executive Summary of your Abstract:

La ciudad de Vilanova y la Geltrú ha transformado Platja Llarga: de sector urbano en primera línea de la costa, apto para la construcción de más de 40.000 m2 de techo a espacio natural protegido, con un Plan Especial de Restauración, Regeneración y Gestión y la creación de conectores biológicos con otros espacios naturales. La transformación ha requerido convenios de colaboración con los propietarios del sector y con los departamentos de Política Territorial y de Medio Ambiente de la Generalitat de Catalunya (gobierno autónomo). Los convenios contemplan la transferencia de la edificabilidad a otro sector del municipio de baja densidad y mejor integrado en la trama urbana. El proceso ha sido posible gracias a la participación del Consejo Municipal de Medio Ambiente y Sostenibilidad y de la Plataforma Ciudadana "Salvem Platja Llarga" ("Salvemos Platja Llarga").

El proceso de transformación contrasta "a sensu contrario" con la transformación de amplios sectores de suelo libre en urbanizable a lo largo de la costa mediterránea.

El Plan Especial de Restauración, Regeneración y Gestión integra el sector en el ámbito del Consorcio "Els Colls-Miralpeix-Costa del Garraf", que tiene como objetivo la gestión integrada de la zona costera citada, y que está formado por los ayuntamientos y diversos departamentos de la Generalitat de Catalunya.

Resumé:

Jordi Valls Fuster es Teniente de Alcalde de Acción Territorial y Medio Ambiente del Ayuntamiento de Vilanova i la Geltrú (Barcelona) desde 1999. Anteriormente había ocupado puestos de asesoramiento del gobierno regional (Diputació de Barcelona) y Directivos del mismo Ayuntamiento. Durante su mandato como Teniente de Alcalde, la ciudad de Vilanova i la Geltrú se ha dotado de un nuevo planeamiento territorial, basado en una auditoria ambiental previa, y de un Plan de Acción Ambiental.

Es Profesor Superior de Pedagogía Musical.

B 10 Evaluation and reporting

Urban sustainability evaluation and innovative urban ecological footprint calculation – presentation of concrete results from Slovak cities

Zuzana Hudekova

Project Manager, Dipl. Ing.
Country Office Slovakia
Regional Environmental Center
Vysoka 18
811 06 Bratislava
Slovakia

Tel: +421 905 448 345
Fax: +421 2 5296 4208
e-mail: rec@ba.telecom.sk
www: www.rec.sk

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The innovative set of the Sustainable Development Urban Indicators, including all pillars of sustainability (environment, social, economic and institutional dimensions) was practically implemented in model Slovak cities. In addition, the ecological footprint (EF - aggregate indicator of the local sustainability) was calculated as well. Moreover, the new methodology of urban EF calculation taking into account the structure of the cities and towns, including anthropogenic and natural biotopes, was established and examined. The new Ecological Footprint calculation enables to measure the impacts of climate change on the urban environment, especially focusing on the ecological stability expressed by the quality and amount of greenery and natural biotopes inside the urban structure.

Abstract:

A city is a complex system greatly dependent on outer resources. Inputs are brought in (e.g., raw materials, energy and food) which are then transformed into outputs into the environment (e.g., emissions into the air and water, wastes). When we consider the sustainability of city systems, the interrelationship between a city, its environment and the environment of the surrounding land in parallel with the perception of city development in

close connection with global human problems, the challenges inherent in these relationships must be addressed.

The indicator of the ecological footprint is often used these days as an expression of natural resource consumption, which indirectly shows the amount of natural resources consumed at different levels from the individual to an entire state. The ecological footprint comprises all activities from food consumption, accommodation and transportation, to produced waste, and it is able to quantify the impact of human activities on the environment and natural resources. It shows the existence of the limited amount of natural resources which will be insufficient should the increasing demands continue into the future.

Ecological footprint is expressed in so-called global hectares per person (gha / person). This parameter, however, does not reflect the real "consumed" area but is rather a comparison unit for the expression of the real capacity of the biologically active surfaces on the Earth with natural resources consumption. While the global biocapacity of Earth is steadily decreasing (reaching app. 1.8 gha / person at present), the total ecological footprint of the planet is increasing – the latest report of the Global Footprint Network presents the overall global ES 2.2 gha / person, with Slovakia reaching 3.6 gha / person (the biocapacity of Slovakia being 2.9) and the most developed Western countries between 4 – 7 gha / person. The main target in this topic is a decrease in natural resource consumption, which would also result in a decrease in the ES value. The sustainable development of consumption would then be maintained below the Earth's overall biocapacity.

The ecological footprint of the Slovak Republic is 3.6 gha / person, but the biocapacity of the Slovak area is also an important value, and that reached 2.9 gha / person. The ecological footprint was evaluated for all 6 model cities. Each of them exceeded the biocapacity of the SR, though Piešťany and Dubnica nad Váhom achieved a better value than the Slovak average (3.32 and 3.58 gha / person, respectively). The other cities, with the exception of Zvolen, have values slightly exceeding the average, at 3.8 – 3.9 gha / person. Zvolen has the most unfavorable value – up to 5.0 gha / person, which was due to the high ES values in accommodation and goods and services issues.

The present calculation of the ecological footprint does not reflect directly the negative impacts on the natural environment (e.g. deterioration of ecosystems, deforestation, acid rain impacts, none of the current methodologies dealing with EF of town or cities take into account negative impacts of the destruction of ecosystems, which will later result in the decrease of biocapacity production). In urban areas, buildings and paved surfaces have gradually replaced pre-existing natural landscapes. As a result, solar energy is absorbed into man-made materials causing the surface temperature of urban structures to become higher than the ambient air temperatures. Urban vegetation directly and indirectly affects local and regional air quality by altering the urban atmospheric conditions. The dominant way the urban vegetation affects microclimate is temperature reduction and affiliated effects, for example; increase of air humidity.

The new methodology of urban EF calculation takes into account the structure of the cities and towns, including anthropogenic and natural biotopes. Green areas have irreplaceable value as regulators of the climate of towns and cities (as mentioned above), and also as providers of ecological stability. Therefore ecological stability is indirectly reflected in the methodology of the new ecological footprint of a town or city as an additional factor (to the factors as alimentation, shelter, mobility and goods). The new Ecological Footprint calculation enables to measure the impacts of climate change on the urban environment, especially on the ecological stability which is expressed by the quality and amount of greenery and natural biotopes inside the urban structure.

The innovative methodology of urban environment is fully in accordance with European policies (e.g. 6.EAP), that recommend within the planning cities and new construction activities supporting the creation of new parks and green areas.

Resumé:

Education: Graduated Mendel University of Forestry and Agriculture in Brno (Czech republic)
- Institute of Horticulture - Specialization Landscape architecture; Faculty of Architecture
Slovak technical University - PhD. study;

Responsibilities, managing projects in the field of landscape protection, urban sustainable development, greenery management and historical parks revitalisations;

Personal interests: garden art, nature, sensitive tourism, cycling)

Further recommended reading: www.rec.sk, www.udrzatelnemesta.sk, www.zelen.sk

B 10 Urban sustainability strategies in Central and Eastern Europe

Local Sustainable Development Strategy in Serbia

Aleksandar Popovic*

Slobodan Milutinovic

Ljubinka Kaludjerovic

***Programme Coordinator**

Advocacy Team Leader
Standing Conference of Towns and Municipalities
Makedonska 22/VIII
11000 Belgrade
Serbia

Tel: + 381 11 3223 446

Fax: + 381 11 3221 215

e-mail: aleksandar.popovic@skgo.org

www: skgo.org

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The Programme for Environmental Protection and Sustainable Development in Serbian Towns and Municipalities 2004 – 2006, developed by the Serbian Association of Towns and Municipalities (Standing Conference of Towns and Municipalities) and supported by the Norwegian Association of Local and Regional Authorities – KS, was created with the overall goal to improve the quality of life in Serbian local communities, by obtaining better environmental conditions and enabling local governments, as well as the national government, to define and pursue policies of sustainability in the future development of Serbian towns and municipalities. Significant results have been achieved in preparation and implementation of the Local Sustainable Development Strategy in Serbia.

Abstract:

Achieving the sustainability of national development requires a strategic approach which is a long term one and which either integrates or encompasses different development processes in such a way that they can be as sophisticated as the development challenges are complex. In accordance with the conclusions of the Johannesburg Conference, local governments implementing the sustainable development are bound to enter a decade of accelerated action towards the creation of sustainable communities and protection of common world goods.

Serbia is facing large problems and challenges in the environmental, but also in the social, economic, scientific, educational, legislative, institutional, and other areas of life. Unfortunately, the concept of sustainable development is neither sufficiently developed, nor implemented in our country. Moreover, local authorities acted faster in response to sustainable development strategy formulation process and adopted Local Sustainable Development Strategy before National Strategy for Sustainable.

Serbian National Strategy for Sustainable Development is still in the process of drafting. The project on Development of Sustainable Development Strategy for Serbia was initiated as a response to the World Summit on Sustainable Development and its call for National Sustainable Development Strategies. In line with the plan adopted at the 2002 Johannesburg Sustainable Development Summit, which specifies the implementation of national strategies on sustainable development, Serbian Government has constituted a Council for Sustainable Development and started drafting its National Strategy for Sustainable Development. After some delays in 2006, it is expected to develop the final document in spring 2007. Experts from the Standing Conference of Towns and Municipalities were included, from the very beginning, in the strategy drafting process as a key stakeholders.

The Programme for Environmental Protection and Sustainable Development in Serbian Towns and Municipalities 2004 – 2006, developed by the Serbian Association of Towns and Municipalities (Standing Conference of Towns and Municipalities) and supported by the Norwegian Association of Local and Regional Authorities – KS, was created with the overall goal to improve the quality of life in Serbian local communities, by obtaining better environmental conditions and enabling local governments, as well as the national government, to define and pursue policies of sustainability in the future development of Serbian towns and municipalities. Significant results have been achieved in preparation and implementation of the Local Sustainable Development Strategy in Serbia.

Implementation phase was operationalised through the strategic planning pilot projects in seven Serbian municipalities. Strategic planning processes in the pilot municipalities occurred during second and third project year. During the strategy formulation process pilot municipalities developed a comprehensive and integrated approach to assess the current local development situation, including equality achievements and gender awareness, socio-economic, environmental and institutional factors, identification of the most vulnerable groups within the identified municipalities, with a reference to MDGs and PRSP agreed priorities.

Most of Serbian municipalities are not currently well equipped, both in material and human resources, to plan for sustainable development and participate in this worldwide movement to formulate action plans, avert environmental devastation, and assure the long-term viability and stability of societies. All efforts and assistance provided to Serbian municipalities are welcomed and appreciated.

Resumé:

Aleksandar Popovic has postgraduate degree in State Management and Humanitarian Affairs from “La Sapienza” University of Rome. His experience includes consultancy and project experience in different cultural and environmental settings (Europe, Africa and USA). He actively participated in creation and implementation of sustainable development projects on the local level. Also, significant contribution was provided to the Local Sustainable Development Strategy formulation process in Serbia, and consultations on National Sustainable Development Strategy preparation process. Currently assumes responsibilities as Team Leader in the Standing Conference of Towns and Municipalities in Serbia.

Further recommended reading:

- "Local Sustainable Development Strategy", Standing Conference of Towns and Municipalities, 2005. <http://www.skgo.org/code/navigate.php?Id=263>
- Milutinovic, 2004. "Local Agenda 21: The Basic Guide for Local Sustainable Development Planning", Standing Conference of Towns and Municipalities,
- Milutinovic, 2006. "Visioning Manual for Local Sustainable Development Planning", Standing Conference of Towns and Municipalities
- Milutinovic, 2007. "Participatory Situation Analysis", Standing Conference of Towns and Municipalities,
- Milutinovic, S. (2006), Country to Country Cooperation in LSD Strategic Planning: The Strategy for Local Sustainable Development in Serbia. Abstracts. ICLEI World Congress 2006, Cape Town, South Africa, March 27th – April 3rd 2006. http://www.iclei-europe.org/fileadmin/user_upload/ITC/worldcongress2006/LA2_Milutinovic_Slobodan.pdf
- Milutinovic, S., LJ. Kaludjerovic (2005), Local Support for Global Citizenship – Transition in Serbia and the Challenge of Local Sustainable Development, International Sustainability Conference ISC2005, Basel, Switzerland, October 13th – 14th 2005.
- Milutinovic, S. (2005), Transition in Serbia and the challenge of local sustainable development, Proceedings of Abstracts, International Conference Sustainable Construction: Action for Sustainability in the Mediterranean, Athens, June 9th – 11th 2005.
- Milutinovic, S., LJ. Kaludjerovic, A. Popovic and M. Milenkovic, 2005. Local sustainable development strategy in Serbia. Proceedings of the Conference, "Environment for Europe", Belgrade, June 2005

B 10 Urban sustainability strategies in Central and Eastern Europe

A case study of EMAS implementation in Kirklees Metropolitan Council and increasing the uptake of EMS in UK local authorities.

Helena Tinker

Environment Officer
Environment Unit
Kirklees Metropolitan Council
23 Estate Buildings
Railway Street

Huddersfield
HD1 1JY
West Yorkshire

UK

Tel: +44 01484 223605
Fax: 01484 223576
e-mail: Helena.tinker@kirklees.gov.uk
www: kirklees.gov.uk

City Profile*:

The main town in Kirklees is Huddersfield,
UK

* only relevant if city/local government is presenting

Short city/region profile:

Kirklees Metropolitan Council has approximately 19,000 members of staff and delivers a range of services to the local community such as waste collection, housing, social services and planning. The Local Authority is unique in the UK as it has an Environment Unit with approximately 15 members of staff all working on environmental issues in the district such as fuel poverty, biodiversity, energy efficiency and renewable energy.

Number of inhabitants:

400,000 in the Kirklees District

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Kirklees Metropolitan Council has been fully registered to EMAS since 2003 and has achieved many environmental improvements over the past few years; a selection of these will be presented. They are also working on the European Life funded NEST project which is helping Local Authorities in Poland, Hungary and Greece implement EMAS through a Network approach. Kirklees adopted this networking approach and through Central Government funding has established 5 EMS networking groups across England consisting of approximately 60 local authorities all of which either have an EMS or are working towards one.

Abstract:

Kirklees Metropolitan Council is Located in the North of England and has been fully registered to EMAS (Eco management and Audit Scheme) since 2003. They have a great deal of experience of implementing EMAS in local Government and will present the background of how they achieved EMAS and the critical success factors.

They will also briefly outline some of the environmental projects that have taken place since been registered to EMAS and how it continually drives environmental improvement for the local authority. Some of the projects detailed will be renewable energy projects and improving transport depots and legal compliance.

The session will show how Kirklees Metropolitan Council has used EMAS to help deliver environmental improvements in a town, city or region. It will hopefully inspire local Authorities or municipalities to consider working towards an EMS or think about implementing some of the environmental projects Kirklees has delivered.

Kirklees will also present their recent work on establishing five regional EMS networks in the UK via a central government funding. Establishing the regional EMS networks has been hugely beneficial for Kirklees Council and other local authorities in the UK.

It is hoped the session will also encourage other Local Authorities to establish an EMS or environmental network groups. Local Authorities are all working towards the same goal so these groups save money, time and resources. We hope it will also motive Local Authorities to contact their neighbouring local Authorities and share good/ best practice on environmental issues and work together .

Resumé:

Helena Tinker BSc (Hons) MSc, Cenv .

Helena holds a BSc in Physical Geography and a MSc in Pollution and Environmental Control. She has ten years experience in the environmental management field working with both public and private sector organisations. She now manages Kirklees Council's environmental management system (EMAS) and works on a number of the Councils environmental improvement programmes such as sustainable procurement, sustainable construction and design and renewable energy.

She also works on a European Life funded project called NEST (Networking with EMAS for Sustainable Development) that is coaching ten Local Authorities in Poland, Hungary and Greece to gain EMAS registration. She helped develop a simplified EMS tool kit and delivers training in Europe on best practice to aid the EMS implementation process.

Helena has also recently started doing a number of discrete projects for other UK Local Authorities such as EMS auditing and implementation. She is also coaching many UK local authorities through the EMS implementation process via a central government funded project. Helena is also a chartered environmentalist and an registered environmental auditor.

Further recommended reading:

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 01 Challenges and Opportunities within the Aalborg

Commitments Implementation

Challenges and Opportunities within the Aalborg

Commitments Implementation

Steffen Lervad Thomsen

Sustainability Coordinator

Health and Sustainable Development Department
City of Aalborg
Strandgade 1
DK-9240 Aalborg, Nibe
Denmark

Tel: +45-99 31 12 42
Fax: +45-99 31 22 05
e-mail: slt-sbu@aalborg.dk
www: www.aalborgkommune.dk

City Profile*: Aalborg, Denmark

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Municipality of Aalborg (192.000 inhabitants) - part of the Region of North Jutland

Social, economic and environmental background:

100.500 are employed. Main economic activities are manufacturing, trade, tourism, business service and public service, including education and social services.

Summary:

Abstract:

Background information

City of Aalborg signed the Aalborg Commitments (AC) at the Aalborg +10 conference in June 2004. The signature was ratified by the city council a few months later and the council decided to allocate more resources to the implementation process by funding a new position as sustainable coordinator, attached to the Technical Department. After the council's decisions the implementation process was started by establishing an organisation including all departments within the city administration.

To reinforce the Aalborg Commitments implementation the coordinating task and the sustainable coordinator, has since January 1st 2007, been attached to the newly established Department for Health and Sustainable Development.

Baseline Review

The baseline review process was initiated in February 2005 and the final baseline report was approved by the city council in November 2005. The main objective of the baseline review was to identify thematic gaps and to evaluate existing targets on their relevance and quality. The scope of the process was to map all existing sustainability targets and results/ efforts along the 50 sub themes of the AC. About 50 current plans within all departments were surveyed and each single department was responsible for submitting "own" targets and efforts. Stakeholders were not involved in this part of the process, as it was seen as an internal exercise, clarifying existing strengths and weaknesses.

The main conclusion of the baseline review was:

- Gab analysis, 90 % AC themes covered
- Visions / overall targets more than concrete targets
- Many projects carried out to reach targets
- Documentation difficult due to lack of indicators

The preparation of the baseline review initiated constructive and inspiring discussions on definitions, target quality, ambitions, target fulfilment, indicators etc. which provided a valuable and necessary input to scope and form of the following target setting process.

Improvements on findings e.g. low quality targets, have already been put in place.

Targeting process

The actual targeting process was initiated in January 2007. The process has been delayed due to organisational reforms in Denmark. During 2006 specific key themes have been addressed and discussed (e.g. green procurement & air quality). The targeting process takes it point of departure in the findings of the baseline exercise. As the process will be extended for some years from now, focus in 2007 will probably be put on improving existing targets (relevance, quality and ambitions), to get an overall understanding of the many targets and to discuss the need for more operational targets and indicators. To this will be added a discussion on targets for new priority areas (e.g. Health and Rural Development Planning) as the Municipality will take over many tasks from the regional level due to the organisational reforms.

From 2008 and onwards the objective of the targeting process will be – step-by-step - to include all sub themes of the Aalborg Commitments. An extensive stakeholder consultation is accomplished by creating a representative "Sustainability Board" for a broader approach on consultations with citizens.

Conclusion

This presentation will address approaches and results of the baseline review. It will highlight the challenges on working with the broad perspectives on sustainable development and how to strive for a common understanding of sustainable development across municipal sectors. It will address the scope of the target setting process: how it will merge with the development of a comprehensive Local Strategy for Sustainable Development and how this strategy will interface with existing strategies and plans.

It's my hope that this presentation will inspire and motivate colleagues to recognise the Aalborg Commitments as a very practical and flexible tool for local action and achievements on sustainable development and to give colleagues ideas on how to approach the local implementation process.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 02 Evaluation and reporting

Evaluation of sustainability in urban areas through a set of innovative indicators

Vladimir Hudek

Country Office Director, Dipl. Ing., PhD.

Country Office Slovakia
Regional Environmental Center
Vysoka 18
811 06 Bratislava
Slovakia

Tel: +421 905 448 345

Fax: +421 2 5296 4208

e-mail: rec@ba.telecom.sk

www: www.rec.sk

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

The evaluation of urban sustainability (LIFE III project – UrbEco Footprint) is possible through the practical implementation of an appropriate set of indicators. REC Slovakia elaborated a set of Sustainable Development (SD) Urban Indicators to monitor progress of selected Slovak cities towards SD, including all pillars of sustainability (environment, social, economic and institutional dimensions) while taking into accounts existing relevant sets at European level (like STATUS, TISSUE and ECI). REC Slovakia performed the practical evaluation of sustainability in 10 Slovak cities.

Abstract:

More than 58% of inhabitants of Slovakia live in urban areas (it is almost 80% in EU countries). It poses a challenge to the cities to look for optimal and sustainable ways of their development in order to solve the environmental and health problems. The evaluation of urban sustainability is possible through the practical implementation of the appropriate set of indicators.

REC Slovakia elaborated an innovative set of urban SD indicators, representing all pillars of sustainability (environment, social, economic and institutional). In the same time it takes into account existing relevant sets of SD indicators at the European level (such as STATUS,

TISSUE and ECI). Thus the evaluation of the new set of sustainable development indicators of cities takes into account not only the specific status of settlement structure in Slovakia (the core of the urban population lives in mid-sized and small cities of up to 50,000 inhabitants), but also several indicators from the social and economical fields. These indicators were added to the SD indicators directly and are linked not only to the environmental quality of urban areas, but they form an inseparable part of the city's sustainable development issues. The principal reason for it was, that urban atmosphere is affected not only by the environmental problems, but from socio-economic ones as well; such as lack of job opportunities, unemployment and the resulting poverty of a certain portion of the citizenry; who have limited access to the societal services and amenities related to areas such as: accommodation, education, and cultural activities and events. The problematic disparities in the socio-economic structure of the populace are leading to undesired socio-pathological phenomena. These problems need to be solved in parallel with the above-mentioned environmental issues.

The innovative set of sustainable development indicators proposed for Slovak cities is arranged into 6 main themes. Each of the themes is comprised of two subtopics (main indicators), that are further expressed as particular measurable partial indicators.

Theme 1 - Transport

Main indicators – Traffic situation, Mobility of citizens

Theme 2 – Urban design and construction

Main indicators: Sustainable urban design, Sustainable construction

Theme 3 – Environment, Landscape and Biodiversity

Main indicators: Environment quality, Sustainable land use and biodiversity

Theme 4 – Environmental burden and ecological footprint

Main indicators: Contribution of the city to the global climate change, Ecological footprint

Theme 5 – Socio-economic situation of the city

Main indicators: Social situation, Economical situation and attractiveness of the city

Theme 6 - Management

Main indicators: Environmental and social management of the municipality and enterprises, Citizen participation on the community life.

With the help of the above-mentioned set of indicators, REC Slovakia performed the practical evaluation of sustainability in 10 Slovak cities. Data gathering needed for indicators evaluation in these cities was performed by three main approaches: questionnaire investigation, investigation of background documents and information and data receiving from relevant institutions and statistical resources. In spite of all the work performed some difficulties occurred in all participating cities. However, we can conclude that most of the indicators were completely and satisfactorily evaluated in this project phase.

In comparison with the results of European cities that were involved in evaluation of sustainable development by means of other sets of SD indicators, the following facts were shown:

- Traditions of „European“ cities to follow the matter is to be considered in mutual comparison, involvement into whole Europe activities, exchange of experience and/or voluntarily acceptance of the duties and targets of city sustainable development
- In the particular results some differences are shown that originate from socio-economical situation and degree of development and consumption of Slovak citizens in comparison with the other EU countries. According to this trend Slovak cities seem to be very

favourable in certain parameters, size of the ecological footprint being the most important difference in favour of Slovak cities (average of EU-15 4.4 gha, Slovakia 3.6 gha),

- Dominance of individual automotive transport in daily citizens movements as children transport to school in European cities when compared with Slovak cities is obvious, and the favourable proportion of pedestrian and bicycle transport in Slovak cities can be explained also by shorter distances,
- The results were comparable in several parameters, e.g. accessibility of green areas and services, insufficient participation of citizens (in spite of fact that mechanisms for their participation are in place) are similar for Slovak as well as European cities. Also the issues of urban air pollution and noise level are similar, however (due to data lack) this problem is only suspected in Slovakia,
- Slovak cities are far behind in other parameters: exploitation of environmental and social management (EMAS), strategical environmental assessment processes (SEA), that were practically not applied in any of model cities,
- Satisfaction of Slovak urban citizens is lower than in European cities – based on objective facts on city status it may indicate too high criticism of Slovak citizens.

Resumé:

Education: Attended Technical University - Electro-engineering and Informatics; Open University in Keystone, Great Britain - Environmental Policies in an International Aspects; emphasis on environmental courses and managed projects. Responsibilities: management of the REC Slovakia at national, regional and local/city level, management of projects related to SD topic. Personal interests: sensitive tourism, cycling, nature, education-children, music and ball sports)

Further recommended reading: www.rec.sk

C 02 Evaluating and reporting

INFORME Y EVALUACION DE LA AL21 EN GIPUZKOA

Aitor Aranguren Iriarte

Director General de Medio Ambiente
Departamento para el Desarrollo Sostenible
Diputación Foral de Gipuzkoa
Plaza de Gipuzkoa s/n
20004 Donostia-San Sebastián
Gipuzkoa, Spain

Tel: 943 11 29 15
Fax: 943 43 14 27
e-mail: aaranguren@gipuzkoa.net
www: www.gipuzkoa.net
www.gipuzkoaingurumena.net

City Profile*: Territorio Histórico de
Gipuzkoa,

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

688.769; capital, Donostia-San Sebastián: 183.515

Social, economic and environmental background:

Superficie (km2): 1.909

*Nº de municipios: 88

*Idiomas oficiales: Euskera y castellano. El 51,5% de los guipuzcoanos habla correctamente euskera.

*Territorio montañoso, el punto mas elevado con 1551 m snm.

*63% de la superficie arbolada.

*21% de la superficie bajo figura de protección.

*Sectores según empleo:

- 4,4% trabaja en el sector primario.

- 55,7% en el secundario.

- 39,9% en el sector servicios.

Summary:

*El territorio cuenta con una asamblea legislativa y un gobierno con competencias amplias (fiscalidad, carreteras, transporte público, residuos, ordenación del territorio, impacto ambiental...).

*El gobierno del territorio es la Diputación Foral.

*Todos los impuestos son recaudados por Diputación.

Executive Summary of your Abstract:

La Dirección General de Medio Ambiente de la Diputación Foral de Gipuzkoa ha diseñado y puesto en funcionamiento el Observatorio de la Sostenibilidad de Gipuzkoa que se configura como una iniciativa global y multinivel (territorial, local y organizacional).

En la escala local del Observatorio destaca el Programa de Evaluación de Agenda Local 21, que ha proporcionado información objetiva y comparable del nivel de implantación de las Agendas Locales 21 de 12 municipios de Gipuzkoa desde el año 2002. Las evaluaciones arrojan datos medios de ejecución del 35% tras cinco años de implantación, lo que debe ser motivo de reflexión.

La información obtenida es de gran valor para la Diputación Foral de Gipuzkoa para diseñar su estrategia de impulso de la sostenibilidad local.

Abstract:

Observatorio de la Sostenibilidad de Gipuzkoa. La Dirección General de Medio Ambiente (DGMA) de la Diputación Foral de Gipuzkoa ha puesto en marcha el Observatorio de la Sostenibilidad de Gipuzkoa. Este Observatorio, al estar integrado por la propia DGMA, además de observar y medir en materia de sostenibilidad en el ámbito de Gipuzkoa, cuenta con la capacidad de planificar, actuar y comunicar. El Observatorio desarrolla su actividad en tres escalas o niveles: territorial, local y organizacional o interna.

Antecedentes de la Agenda Local 21 (AL21) en Gipuzkoa. La DGMA, junto con el Departamento de Medio Ambiente y Ordenación del Territorio del Gobierno Vasco, viene impulsando desde el año 2000 los procesos de AL 21 en Gipuzkoa. En el marco de la Estrategia Ambiental Vasca de Desarrollo Sostenible, documento que fija los objetivos que deben ser impulsados por la administración pública en coherencia con los formulados en la Estrategia de la Unión Europea para un Desarrollo Sostenible, se planteaba el compromiso de implantar la AL 21 en los municipios de más de 5.000 habitantes antes de 2006.

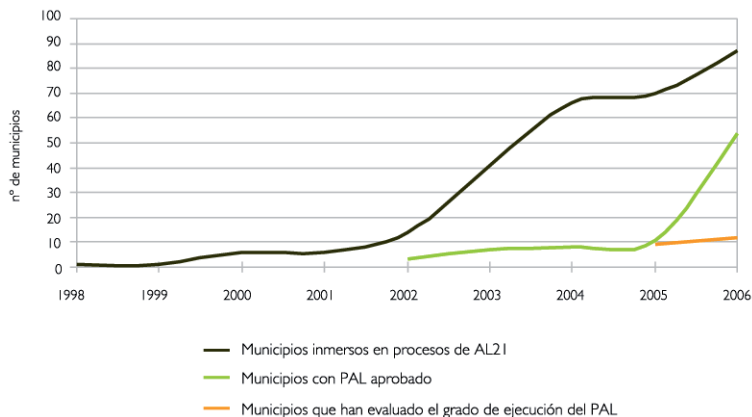
La aprobación de los primeros Planes de Acción Local (PAL) se produce en el año 2001 aunque toma especial relevancia en el 2006, año en el que el 60% de los municipios tiene aprobado su PAL en el pleno del ayuntamiento.

Durante el proceso de implantación de las AL21 en Gipuzkoa, la DGMA, dando repuesta a las necesidades progresivamente crecientes de los municipios de territorio, ha diseñado el "Programa Foral de apoyo a la sostenibilidad local" que se compone de diversas herramientas de asistencia. Una de estas herramientas es el "Programa de soporte a la evaluación de los PAL", que trata de dar respuesta al desconocimiento sobre el grado de ejecución real de los PAL y sobre la calidad de estos procesos.

Hoy podemos decir que la implantación de la AL 21 en Gipuzkoa supera los objetivos que se habían propuesto: Actualmente, 87 de los 88 municipios que forman el Territorio Histórico de Gipuzkoa están desarrollando su AL 21, con una representación del 99% de la población. En cuanto al grado de implantación, 54 municipios han aprobado su PAL, representando a un 60% del total y 11 municipios y la comarca de Debabarrena han evaluado el grado de implantación de su PAL, representando un 12% del total de los municipios inmersos en procesos de AL 21.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org



Metodología. El Programa de soporte a la evaluación de los PAL. Este programa es un servicio que desde la DGMA se ofrece anualmente a los ayuntamientos más avanzados en el desarrollo de la AL21, con el objetivo de evaluar el grado de implantación de los PAL. El programa de evaluación impulsado por la DGMA se ha desarrollado de forma coherente con el marco metodológico establecido en la Red de Municipios Vascos hacia la Sostenibilidad Udalsarea 21, y se apoya en la aplicación informática MUGI 21 de gestión integrada de la AL 21 disponible en todos los municipios de la red.

Resultados e Indicadores del estado de las estrategias de sostenibilidad local. El Programa de Soporte a la evaluación de la implantación de los PAL se ha desarrollado durante los años 2005 y 2006. Este programa nos ha permitido medir el grado de implantación de los PAL en Gipuzkoa en el periodo 2002-2006.

Se han evaluado los PAL de 11 municipios, así como de forma experimental un PAL de carácter comarcal. Los resultados de estas evaluaciones se han valorado en base a los siguientes indicadores:

- Número de acciones de los PAL: La dimensión media de los PAL evaluados en 2006, medida como el número de acciones total, es de 157.
- Grado de ejecución de los PAL: Las evaluaciones arrojan datos medios de ejecución del 35% tras cinco años de implantación del PAL.
- Estado de ejecución de las acciones: El porcentaje de acciones pendientes de inicio es significativamente alto, con un 32%. Las acciones en proceso de ejecución (iniciadas, avanzadas o finalizando) representan un 62% del total y sólo un 6% de las acciones han sido completadas.
- Grado de ejecución por Líneas Estratégicas: Las Líneas estratégicas que más han avanzado en el grado de ejecución son Agua, con un 41% de las acciones ejecutadas, y Movilidad, con un 39%. Las Líneas estratégicas que presentan un menor grado de ejecución son Atmósfera y Ruido, con un 19%, y Medio Natural, con un 22%.
- Número de agentes implicados en el PAL: El grado de implicación en el PAL se refleja en una media de 19 agentes implicados, con un grado de participación en la ejecución del PAL que se considera alto. Así, el porcentaje de acciones como mínimo iniciadas en cuya ejecución participan agentes diferentes del coordinador de AL21 oscila entre el 43% y el 92%.
- Ritmo de incremento anual en la ejecución del PAL: El ritmo de incremento anual corresponde a una media del 7% de incremento en el último año evaluado, con un máximo del 22% en su primer año de implantación, y un mínimo del 3%.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Conclusiones y perspectivas de futuro. Si bien damos por finalizada una primera fase de impulso e implantación de procesos de sostenibilidad local que ha resultado muy positiva en cuanto al número de municipios implicados, las evaluaciones realizadas arrojan datos medios de ejecución de los PAL del 35%, lo que debe ser motivo de reflexión. Se considera imprescindible que en adelante se incrementen progresivamente los niveles de exigencia y calidad de estos procesos.

Resumen:

La Dirección General de Medio Ambiente de la Diputación Foral de Gipuzkoa ha diseñado y puesto en funcionamiento el Observatorio de la Sostenibilidad de Gipuzkoa.

Entre las actuaciones del Observatorio destaca el Programa de Evaluación de Agenda Local 21, que ha proporcionado información objetiva y comparable del nivel de implantación de las Agendas Locales 21 de 12 municipios de Gipuzkoa desde el año 2002. Estas evaluaciones arrojan datos medios de ejecución del 35% tras cinco años de implantación.

La información obtenida es de gran valor para la Diputación Foral de Gipuzkoa para diseñar su estrategia de impulso de la sostenibilidad local.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 02 Evaluation and reporting

Information system of Sant Boi de Llobregat sustainability

Isabel Sarrate Buisán

Director, Local Agenda 21 Office/architect

Local Agenda 21 Office
Sant Boi City Council
Plaça del Ayuntamiento, 1
08830 Sant Boi de Llobregat
Spain

Tel: +34-93/ 635 12 00

Fax: +34-93/ 630 18 56

e-mail: agenda21@santboi.cat

www: www.santboi.cat/agenda21

City Profile*: Sant Boi de Llobregat,
Spain

* only relevant if city/local government is presenting

Short city/region profile:

Sant Boi de Llobregat is a town of the autonomous community of Catalonia (Spain). It has an area of 22 Km² 40% of the municipal term is occupied by the city and the rest is divided into 40% of agricultural zone, forest 15% and 5% fluvial.

Number of inhabitants:

81.611

Social, economic and environmental background:

The climate is Mediterranean that means that there are usually warm summers, soft winters and rainy autumns. The average temperature is 16'3 degrees centigrade. The agriculture is mainly of irrigated land with predominance of vegetables and fruit trees. The industry is mainly metallurgical, although there is also textile, footwear and food products, even though the main industrial activity is constituted by the trade and services.

Summary:

Sant Boi signed the Letter of Aalborg year 1997 and Local Agenda 21 was approved year 2003. At the moment 46% of the performances anticipated for period 2003-2010 have been made.

Executive Summary of your Abstract:

We present a system of information and follow-up of the plan of action of the Agenda 21 of Sant Boi, in which we have used the up-to-date techniques of information and communication, especially the web page technology, an environment totally opened in real time to the citizens.

Abstract:

The system is born with the will of being easily knowledgeable, simple one of use and interactive.

We consider the following goals:

- Making the Agenda 21 the vertebral axis of all the municipal performance, in such a way that all the administration works from this global project in which the technicians as well as the politicians are implied.
- Showing the development of each of the actions and goals with total transparency, as much internal (workers) as external (citizens).
- Helping sustainable incorporating mechanisms of direct civic participation to correcting and redefining public policies: the citizens can brief themselves and interact in the Net through questions and forums of opinion.
- Integrating in a same space different tools capable of helping into the politicians in the decision making.
- Showing the state of the actions through indicators of result and of the goals through global indicators of sustainable development related with the commitments of Aalborg.

Obtained results:

- The organisation has kept on bearing all the process of implementation of the management for goals, necessary for a correct evaluation of the different performances, in a constructive way.
- It has developed an integral instrument panel that has allowed the facilitation of appropriate decision-making, giving information of the level of fulfilment of the goals and of each performance through indicators of control and mechanisms of support, with the novelty of mixing the strategic and management dimensions.
- Through techniques of motivation a change of attitudes, a more participative staff, truly implied in the system and with an important intangible potential for the achievement of the goals global has been achieved.
- The interdepartmental cohesion and the will of working towards a common goal have been favoured.
- The utilisation in an only technological environment has favoured the exchange of information among all the implicated actors and all the plans in development.
- The fact that is open to the society has encouraged and has provoked its participation.
- For the first time the citizens of Sant Boi have been able to observe the evolution of many of the performances of Agenda 21 compromised for their politicians, surfing the System (Net), at the same time that they made contributions by means of the interactive spaces.

Innovation:

The construction on a platform web site, containing an informational system of the sustainable development, is a completely new approach in the interaction among politicians, citizens and municipal technicians (forums of discussion and citizens mails). The citizens can communicate in Net with their elected representatives, and politicians, depending on their agenda, will answer all questions brought up in very brief temporary periods (hours in the worst case).

There are not many previous cases of mechanisms allowing briefing in real time of the evolution of the municipal projects. This allows the municipal performance in a constant and continuous examination, showing the results in real time (good and bad).

The System is capable of relating any municipal performance with the municipal agreements approved or included in the agenda, as well as any application entered in the official registry of the town council. This allows to the town councillors to have any request, application or complaint related with their area of competence. This relationship is made in an automatic way and through some powerful search engines, which incorporate mechanisms of data protection according to the regulations currently in force. One of the improvements of the system consists of its easy adaptability in any instrument of strategic planning.

Capacity of transfer:

We have started off a system transferable to any other town that has a basic computer endowment. The possibility to adapt the System is only subordinated to the existence of a server web site capable of lodging a data base (oracle or access) and to the political will and technique of implementing a system of these characteristics. The system is capable of adapting any type of plan strategic subdivided in four levels of segregation (for example axes, areas, goals and performances) existing a fifth level that can be placed in the section "tasks" of the index card of the performance.

Contribution to the general goals of the conference:

The System of information of the sustainable development of Sant Boi obeys in its conception to the application of all the commitments of Aalborg+10 and the evaluation of results:

2 LOCAL MANAGEMENT TOWARDS THE SUSTAINABLE DEVELOPMENT

We compromise on implementing effective cycles of management, from its formulation until its implementation and evaluation.

Resumé:

The model followed in Sant Boi in order to solve in an only instrument the follow-up of the strategic plan of the Agenda 21, the information of the performances and the system of indicators, opened in real time to the citizens, it can be interesting for any technician or politician interested in efficient mechanisms of management of the Agenda 21 and in making easy and transparent its communication.

Further recommended reading: www.santboi.cat/plaagenda21/

C 03 Local sustainability in Europe supported by regional and national programmes

How to find a sustainable path to the future

Swedish Council for Sustainable Development

Albert Edman

Project development officers

Swedish Council for Sustainable Development

Box 7980
SE 907 19 Umeå
Sweden

Tel: +46 - 90 - 18 46 00
Fax: +46 - 90 - 19 46 29
e-mail: albert.edman@hallbarhetsradet.se
www: www.hallbarhetsradet.se

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Many Swedish authorities develop tools and methods to realise sustainable development. These tools often identify potential synergies and conflicts between social, economic and environmental interests and act as a basis for sustainable decision-making and governance. Examples of such tools are indicators, impact assessments and adaptation of entire organisations to promote sustainability. Several examples of tools and the results of a national survey of local activities towards sustainable development in Sweden are presented in an informative brochure.

Abstract:

Many Swedish authorities develop tools and methods to realise sustainable development. These tools often identify potential synergies and conflicts between social, economic and environmental interests and act as a basis for sustainable decision-making and governance. Examples of such tools are indicators, impact assessments and in some cases authorities adapt their entire organisation to promote sustainability.

Synapse – a tool for regional assessment

SYNAPSE, Systems Analytical Process oriented tool for Sector integration, is a tool developed by Region Skåne, a regional body in the south of Sweden. The tool offers a way

to practically work with sustainable development at several levels of society. It allows different sectors interests to be balanced against each other and from that identify which measures different sectors must take in order to optimise the conditions for a region to develop in a sustainable way. SYNAPSE will be available as an Internet based software tool in several languages.

City council in Aneby re-organised to promote sustainable decisions

In order to facilitate sustainable decisions, the local authority of Aneby restructured its political organisation in 2002. In doing so, the local authority cut down the number of boards to two. Aneby also streamlined its administrative organisation to four units. This has led to more integrated efforts. The understanding of different sectors needs has grown and led to more sustainable decisions. The concept has succeeded and spread to other local authorities in Sweden.

The Sustainable School Award

Schools and pre-schools can apply for The Sustainable School Award with the Swedish National Agency for School Improvement. The purpose of the title is to support and inspire sustainable development efforts all the way from pre-schools to adult education. A school must meet ten criteria to receive the title. The criteria cover both the role of leaders, administrators and initiatives by teachers to involve students and other employees. The title demands continual monitoring and can be coordinated with the school's overall quality reporting.

These and several other examples of tools and the results of a national survey of local activities towards sustainable development in Sweden are presented in an informative brochure.

Resumé:

Albert Edman

M.Sc. Chemical Engineering, B.Sc. Chemistry, working as Project development officer at the Swedish Council for Sustainable Development, with focus on regional and local development issues.

Further recommended reading: Download the brochure at:

http://www.hallbarhetsradet.se/upload/publikationer/Make_your_muni_webb.pdf

C 03 Local sustainability in Europe supported by regional and national programmes

"Social investments" - lifting the social dimension to the strategic level by a synergetic approach.

Gunnar Granberg

Lars Brännström

Project development officers

Swedish Council for Sustainable Development
Box 7980
7980 Umeå
Sweden

Tel: +46 - 90 - 18 46 04

Fax: +46 - 90 - 19 46 29

e-mail: gunnar.granberg@hallbarhetsradet.se,
lars.brannstrom@hallbarhetsradet.se

www: www.hallbarhetsradet.se

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Local efforts on social development are often reactive rather than strategic. In this project we used dialogues and a high level of participation to include the social dimension into the strategic thinking in 15 local municipalities in Sweden.

Abstract:

The purpose of this project was to improve strategic sustainability work at the municipal level. The project was constructed in accordance with our core values: participation and dialogue. In the first phase we asked strategists at the municipal level what would be the next challenge in their work with sustainable development? The most common answer was about how to incorporate the social dimension into the strategic work, and what to aim at when looking for Social Sustainability?

We thereafter invited 15 proactive municipalities to become forerunners and cooperate with us in a project which aimed at improving their strategic sustainability work by developing knowledge about

- what social sustainability can be
- how to work strategically with it
- understanding the relations between the social dimension and the economic and ecologic dimension of sustainability.

Next step was to conduct dialogues in each municipality. In each local dialogue representatives from the strategic, political and social level met up for a non governed dialogue about the local situation.

The results from all 15 dialogues were used as input to a forum where all the participants could meet and continue the discussion about social sustainability. Parallel to this a knowledge development process was initiated on the projects website.

Next phase in the project is to communicate results and continue the process, which this conference is one part of.

Some results

- A better understanding of the social dimension at the strategic level
- The representatives from the social sector empowered and truly incorporated into the strategic process
- A guidebook about how to work with social sustainability is under production
- National networks were created
- Designing and carrying through the project in accordance with the subject created positive vibrations and energy.

How to create a socially sustainable person?

Some of the results from the knowledge development about social sustainability can be visualised as a socially sustainable person.

Let's start from the bottom and connect the person to a sustainable earth taken care of in the ecological dimension of sustainable development.

A socially sustainable person has to rest on two legs. Empowerment gives the energy – people have to be powered to be able to create something. This has to be balanced by a wise leadership. We must relate to other people to avoid misguided use of the energy. Our society needs wise leadership on all levels. Not just at the top.

The main key to sustainability is participation. We are all social beings. To avoid negative effects of power from empowerment, think about the terrorists, who are empowered in some way, we need participation. We have to participate in the social project. This helps us to develop empathy and so on.

How to work towards a social sustainability? We need some concrete tools to put in the hands of the man. In one hand he holds his social networks and in the other hand the civil society.

Resumé:

Gunnar Granberg

Ph. D. in Soil Science, biologist and physical geographer, working as Project development officer at the Swedish Council for Sustainable Development, with focus on systems analysis and bridgebuilding between research and society.

Lars Brännström

has a background as an environmental officer at local level in the cities of Stockholm, Luleå and Umeå, working as Project development officer at the Swedish Council for Sustainable Development, with focus on sustainable traffic systems.

Further recommended reading:

C 03 LOCAL SUSTAINABILITY IN EUROPE SUPPORTED BY REGIONAL AND NATIONAL PROGRAMMES

Implantación de la Agenda 21 Local en Andalucía: Un análisis organizacional e institucional de los ayuntamientos andaluces del Programa Ciudad 21

Rocío Llamas Sánchez

Assistant Professor, PhD

Department: Organización de Empresas
Universidad de Granada
Street: Carlos V, 35, 3ºD
52006 Melilla
España

Tel: 629929429

Fax: 952691248

e-mail: rllamas@ugr.es

www:

Executive Summary of your Abstract:

Se presenta el avance de un análisis sobre la implantación en los municipios andaluces de la A21L, estudio realizado para el programa de sostenibilidad urbana Ciudad 21, en virtud del contrato de investigación que la Universidad de Granada tiene firmado con EGMASA.

Abstract:

En este trabajo presentamos las conclusiones obtenidas tras la realización de un proyecto de investigación titulado "Los municipios andaluces y el desarrollo sostenible: Factores condicionantes" que este equipo de la Universidad de Granada presentó a la Consejería de Medio Ambiente de la Junta de Andalucía y se tradujo en la firma de un contrato de investigación con EGMASA, que nos ha brindado financiación y apoyo en todo momento.

Desde la Cumbre de Río donde surgió el Programa 21 y en cuyo capítulo 28 se animaba a las autoridades locales a crear su propia Agenda 21 Local (A21L), los ayuntamientos de todo el mundo han ido adquiriendo un papel relevante en los procesos sostenibles de sus ciudades y pueblos. Es el caso de los municipios andaluces que han recibido el impulso de la Junta de Andalucía a través del Programa Ciudad 21 cuyo objetivo es mejorar sustancialmente la calidad del medio ambiente urbano, en el marco de las iniciativas que

fomenten un desarrollo sostenible, para lo cual brinda su apoyo y asesoramiento técnico a las ciudades andaluzas que manifiesten su compromiso de crear un plan de acción local hacia la sostenibilidad fomentando la participación ciudadana.

El objetivo del presente trabajo ha sido hacer un análisis de la situación particular de Andalucía en cuanto al desarrollo sostenible y la implementación de las A21L en los diferentes municipios que se han adherido al Programa Ciudad 21, identificando tanto los factores organizacionales como institucionales favorecedores de su adopción, así como las dificultades y los retos con los que se enfrentan actualmente a la hora de "llevar los compromisos a la calle", tal y como señala el lema de esta Conferencia.

La metodología seguida se puede dividir en tres fases: Recopilación y análisis de información de un gran número de fuentes documentales con el objetivo de partir del estado actual de la cuestión; una segunda fase que ha consistido en la realización de una investigación exploratoria in situ sobre el estado de desarrollo de la A21L en trece ayuntamientos, donde quedaban representadas las ocho provincias andaluzas; una tercera fase en la que se ha llevado a cabo un estudio de campo mediante un cuestionario estructurado enviado a los 111 ayuntamientos adheridos al Programa Ciudad 21.

Las principales conclusiones obtenidas muestran como principales retos: continuar trabajando para mejorar los procesos de participación involucrando a todos los grupos de interés relacionados con el municipio desde el inicio de la adopción de la A21L; intercambiar las experiencias entre los ayuntamientos creando redes sostenibles y celebrando jornadas, seminarios, etc. que favorezcan la difusión del conocimiento; definir una estructura organizativa que consiga la integración sectorial entre las diferentes concejalías de los ayuntamientos; mejorar el contexto interno de los ayuntamientos para que impulsen el cambio y la innovación; conseguir el apoyo y la colaboración de las diferentes administraciones e instituciones; desarrollar un liderazgo de apoyo a la A21L que cree una cultura y un clima propicio para la innovación impulsando la aceptación de la A21L. En definitiva, seguir trabajando por la eficacia en la implementación y la eficacia de la innovación que supone para el ayuntamiento un proceso de A21L. Así finalmente se conseguirá el objetivo común de la consecución del desarrollo sostenible.

PERFIL PROFESIONAL DEL PONENTE: Profesora del departamento de Organización de Empresas de la Universidad de Granada. Doctora por la Universidad de Granada desde junio de 2005 con la tesis titulada "Un análisis institucional de la implantación de la Agenda Local 21 por los ayuntamientos españoles". Como líneas de investigación destacan los estudios organizativos, teoría institucional, gestión pública, sostenibilidad y medio ambiente. Autora de diversas publicaciones e investigadora principal y colaboradora de proyectos de investigación con entidades públicas (EGMASA, Consejería de Economía, Empleo y Turismo y Consejería de Medio Ambiente de la Ciudad Autónoma de Melilla, Programa Equal de la Unión Europea, Plan Nacional de I+D).

Resumé:

El equipo investigador está compuesto por profesores doctores de la Universidad de Granada, cuya investigación e interés se centra actualmente en la sostenibilidad de las ciudades y en la Agenda 21 Local.

Further recommended reading:

C 03 Local sustainability in Europe supported by regional and national programmes

Adriatic Action Plan 2020: sustainability in a fragile region

Piero REMITTI,

Director

Environment and EU sector
Municipality of Ancona
Via Frediani, 4
60124 Ancona
Italy

Tel: +39.071.207.2757

Fax: +39.071.207.2757

e-mail: piero.remitti@comune.ancona.it

www: www.aap2020.net

City Profile*: Forum of Adriatic and
Ionian City and Towns,

* only relevant if city/local government is presenting

Short city/region profile:

The Adriatic sea is an articulation of the Mediterranean sea, between the Italian peninsula and the coasts of Slovenia, Croatia, Bosnia-H., Montenegro and Albania. It is around 800 km long and on average 150 km large, with a total surface of 132mila km².

Number of inhabitants:

around 45.000.000 in the basin (2/3 from Italy)

Social, economic and environmental background:

The Adriatic region (meaning the Adriatic sea basin, including all watersheds) is characterised by deep differences between east and west coasts. On east coast (Slovenia, Croatia, Bosnia-H., Montenegro, Albania), you have not so high concentration of population, lower-middle income regions and often very good quality of environment. Main activities are given by agriculture, fishery and (extensive) tourism. Only very rare urban and industrialised centres. Otherwise, on the west coast (Italy) you have very high concentration of population (mostly urban) and high income regions, based on commercial and industrial activities (mainly in north-side) and high-density tourism and "loisir" infrastructures. All over the region freights (and passengers in summertime) maritime transports are very intensive. As a consequence, quality of environment in northern Italy is becoming lower and lower, being seriously threatened also in southern regions.

Summary:

Adriatic Action Plan 2020 as operation aiming to disseminate all over the Adriatic region a common approach to local sustainability

Executive Summary of your Abstract:

The Aap2020 (Adriatic Action Plan 2020) project, co-funded by Interreg 3c programme, is aimed to define, spread and practice (within 2020) an Adriatic sustainable lifestyle. 21

partners coming from the 6 different countries of the Adriatic area, supported by 6 European partners involved in the project with specific technical tasks, have applied in a common way the LSD (Local Sustainable Development) set of tools, focused on ACI (Adriatic Common Indicators) set, whose regional-wide data bank represents the first benchmarked cities evaluation on Adriatic scale. The final results have been met last June 2006 in the Adriatic Sea Forum, a governance space, which elaborated the final Action Plan for the Adriatic of 2020, available, as the ACI data bank, on www.aap2020.net.

Abstract:

The Adriatic region, i.e. the whole basin of the Adriatic sea, in the south/eastern part of Europe, is a densely populated region. The coastal population is around 10 Ml peoples, most of which in the urban centres, but the whole population of the basin (including all river basins of the Padana Plains - Po, Adige - and the Neretva one, entering in the Balkanic peninsula), is around 45 Ml inhabitants, that are 57% of total population of the 6 countries overlooking the Adriatic sea (a few less than 80 Ml inhabitants). In summertime, that population increases up to 15-20% in a few weeks, meaning an antropic burden and major sweet (black) water flows able to completely change the chemical composition of the sea and causing various depletion phenomena, like eutrophication and so on.

As all over the world (but more than all over the world), in the Adriatic case there's a deep difference between "Political Region" and Ecological Region". The "political" layer includes six different countries, at least 5 languages and three religions, more than 30 administrative regions or counties and a lot of municipalities, with very different laws, roles and technical background, and an endless world of local and wider cultural identities. In one word, a wide diversity on the social point of view, that is in the same time the most important richness of the region, and its most recognised frailty. But the political (man-made) frameworks are laying upon an "ecological" structure, that is only one macro-ecosistem, given by all the watersheds providing water to the same sea: in other words, all the 45 Ml people living in this region, being so different by country, language, religion and so on, are anyway using the same water and sharing the same environmental resources, and have to address the same limits, given by the same ecological factors, mostly due to their sea's frailty. Definitively, the Adriatic sustainability is only one.

Why the Adriatic region should be so fragile? 1) The ecological frailty is given by the very shallow waters (max. 50 -100 mt. in medium/high Adriatico sea) and by the very slow water change cycle (it needs 300 years for the full cycle, Vs. 100 years of the Mediterranean sea). According to the ICZM basic principles, it must be considered as shore platform up to 150-200 mt. depth. In practice, between the two coasts the continental platform does not interrupt, and we think about the Adriatic as a huge lake, in which are travelling 1.820 "dangerous" ships per year, disseminated with oil-spills. But it's anyway the most bio-productive part of the Mediterranean sea. 2) The political (social) frailty. The war is over since a few years, but differences and difficulties in relationships are still deep: 6 different countries-laws-governments, (at least) 4 different languages and 3 religions (catholic, orthodox, Muslim), numberless local cultures. Very different regions living together since thousands years, with more conflicts than accordance, but also with very frequent exchanges and communications. In the global context, the Adriatic region is anyway a B region with too many unsolved contradictions, often unsafe, with a middle income (9.1118 eurs/pc/year, between 2.040 in Bosnia-H. and 26.280 in Italy), with a medium/high environmental quality due more to delays in development than to precise policies implementation (4.2 tons/pc of CO2 emissions, Vs. 8,3 in EU), and exposed in the next years to all risks of a quick development, more oriented to a quantitative growth than to a qualitative sustainable development. 3) Economic frailty. Even if the major economic development of the region strated up after the second world was on industrial basis, since many years tourism is the main economic resource if the area. But in this case tourism doesn't mean less impact. The "Holidays City" created in the Romagna area, whose environmental resources are today seriously depleted, should be intended as a "worst practice" on the sustainability point of

view, today unfortunately more and more pursued also in the east coast. But the ecosystem's limits are evident, the carrying capacity very low, and the tourism "Adriatic style" industry must become able to set off its enormous environmental resources, instead of to remove them. Climate changes are already seriously threatening ecosystems like the Venetian lagoon, an area with more than 3 ML tourists/year.

How are local governments working in this situation? They have very different roles and history, depending from their country: very strong and omnipresent central government on the east coast, with local authorities almost absent in the past. On the contrary, very high local pride and importance on the Italian side, that means important function for local governments also in the past, but always more oriented to defence and non-communication with any "external" enemy, starting from the central government. Those different historical background created a strongly unbalanced situation about functions, competencies, know-how, technical and political languages. Today you have various initiatives at central level, but very few experiences of cooperation and networking between local authorities of the Adriatic countries. Aap2020 is one of these, aiming to address this common chaotic background, establishing a common Adriatic Sustainability language by means of technical tools. How?

First of all, common numbers. Adriatic Common Indicators are the first local Adriatic databank about urban sustainability and benchmarking. To make an example, ACI 1.3 - Water consumption (l/pc/day) - shows data of great interest, showing a huge difference in the water resources management. Inside the Adriatic region, a citizen from Pescara uses daily more than 5 times the water quantity used by an inhabitant of the Salento (the extreme south of the Puglia region), and the inhabitants of the Ravenna Province use more than the double of water used by the citizens of Koper. If the data from Pescara could be anomalous, and anyway strongly conditioned by the network losses, the consumption of some Italian (Ravenna, Ancona, Venezia, le Marche) and Greek (Patras) cities seem to be anyway too high, above all if related to the water shortages nowadays afflicting the southern part of the Adriatic region, and to the possible future trends coming from the climate changes, with the high desertification risks for wide areas of the Mediterranean and Adriatic itself. More than 50% of partners (and between them also cities with advanced urban patterns) shows consumption largely lower than 200 litres/inh./day, demonstrating with a great evidence the wideness of possible improvements, feasible also without great investments in the short period. In this situation, priorities seems to be given by a) structural works and interventions (maintenance, separated networks, reuse of industrial waters, storage and reuse of rain waters, etc.) b) urgent education activities on water saving in all the cities with consumption higher than 200 litres/inh./day.

Then, governance procedures. The first Adriatic Action Plan for the year 2020 was defined by all partners on June 2006, and it's directly related to ACI issues. Always using as example the Water management, Aap2020 includes:

01. Improvement of groundwater and freshwater quality, stressing its character of common good, favouring their fair and rational use and protecting water tables from pollution.
02. Improvement and respect of the national laws
03. Definition of a Treaty about hydrographical basins management in Adriatic region
05. Reduction of the taking of water from wells
06. Elimination of sources of pollution of water table by means of sewage system completion
13. Promotion of the city drinkable water and reduction of bottled water consumption
14. Separated systems for drinkable/not drinkable water, to increase water savings
18. Collection and adequate treatment of any kind of waste waters (Ancona)

The actions now included in the first Aap2020 (www.aap2020.net to download the full version) must be intended only as starting point for new common projects, aimed to their full implementation. AapAgency and partners are hence operating to mobilise new partners and

activities, at EU and world-wide level, starting from their common methodologies (ACI) and strategies (Aap2020), and having learned that:

- Different languages can become an enormous problem, and its solution very hard to identify. We still need a common language.
- Today it's not true that "the Adriatic sea joins all together". On the contrary, it represents a strong barrier, and it's very different to born on the west or on the east coast. Furthermore, crossing the sea it's not so easy, in spite of its "proximity", above all in winter season. Cities have very different technical and cultural background, and there's a lot to do to build a common sustainable identity, with its markets and exchanges of competencies and practices.
- Aap2020 demonstrated that it's possible to overcome and integrate cooperation at central level, to start up a local governments network in the Adriatic are, able to work with a bottom-up diplomacy approach, applying new projects to any kind of international donors. First and most important emergency, the climate changes: our region is a very high risky region about this, but our cities are making almost nothing. Why?

Resumé:

PIER ROBERTO REMITTI

Education: Degree in Regional and Urban Planning, Venice, 1986

Present position: Project Manager of Aap2020 – Adriatic Action Plan 2020. Director of Environment and EU programs Department of the Municipality of Ancona, Italy (www.comune.ancona.it) since 2002. City responsible for the Masterplan for the prevention of environmental risks in the Area of Ancona (AERCA) by Marche Region (Italy). (<http://autoritambientale.regione.marche.it>)

- Local Agenda 21 Expert for MAM – Municipal Administration Modernisation – project (Syria, 2006/2008). Funded by the European Union and the Government of Syria, the MAM program aims to improve the quality and effectiveness of local governance in many areas of life. In this general framework, the project includes the implementation of Local Agenda 21 processes in the cities of Aleppo and Damascus, and the establishment of a Syrian cities network to support the introduction and dissemination of the Local Agenda 21 principles and tools (www.mam-syr.org).

- Technical consultant for the Forum of Adriatic and Ionian Cities and Towns (www.adriatic-ionian.org)

- coordinator of LA 21 processes in several Italian cities (Ancona, Modena, Parma, Maremma park, Colline Metallifere, etc.) since 1997 up to now - co-founder of Italian Association of Local Agenda 21 (LA21italy) and content provider for its website since 1997 up to 2003 - technical coordinator of EIA (Environmental Impact Assessment) procedures for Urban plans and projects in the city of Bologna (Italy , 1994 – 97) - project Manager and film director for the restoration project of Molentargius Ramsar wet areas in Cagliari (Italy, 1990).

Further recommended reading:

Adriatic Action Plan and all related documentation, available on www.aap2020.net, Ancona 2006

MCSD, Mediterranean Strategy for Sustainable Development, Athens 2005

Eugenio Turri-Daniela Zumiani, Adriatico mare d'Europa, Rolo Banca 2001

Fondo Mole Vanvitelliana, Io Adriatico, Ancona 2001

F.Braudel, Il Mediterraneo. Lo spazio, la storia, gli uomini, le tradizioni. Milano, 1987

Ivo Andric, The Drina bridge, Milano 1968

C 03 Local sustainability in Europe supported by regional and national programmes



Banque de données des Agendas 21 locaux et des pratiques territoriales de développement durable

Presentation of database of the national Observatory on local agenda 21 an territorial sustainability
www.dd-pratiques.org (France)

Name Charlotte RENARD

Function/Title Responsible for territory and local agenda 21
Association 4D
Cité européenne des Récollets 150-154 rue du
Faubourg Saint martin
F-75010 - Paris
France

Tel: +33 1 44 64 75 02

Fax: +33 1 44 64 72 76

e-mail: crenard@association4d.org

www: www.association4d.org ; www.dd-pratiques.org

Executive Summary of your Abstract:

Association 4D and Comité 21 (2 national networks on sustainable development in locals authorities in France), the French Mayors' Association (AMF) and France's Ministry of Ecology and Sustainable Development have worked together to create a National Observatory on Local Agenda 21 and Territorial Sustainability. This Observatory aims to become a real tool for information sharing, and act as a support to local authorities in their implementation activities.

The Observatory's first activity has been, in 2006, to launch a database — www.dd-pratiques.org — (led by 4D on behalf of the project's four partners) which to this day contains 136 communities' reports, provides qualitative information on Local Agenda 21, territorial practices and projects relating to sustainable development. The contact details of those leading the local projects as well as downloadable materials (evaluations, action plans, awareness-raising documents, etc.) are available. French local authorities fed information into the database on a voluntary basis.

Abstract:

Context

During the Rio Earth Summit, France committed to a National Sustainable Development Strategy, which was launched on June 30, 2003. One of the commitments made within this strategy was the setting-up of 500 Local Agenda 21s between 2003 and 2008.

In order to support this process, Association 4D, Comité 21, the French Mayors' Association (AMF) and France's Ministry of Ecology and Sustainable Development have worked together to create a **National Observatory on Local Agenda 21 and Territorial Sustainability**. This Observatory aims to become a real tool for information sharing, and act as a support to local authorities in their implementation activities and to promote and support the implementation of Local Agenda 21 initiatives, as well as all other types of territorial sustainability practice and project.

Today, over 200 Local Agenda 21s—at all levels—have been launched by local authorities. Sustainable-development initiatives on the larger, territorial scale have become more numerous over the past few years.

The Observatory's missions are to:

- Capitalize and disseminate tools and territorial practices on sustainable development,
- Network among various stakeholders at different territorial levels
- Meet their requirements and offer solutions.

The steering committee, comprised of public institutions, local authorities and NGOs, actively work together to achieve the Observatory's stated goals.

The Observatory's first activity has been, in 2006, to launch a database — www.dd-pratiques.org — led by 4D on behalf of the project's four partners

The database, which to this day contains 136 communities' reports, provides qualitative information on Local Agenda 21, territorial practices and projects relating to sustainable development. The contact details of those leading the local projects as well as downloadable materials (evaluations, action plans, awareness-raising documents, etc.) are available. French local authorities fed information into the database on a voluntary basis.

Today, another tool exists that is complementary to the Observatory: the French Local Agenda 21 portal, - www.agenda21france.org led by Comité 21 in partnership with several institutional and non-profit partners.

These two tools together are harmonized with the national Local Agenda 21 guidelines published by the French Government (see www.ecologie.gouv.fr).

The Observatory's database is:

- **A Local agenda 21 and territorial practices panorama,**
- **An information-sharing network regarding the different experiences** in order to help develop methodological tools,
- **A collaborative web** between local authorities and project partners,
- **An online resource centre** that contains documents that showcase the projects pursued by local authorities.

Content and method:

Data has been collected thanks to an online questionnaire accessible between February and September 2006. Local authorities have voluntarily agreed to exchange information on their respective experiences when they join the database.

Each experience fact sheet contains detailed information on:

- The project's history, the current situation and the approach taken,
- The internal organization,
- The partnerships that have been engaged in, leverage points for action, and the obstacles encountered,
- The participation process,
- The actions that have been implemented.

Data links:

The database is a dynamic tool that takes projects' evolution into consideration. For this reason, it is expected that the questionnaire will be online for a certain amount of time on a yearly basis in order to incorporate the latest projects and to update the existing information fact sheets.

Contacts

Charlotte Renard (banque de données www.dd-pratiques.org) crenard@association4d.org

C 03 Local sustainability in Europe supported by regional and national programmes

Actions to promote sustainable in the regional Lombardy territory with Regional LA21 Coordination

Anelisa Ricci

Environment Quality Department

Unit "Reduction emissions in atmosphere and Sustainability environment"

Lombardy Region

via Taramelli, 12
20124 Milano
Italy

Tel: 02 67658307

Fax: 02 67654857

e-mail: Anelisa_Ricci@regione.lombardia.it

www: www.svilupposostenibile.regione.lombardia.it

City Profile*: Lombardy Region, Italy

* only relevant if city/local government is presenting

Short city/region profile:

Lombardy Region is situated in the northern Italy at the crossroad of important Trans-European Networks: the East – West corridor between the Balkans and the Iberian Peninsula and the North – South corridor between Continental Europe and the Mediterranean.

Number of inhabitants:

9,475,202 inhabitants

Social, economic and environmental background:

Lombardy Region is one of the four motors of Europe.

It is the 4th largest Italian region and the most populated, with a GDP about 21% of the national GDP. It has a number of enterprises about 15% of the national number of enterprises and a productive sector in which co-exist a number of great, medium and small enterprises; in the Region are located 800 national and multinational companies. The 36% of GDP is produced by the industrial sector, the 62% by the service, the 2% by agriculture. Craft is also very important, contributing to about 1/6 of the total regional economy and to about the 18% of the national craft production. Lombardy is the most important Italian financial market, import sector covers the 40% of the national import and export covers the 30% of the national export. Its territory includes both natural and industrial areas.

Summary:

Executive Summary of your Abstract:

Since many years, the Lombardy Region Government promotes a complex range of activities to foster environmental sustainability, through awareness raising and best practice spreading among Local Authorities.

The approach is strategic and focussed on a selected number of themes in the framework of the regional major environmental criticisms and the Aalborg Commitments (Better mobility less traffic, Responsible consumption and lifestyle choice, Local to global, ...). All the actions developed aim to spread tools for sustainability (LA21, Environmental Management Systems, Green Public Procurement; Sustainable Local Plans and Programmes, Environmental Accountability) involving a large number of local authorities in the Region.

Key aspects for the success of the initiatives undertaken are the complementarity and synergy among different activities (promotion, financial support to local authorities, training and technical support, dissemination and best practices diffusion) and among financial resources (European Union Structural Funds and regional funds).

Abstract:

Since many years, the Lombardy Region Government promotes a complex range of activities to foster environmental sustainability, through awareness raising and best practice spreading among Local Authorities.

Lombardy is the Italian region with the greatest number of local authorities that have activated Local Agenda 21 processes: over 120 processes – the 21% of the national total number - involving more than 260 Local Governments (towns, provinces, parks) and covering 4.942.327 people (the 54,25% of the regional population). From 2002 to 2006, the Lombardy Region published 5 announcements, both with regional funds and European funds, funding 133 local authorities. A sample of the financed projects is currently subjected to monitoring and evaluation.

In order to further support the diffusion of tools for sustainable development in Lombardy, the "LA21 Regional Coordination Unit" was created in October 2004, with the participation of more than 80 local authorities committed in sustainability practices. Since march 2005, the LA21 Regional Coordination Unit cooperates with Environment Quality Regional Department in order to promote sustainable local development policies backing up the creation of networks between local authorities, the development of guidelines, the exchange of best practices.

The LA21 Regional Coordination Unit, together with the Lombardy Region activated five Working Group on the following subjects:

- Aalborg Commitments, working on targets and indicators for AC, public administration policies, scenarios and challenges facing local authorities;
- Green Public Procurement (AC n. 4), working to define a minimum set of sustainable criteria for ICT equipment, under the provisions of Air Quality and Greenhouse gases emission reduction regional law (see below);
- Sustainable mobility (AC n. 6), aiming at building up the necessary tools for the Observatory of sustainable mobility, such as a set of indicators (O.S.I.M.O.S. national project) and the assessment methodologies for mobility policies;
- Environment Management Systems (EMAS II), sharing experiences among local authorities and investigating synergies between EMS and different tools for sustainable development;
- Energy Efficiency (AC n. 10), promoting energy efficiency tools for local authorities, such as communal energetic planning and building regulations, certification and energetic diagnosis.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Besides the participation in the GPP LA21 Coordination Unit Working Group, the Lombardy Region is working at different levels to promote a green market of products and services and to back up sustainable production and consumption models.

Many initiatives were developed in this field, such as:

- Orientation and technical support for Objective 2 areas local authorities in the definition and management of GPP pilot projects. 22 out of the 46 local authorities involved in the project published GPP announcements;
- Participation in the National GPP Working Group, managed by the Ministry of the Environment and Territory;
- Financing communication projects for the promotion of GPP policies;
- Financing "GPP School" project, promoted by Cremona Provincial Government and addressing public officers. The school ran a basic and an advance course. The aim was to draw up "green" calls for tender and implement local strategy for green procurement. 56 Local Authorities participated.

Moreover, in the field of energy efficiency, it was developed the project "Training for Local Authorities and Local Action Plans for Kyoto" in partnership with A21L Regional Coordination Unit. After a first phase of training, attended by about 50 local authorities, it is currently ongoing the second phase aimed at the development of the tools necessary for local authorities to create their own "Action Plan for Kyoto". This phase involves 10 Local Authorities which are working to reduce their CO₂eq emissions.

Complementary to the actions addressed to local authorities, the Lombardy Region developed initiatives also at legislative and planning level.

In particular, concerning air quality and greenhouse gases, in 2006 it was proclaimed the law "Measures to prevent and reduce the atmospheric pollutants emissions in order to protect human health and the environment" (regional law n. 24/2006).

With an advanced inter-sector approach, the law establishes strategies and actions for industry, transport, energy production and consumption (especially for the civil sector), agriculture and forestry.

Public participation was carried out at different stages of the processes involving other institutions, such as Chambers of Commerce and Town Councils, and non institutional stakeholders, such as the environmental associations and the consumers associations.

In the field of energy and greenhouse gas emissions reduction, in 2006 the Lombardy Region drawn up the "Energy Action Plan", updating the 2003 regional energetic assessment and defining priority measures to improve energy efficiency and to develop renewable energy sources.

Resumé:

Anelisa Ricci

Graduated in architecture, she has been working in Lombardy Region since 1982, first in the General Management of Territory, then in the General Management of Transportation and Mobility and, since 2000, in the General Management of Environmental Quality.

Now she is the Regional Environmental Authority for Objective 2 structural funds (Single Programming Document - Lombardy Region - 2000-2006) and manager of the "Reduction of atmospheric emissions and environmental sustainability" Unit.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Local sustainability in Europe supported by regional and national programmes

Monitoring performances in local sustainability: issues and methods

Silvia Brini, Giorgio Cattani, Mario C. Cirillo, Patrizia Franchini, Patrizia Lucci, Marzia Mirabile, Emanuela Pace.

Silvia Brini

Coordinator of APAT Report on Environmental Quality in Urban Areas

Department

APAT - Italian National Agency for Environmental Protection and Technical Services

Via V. Brancati, 48

00144 Roma

Italy

Tel: +390650072214

Fax: +390650072986

e-mail: silvia.brini@apat.it

www: www.areemetropolitane.it

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

To verify the achievement of the objectives of Aalborg Commitments we need a shared and harmonized approach. After a review of the methods and approaches (particularly quantitative) presently developed and applied in various Countries, some considerations are presented with special reference to the monitoring of the performance of the Aalborg Commitments in some Italian urban areas.

Abstract:

Introduction

During the last few years we have witnessed growing interest on sustainable development processes worldwide. The development of a common framework, goals and sustainability indicator systems would be helpful in achieving a global vision and cooperative action towards sustainability.

Moreover cities could be conceived as dynamic and complex systems or ecosystems, where the relationships among determinants, pressures, impacts and responses are typically non linear and are better described by complex multiple input-output feedback systems. Governing this complexity is not an easy task. Thus various international bodies, national governments, nongovernmental organizations and private sectors are involved in providing a set of indicators for monitoring the performances. Some characteristics are essential to set up a core of sustainable development indicators: they should facilitate cross-country comparisons by adopting the same framework systems and by referring to available data.

Objectives

The Aalborg Commitments are a practical and flexible tool to strengthen and revitalise ongoing local sustainability efforts. They need shared sustainability indicators and reporting systems to verify the achievement of the objectives. Local governments must undertake a baseline review within 12 months from the signature of

the commitments and then enter into a local target-setting process in consultation with citizens and stakeholders in order to develop within 24 months a local programme of action under the ten Commitment themes.

This work would be a starting point aimed to contribute to the international debate on a shared, harmonized and as far as possible quantitative approach to monitoring performance towards Aalborg commitments achievements.

Methods

A literature review of the methods and approaches presently developed and applied in various countries has been carried out.

We chose to analyse sustainable development indicators settled by international programs and based on a broad knowledge of sustainability issues, trying to select those fitting better with the Aalborg commitments.

Moreover the indicator set used by the Italian National Agency for Environmental Protection and Technical Services in the framework of the «environmental quality and human well being in the Italian urban areas» APAT project (www.areemetropolitane.apat.it) were reviewed aiming also to find those fitting better with the Aalborg commitments.

Lastly the different approaches used in monitoring the Italian cities' performances towards the Aalborg commitments, arising from the already available baseline review, were studied.

Results

Many indicator sets, specially suited for urban sustainability performance monitoring, have been realized mainly aiming to develop a common approach. Typically they are characterized by the presence of a core set or «pillar» indicators covering each main issue (such as air pollution, mobility, waste management etc).

The analysis of literature on sustainability performance indicators confirms that unique, internationally agreed, widespread, quantitative Aalborg commitments performance monitoring methods have not been developed yet.

It was not possible to link all Aalborg commitments and suggested targets with one or more sustainability performance indicators. This happens particularly for «governance», «urban management», «local action for health», «local to global», and to a lesser extent, for «vibrant and sustainable local economy» and «social equity and justice».

Several indicators could be linked to «natural and common goods», «responsible consumption and lifestyle choices», «planning and design» and «better mobility and less traffic» commitments. In this case agreement in harmonisations of measurement method and selection of core indicators or synthetic index are still needed.

We found that the indicators taken from the «environmental quality and human well being in the Italian urban areas» project mainly fitted with these last commitment set. The added value of this indicator set arises from the large effort for harmonisation carried out during the last three years between experts of the project steering group and the stakeholders. The aim was to establish a large dataset of the 24 main Italian cities' urban sustainability performances, which enable to measure their success in attaining their targets and to communicate the results of initiatives undertaken to their citizens.

The baseline reviews already published show a wide range of different approaches (qualitative, semi-quantitative and quantitative) used to monitor the performances. Moreover the tools used appear very different: from simple «yes or not» approach to deeper methods such as «emergy» or «exergy» analysis. Somehow these approaches could be used as a starting point for sharing the experience acquired.

Conclusions

We believe that the preliminary assessment showed in this paper could be a useful starting point, in order to get an harmonised and shared view on the ongoing progress towards sustainability. The challenge is to support the municipality efforts, to agree on a common method to verify the achievement of the Aalborg Commitments.

Resumé:

Silvia Brini, degree in Chemistry obtained first class of honours at the University of Rome, Italy. Head of the Sector «Urban Mobility» within the section «Urban areas»; responsible of the APAT project «environmental quality and human well being in the Italian urban areas»; coordinator for the APAT Report on «Environmental urban quality»; Italian member of the CAFE (Clean Air for Europe) Steering Goup; Coordinator of the working groups on air quality and on air emissions in the framework of the Italian Commission for the air pollution emergency of the Italian Ministry of Environment.

The most relevant competences include:

Urban metropolitan areas; environmental indicators of pressure, state and responses; atmospheric pollution.

Further recommended reading:

C 04 Session name: Support mechanisms for local climate protection actions

Title of presentation: MicroKyoto Project: A province is challenging its municipalities

Emanuele Burgin

Provincial Council Member
Environment Department
Provincia di Bologna
Strada Maggiore 80
I-40125 Bologna
Italy

Tel: +39-051/ 659 84 62

Fax: +39-051/ 659 88 10

e-mail: emanuele.burgin@provincia.bologna.it

www: <http://www.provincia.bologna.it/ag21/microkyoto.htm>

City Profile*: Province of Bologna,
Italy

* only relevant if city/local government is presenting

Short city/region profile:

The province of Bologna occupies an area that borders on the Apennines, dividing the Po Valley from peninsular Italy. Extending over an area that is one sixth of the Emilia-Romagna Region (370.219 km²), the province and capital of the Region comprises 60 municipalities.

Number of inhabitants:

949.591

Social, economic and environmental background:

The Province of Bologna is one of the most dynamic and competitive areas in Italy, with more than 88.000 companies. The industrial production is well-known for its high quality all over the world.

The University of Bologna is the eldest University at European level with more than 98.000 students enrolled and it is the expression of a dynamic and lively cultural and scientific environment. Significant results have been reached in many different research areas. There are more than 90 University Departments, apart from relevant research Institutes like CNR and ENEA, all playing a vital role in supporting and spreading innovation among local enterprises.

Summary:

Executive Summary of your Abstract:

Resulting from a Local Agenda 21 partnership, the project "MicroKyoto" aims at achieving the reduction of CO₂ emissions stated also in the of Kyoto Protocol by means of a bottom-up approach: acting at a local level and through the cooperation of the municipalities within a provincial framework. A voluntary agreement between the municipalities of the Province of Bologna commits the signers to plan and implement new actions for reducing CO₂ emissions. Signed in May 2006 by 25 municipalities, the Micro Kyoto has since been joined by four more municipalities in the province.

Abstract:

Background

Since 2000 the Assessorato all'Ambiente (Dept. of Environment) of the Provincia di Bologna has been promoting Local Agenda 21. The Local Action Plan was approved in 2002 and a number of partnership groups were formed to think out projects aimed at the implementation of the Local Action Plan.

The project "MicroKyoto" was first conceived in 2002 by the Local Agenda 21 partnership group and it was later financed by the Ministero dell'Ambiente.

The group that implemented this project was concerned due to the lack of interest that the Italian government (as many other national governments) displayed about the issues of Kyoto Protocol. They thought that the key issues of this agreement ought to be immediately addressed by national and local energy policies even if the Protocol had not yet come into force.

They deemed that the best way to raise awareness on those issues was to promote a voluntary agreement between the Municipalities of Provincia di Bologna, in order to reach the objectives of Kyoto Protocol at a local level.

The objectives of the project are:

- 1) To reach the Kyoto target of emissions reduction at a local level. The signature of the "MicroKyoto Protocol" commits the Provincia di Bologna and its Municipalities to plan and implement new actions aimed at reducing CO₂ emissions.
- 2) To create a database of the best practices for energy saving and efficiency implemented by the Municipalities of the Provincia di Bologna. In May 2006 the 6 best practices were selected and each awarded a prize (the prizes consisting in works of art created by the students of the secondary schools of art – Liceo Artistico and Istituto d'Arte di Bologna)
- 3) To analyze 6 buildings (approximately 20 households each), located in different areas of the Provincia di Bologna (Bologna and hinterland, mountains, hills and lowlands), to assess the energy features of the building (heating and cooling, building envelope, lighting etc) along with the energy consumption habits of the households that inhabit them (through personal interviews);
- 4) To raise public awareness about energy saving and efficiency;
- 5) To increase the participation of local governments, Ngos, enterprises and citizens in Local Agenda 21;

The Project

Since the starting date, a work group has been established, involving representatives of the Provincia di Bologna and all the Municipalities that agreed to take part in the project. This group has planned and promoted the actions and initiatives described.

The group also defined the contents of MicroKyoto Protocol, to have it approved by each Municipality.

From the official signature of the MicroKyoto Protocol (18th May 2006) to 2012, each Municipality will implement one or more new actions per year. A steering committee,

composed of a representative from each of the municipalities involved with the Provincia di Bologna, will make sure that the effects of each action in terms of Co2 reduction are measured, so that the overall progress towards Kyoto target will be available and communicated to the citizens on a regular basis.

Until now 27 municipalities and 1 "Comunità montana" have signed the Protocol. It is important to note that in these municipalities live over 70% of the population of the Provincia di Bologna.

Successful / useful tools in achieving the objectives:

- Participation: work groups; seminars; forum
- Awareness: newsletters; newspapers; radio; information points; surveys; leaflets ...
- Training: 10 seminars, held in 10 Municipalities on: 1) sustainable building; 2) energy from biomass; 3) renewable energy; 4) financial tools and opportunities for energy efficiency
- Dissemination / Diffusion: The project is still in progress, but it has already been presented at some conventions (TerraFutura 2005 – Firenze; Sana 2005 – Bologna; BICA 2006 – Venezia; ECOMONDO 2006 – Rimini). In November 2006 the Project has been awarded the prize 'Enti locali per Kyoto 2006', from the Ministry of Environment.
- Network: The workgroup involves Provincia di Bologna, 27 municipalities, 1 Comunità Montana, along with other non-institutional stakeholders. Besides, we are able to share our work with the other Local Agenda 21 groups that are members of the Italian network "Coordinamento nazionale delle Agende 21 locali italiane"

What is innovative:

- the network: about 30 municipalities are involved in a Local Agenda21 workgroup along with other non institutional stakeholders
- the estimate of CO2 reduction: a database has been created, listing the good practices implemented by the municipalities with a CO2 reduction estimate for each practice. About 35 good practices are already available at: <http://www.provincia.bologna.it/ag21/microkyoto>. A report will be issued yearly stating the contribution to CO2 reduction obtained by the Municipalities involved.
- the analysis of energy consumption habits of the citizens: 6 buildings have been analysed and 120 interviews realised about energy consumption habits of the households that inhabit them. 1200 forms, listing questions about energy consumption habits have been filled in by citizens of the 25 Municipalities involved
- the competition on energy saving. On 16 February 2006 (first anniversary of Kyoto Protocol) a competition has been held among the 25 Municipalities and some schools. The organisations that have saved the most energy in one office building using cost-free measures only (i.e. behavioural changes such as turning off lights, turning down the heating etc.) have been awarded a prize (energy saving light bulbs) (http://www.provincia.bologna.it/ag21/Microkyoto_16febr06.htm). The competition has later been extended to households and has recently been proposed to schools.

The project is repeatable wherever local governments are willing to apply a bottom up approach to Kyoto issues.

Resumé:

(Emanuele Burgin was born in 1960 in Como (Italy) and graduated in 1984 in Industrial Chemistry from the University of Bologna. In 1987 he joined the Chemical Industry in the Research Center of former Montedison Company and worked there for 17 years. His professional activity there was mainly dedicated to develop new plastic materials and additive packages, getting awarded as author of 7 patents registered at a worldwide scale. In 2004 he was nominated Council Member of the Province of Bologna and appointed to follow Environment and Territory Safety matters. In this new role, besides specific projects, he's been promoting plans for using and preserving environmental matrix such as air quality (completed) or waste management and water protection (under elaboration). In early 2006 he lead the Province of Bologna to obtain EMAS registration, being the largest Public Institution in Europe in receiving this award

Further recommended reading:

C 04 Support mechanisms for local climate protection actions

EL PLAN NACIONAL DE ADAPTACIÓN AL CAMBIO CLIMÁTICO

Concepción MARTINEZ LOPE

MINISTERIO DE MEDIO AMBIENTE
OFICINA ESPAÑOLA DE CAMBIO CLIMÁTICO
PLAZA SAN JUAN DE LA CRUZ s/n
28071 MADRID
SPAIN

Tel: +34 91 597 6781
Fax: +34 91 597 5982
e-mail: CMLope@mma.es
www: www.mma.es

Executive Summary of your Abstract:

Se presenta el Plan Nacional de Adaptación al Cambio Climático cuyo objetivo principal es la integración de la adaptación al cambio climático en la planificación y gestión de los distintos sectores socioeconómicos y sistemas ecológicos españoles. Un elemento clave del PNACC es la participación de todos los implicados en las evaluaciones de impactos, vulnerabilidad y adaptación al cambio climático, desde el nivel internacional hasta el local.

Abstract:

El Plan Nacional de Adaptación al Cambio Climático (PNACC) es el marco de referencia para la coordinación entre todas las Administraciones Públicas en las actividades de evaluación de impactos, vulnerabilidad y adaptación al cambio climático en España de los distintos sectores socioeconómicos y sistemas ecológicos.

Este Plan fue aprobado en julio de 2006 por la Comisión de Coordinación de Políticas de Cambio Climático y el Consejo Nacional del Clima, y el Consejo de Ministros tomó conocimiento del mismo el 6 de octubre de 2006. El Plan también se presentó en febrero de 2006 a la Conferencia Sectorial de Medio Ambiente, y fue sometido a un proceso de consulta pública en el que se recibieron diversas aportaciones y comentarios procedentes

de varias Comunidades Autónomas y organismos públicos así como de organizaciones no gubernamentales e interlocutores sociales.

La Oficina Española de Cambio Climático es la unidad responsable de la coordinación, gestión y seguimiento de la implementación del Plan Nacional de Adaptación.

El PNACC va a facilitar y proporcionar de forma continua asistencia a todas aquellas administraciones y organizaciones interesadas –públicas y privadas, a todos los niveles- para evaluar los impactos del cambio climático en España en el sector/sistema de su interés, facilitando los conocimientos sobre el tema y los elementos, las herramientas y los métodos de evaluación disponibles, con objeto de promover procesos de participación entre todos los involucrados que conduzcan a la definición de las mejores opciones de adaptación al cambio climático. En definitiva, el objetivo último del PNACC es conseguir la integración de la adaptación al cambio climático en la planificación y gestión de los distintos sectores socioeconómicos y sistemas ecológicos españoles.

El Plan se concibe como un proceso continuo y acumulativo de generación de conocimientos y de creación y fortalecimiento de capacidades para aplicarlos. En conjunto constituye una herramienta para los responsables de tomar decisiones relacionadas con la adaptación al cambio climático.

El enfoque del PNACC es una combinación de dos aproximaciones: top-down y bottom-up. Esto implica una cuidadosa y muy estudiada coordinación, que incluye la identificación de todos los actores y agentes sociales implicados en cada uno de los diferentes sectores y sistemas donde se lleven a cabo las evaluaciones de impactos, y el desarrollo de procesos participativos que lleven a incrementar la capacidad de adaptación.

Muchos sectores y sistemas ecológicos, económicos y sociales en España son vulnerables en mayor o menor medida al cambio climático. Sin perjuicio de que en una fase posterior se incluyan más, o se subdividan en varios, los sectores y sistemas que se integran en el PNACC son: Biodiversidad, Recursos hídricos, Bosques, Sector agrícola, Zonas costeras, Caza y pesca continental, Zonas de montaña, Suelo, Pesca y ecosistemas marinos, Transporte, Salud humana, Industria y Energía, Turismo, Finanzas - Seguros, Urbanismo y Construcción. En muchos de estos sectores las Administraciones locales tienen un importante papel en la planificación y gestión de los mismos y, por tanto, son actores clave para los procesos de evaluación de impactos, vulnerabilidad y adaptación al cambio climático.

El desarrollo del Plan Nacional de Adaptación se llevará a cabo mediante Programas de Trabajo a propuesta de la Oficina Española de Cambio Climático. El Primer Programa de Trabajo contempla 4 líneas de actuación en determinados elementos que se pueden considerar transversales a todas las evaluaciones de impacto en los distintos sectores y sistemas y en sectores considerados de elevada prioridad:

- Generación de escenarios climáticos regionales
- Evaluación del impacto del cambio climático en los recursos hídricos
- Evaluación del impacto del cambio climático en la biodiversidad
- Evaluación del impacto del cambio climático en las zonas costeras

La Red Española de Ciudades por el Clima es la Sección de la Federación Española de Municipios y Provincias (FEMP) que aglutina ciudades y pueblos comprometidos con el desarrollo sostenible y la protección del clima. Esta iniciativa ha sido posible gracias a que la FEMP y el Ministerio de Medio Ambiente establecieron en el año 2004 un Convenio de Colaboración institucional para poner en práctica iniciativas de prevención de la contaminación y el cambio climático, dirigido al impulso de políticas de desarrollo sostenible a nivel municipal y en el que se refleja la necesidad de establecer una estrecha colaboración entre otras instituciones y organismos públicos para impulsar estas actuaciones.

La Red contempla una serie de actividades a desarrollar, entre las que se incluyen:

- Condiciones mínimas para las compras de equipamientos municipales que favorezcan criterios de sostenibilidad.
- Campañas de sensibilización sobre uso eficiente de la energía.
- Reserva de suelo para plantaciones arbóreas y arbustivas incrementando las zonas verdes y de esparcimiento en las ciudades.
- Promoción de la arquitectura bioclimática en las nuevas ampliaciones de la trama urbana, así como en la rehabilitación de los edificios cuando sea técnicamente viable.
- Racionalización del uso y consumo de suelo.

La Red ha desarrollado muchas actividades cuyo objetivo es la mitigación del Cambio Climático (reducción de gases de efecto invernadero), entre las que pueden citarse el aprovechamiento energético de biogás producido en plantas de tratamientos de residuos, la producción de biodiesel y su uso en los transportes municipales, la sustitución del alumbrado público convencional por otro de alta eficiencia energética, la instalación de energía solar en edificios municipales, el desarrollo municipal de normativa para una mayor eficiencia energética, la educación y mejora en los hábitos de conducción que impliquen un ahorro energético, la puesta a disposición de la ciudadanía de parques de bicicletas que supongan un menor uso del transporte privado, etc.

Algunas prácticas concretas relacionadas con la adaptación al cambio climático que se están llevando a cabo en el marco de la Red de Ciudades por el Clima son acciones relacionadas con la sensibilización (publicación de revistas y boletines) y acciones destinadas a hacer un uso más sostenible de los recursos hídricos (mejora de la eficiencia de riego de jardines, gestión de la demanda urbana de agua, etc.)

C 04 Support mechanisms for local climate protection actions

Ambitious cities leading the way: ICLEI's Cities for Climate Protection (CCP) Campaign in Europe

Maryke van Staden

Project Officer Climate & Air

ICLEI - Local Governments for Sustainability
European Secretariat
Leopoldring 3
79098 Freiburg
Germany

Tel: +49 - 761 / 368 92 0

Fax: +49 - 761 / 368 92 79

e-mail: maryke.van.staden@iclei-europe.org

www: www.iclei-europe.org

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

ICLEI's Cities for Climate Protection (CCP) Campaign is an international growing movement of local governments committed to climate protection. This result-oriented framework supports the CCP participants - local authorities - in their planning and implementation of mitigation and adaptation activities.

As local authorities are increasingly becoming interested and active in climate protection, the European CCP campaign is expanding. It offers a range of interaction and support options, that are also explored in the Reinforced Strategy for the European Campaign (addressing both mitigation and adaptation) and the Stockholm Impulse Declaration. These documents form basis of a call for increased political commitment at a local level, and for more concrete action by local authorities in support of climate protection.

Many participating cities and towns of the CCP Campaign are ambitious, advanced and very effective in reducing greenhouse gas (GHG) emissions. Selected examples will illustrate how the basic steps from political commitment, to developing ambitious strategies and implementing actions, can be addressed at a local level. We invite all European cities and towns to join the CCP Campaign - learn and exchange experiences!

Abstract:

The Cities for Climate Protection Campaign was established in 1993 as an international campaign bringing together committed local authorities that are actively reducing greenhouse gas (GHG) emissions. Currently more than 800 local authorities around the world are participants in this campaign, including many large cities. The CCP Campaign is one of the largest local authority networks active in the area of climate protection.

The Reinforced Strategy for the CCP Campaign in Europe, launched in May 2006 to revitalise the process in the region, has been expanded to not only address climate protection through mitigation measures, but also to include adaptation. As a result there has been increasing interest in the European Campaign, with several local authorities requesting involvement.

The Campaign provides a network and framework for action - engaging local governments to accelerate the integration of sustainability and GHG reduction targets into their decision-making and implementation processes. Through clear GHG reduction targets and a plan of action CCP participants can take effective steps in support of climate protection and also to improve community resilience against inevitable climate change.

Participation in the Campaign is open to all local authorities in Europe - the EU-27 region and the area beyond that falls within the responsibility of ICLEI Europe (including the Newly Independent States and the Middle East). The basic requirements are confirmed political commitment to climate protection, with a senior political representative (the Mayor or Vice Mayor for the Environment) to sign the Reinforced Strategy document.

Secondly the new participant is requested to endorse the aims and objectives of the Cities for Climate Protection (CCP) Campaign, and to pledge to undertake the following CCP Five Milestone process:

1. Establish an inventory and forecast for key sources of GHG emissions in the corporate (municipal) and community areas, and conduct a resilience assessment to determine the vulnerable areas based on expected changes in the climate.
2. Set targets for emissions reduction and identify relevant adaptation strategies.
3. Develop and adopt a short to long term Local Action Plan to reduce emissions and improve community resilience, addressing strategies and actions for both mitigation and adaptation.
4. Implement the Local Action Plan and all the measures presented therein.
5. Monitor and report on GHG emissions and the implementation of actions and measures. Reporting of the first results is required at the latest within three years of becoming a participant in the Campaign:

An additional unique opportunity offered through the Campaign to gain increased visibility, is by acquiring the status of 'CCP City of Ambition'. This is applicable to those local authorities that have committed to ambitious targets (e.g. higher than the national targets; zero CO₂ by 2050). The status is provided for a five-year period, with the local authority provided with the use a distinctive logo to present its status, for example in publications, presentations and on its website. The CCP Cities of Ambition will also receive visibility through ICLEI actions – e.g. their targets will be presented on the CCP Europe webpage, a link to their website will be added, and information on their political commitment and good practises will be presented by ICLEI/CCP at international events.

Resumé:

Maryke van Staden addresses climate change adaptation, as well as sustainable energy in built environment and mobility (projects and research) at the ICLEI European Secretariat. She co-manages the European Cities for Climate Protection (CCP) Campaign, and is

involved in implementing the Harmonised Emissions Analysis Tool (HEAT) in Europe, to support local authorities that intend to track and reduce greenhouse gas (GHG) emissions.

Specific projects she is involved in include the Local Renewables Model Communities Network (LR); Sustainable Energy Systems in Advanced Cities (SESAC); and the Biofuel Cities European Platform (Biofuel Cities).

Previous work experience includes heading the Projects Unit of the International Solar Energy Society (ISES), addressing a wide range of renewable energy sources. Further to this Maryke has 10 years research and analysis experience in the field of international politics working with the South African government. She obtained an honours degree in International Politics from the University of Pretoria, South Africa in 1991.

Further recommended reading:

www.iclei-europe.org/ccp

www.local-renewables.org

www.concerto-sesac.eu

www.biofuel-cities.eu

C 05 Local sustainable energy policies for the built environment

Ecoabita: large scale implementation of EPB directive on the Mediterranean area

Paolo Ferri

Chief Energy dept.

Environment and energy dept.
Province of Reggio Emilia
Piazza Gioberti, 4
42100 Reggio Emilia
Italy

Tel: +39 0522 444 250

Fax: +39 0522 444 248

e-mail: p.ferri@mbox.provincia.re.it

www:

City Profile*: Province of
Reggio_Emilìa, Italy

* only relevant if city/local government is presenting

Short city/region profile:

The Province of Reggio Emilia is located at the heart of the region Emilia-Romagna. The landscape is diverse: vast lowlands in the north, where Po, the longest Italian river, flows, the Apennine Mountains in the south, whose highest peak is Monte Cusna (2.150m). The province of Reggio Emilia covers a 2,292 Km2 area (equal to 10.4% of the Emilia Romagna region), with 45 municipalities divided into 6 districts.

Number of inhabitants:

450.000

Social, economic and environmental background:

The Province of Reggio Emilia represents one of the main centres for Italian economy. It is a typically industrial province with a widespread and deeply rooted entrepreneurial tradition, with high competition skills on international markets and an high rate of productivity. Similarly to the rest of the Emilia-Romagna region, the industrial organisation of the province is characterised for the presence of so-called "industrial districts", that is, a high concentration of companies belonging to the same production sector within a limited area.

One of the main district is the mechanical industry, especially agricultural machinery; construction, agriculture, food industry and textiles-clothes industry also play an important role in the local economy, and employ more than 70% of the local workforce.

Local authorities have been providing efficient social services, especially in the field of education.

ReggioChildren is the public-private enterprise renewed worldwide for management of kindergartens, nursery schools, and for promoting international exchanges with teachers, scientists, and researchers.

Parmigiano Reggiano: More than 30% of the total production of Parmigiano Reggiano comes from the

Province of Reggio Emilia.

Summary:

Executive Summary of your Abstract:

The ECO_ABITA project aims at the first large-scale implementation of the European Directive 2002/91/CE on energy savings in building. The project will affect 800.000 buildings and 4.000.000 inhabitants. The province of Reggio Emilia and its municipalities are testing this new policy on their territories. Universities, SMEs, local energy suppliers, as well as representatives of professional associations and consumers are involved

Abstract:

Ecoabita is the whole of administrative measures, incentives, technical specifications, communication campaigns, and training at all levels, that can allow the take off of the 2002/91/CE Directive (Energy performance of Buildings) on a large scale on the Mediterranean Area.

The high levels of energy consumption have by now proved to be one of the major causes of the climate change. As the EU often stresses, there is wide room both for institutional and private actors to improve energy efficiency, especially in private and public buildings.

Also, implementation of 2002/91/CE means reduction of energy consumption and atmospheric pollution, reduction of domestic energy bill, opportunity of economic development.

On this wake, and also in respect of the European Directive 2002/91/CE on the energy performance of buildings, and implementing laws and regulations (e.g.: Emilia-Romagna Regional Law n. 26, 23rd December 2004 for Italy), the Province of Reggio Emilia, the Municipality of Reggio Emilia, the Regional Government of Emilia Romagna, the Municipality of Bagnolo in Piano, and ACER (public company managing the popular residential building estate), reached local agreement in November 2005 to set up and test on the territory of Province of Reggio Emilia all the measures for the implementation of the 2002/91/CE Directive.

In July 2006, after having received formal sponsorship by the Ministry of Economic Development, the whole of measures were ready to be discussed with different groups of interests: enterprises and SMEs representatives, main gas and electricity supplier, consumers, etc. If implementing the EPB Directive was the main objective, to obtain the widest approval amongst all the involved subject was the key factor for the political level to support the change.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

The commitment of public authorities to create the necessary demand for low consumption houses, and so to boost the market by means of a massive communication campaign, training for designers, building contractors and civil servants, has been extremely important.

In particular, building contractors have become aware of the Energy Certification of Building as an economic opportunity, and not just a duty.

The ECOABITA incentives scheme applies both to new and existing houses, and foresees economic support in different degrees, depending on the type of new construction or retrofitting. In example, when the "A" class is reached, the main tax on house property is reduced for ten years, so to recover up to 15% of sustained costs.

This demanding economic effort is partly supported by obtaining avoided CO2 credits and selling them to the main gas supplier, or negotiating them on the CO2 market. Also, the White Certificates scheme is used (similar to the CO2 market but used only in Italy and UK).

Four authorities at different level (regional government, Province, main municipality and small municipality) were able to set a win-win situation, to have enterprises involved, to raise interest of citizenship, to create opportunities for new jobs.

On February 2007, 30 municipalities accounting for more than 75% of Province of Reggio Emilia inhabitants, joined the Ecoabita project, while Province of Modena (Neighbour Province, with more than 700.000 inhabitants) took commitment for bringing its municipalities to join.

By March 2007 the test period over the territory of Reggio Emilia will be almost at the end, and ECOABITA will be ready to be applied on a regional level, affecting 800.000 building and 4.000.000 inhabitants.

Problems related to summer cooling of buildings will be faced on a large scale in high density urban area for the first time.

Resumé:

School career: five-years mechanical engineer Degree at Università degli Studi di Modena; first half of fourth year was a six-month stage at Exeter University (Cornwall, UK) as a participant of European Erasmus Exchange Program.

Job career: Chief energy dept. of Province of Reggio Emilia, Italy. Consultant for local bodies in the energy efficiency field, designing European projects (SAVE, INTERREG IIIC,...), preparing administrative measures for implementation of 2002/91/CE directive. Formerly employed in the power transmission field, dealing with "eff" standards electrical motors, on-board inverter motors, ecc. Also employed in engineering company working in the pharmaceutical prod. plants, performing calculation, sizing, drawing, costs evaluation.

Personal interests: Travelling, international environment, continuous "maintenance" of most important friendships, reading, sports.

Further recommended reading:

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 05 Local sustainable energy policies for the built

Implementing advanced energy-efficient standards and renewable energy systems in the building stock of Hannover

Astrid Hoffmann-Kallen

Head of Climate protection unit
Environment and City greenspace
City of Hannover
Prinzenstrasse 4
30159 Hannover
Germany

Tel: +49-511-168-43500
Fax: +49-511-168-43689
e-mail: Astrid.Hoffmann-Kallen@hannover-stadt.de
www: www.hannover.de

City Profile*: Hannover, Germany

* only relevant if city/local government is presenting

Short city/region profile:

Head of the state of Lower Saxony, part of the Region of Hannover (1,1 Mio. inhabitants)

Number of inhabitants:

520.000

Social, economic and environmental background:

Leibniz University, Expo 2000, sustainable Kronsberg city district, climate protection programme since 1996, member of Climate Alliance and ICLEI

Summary:

Executive Summary of your Abstract:

Hannover and four other European cities (Malmö, Newcastle, Koszalin and Nantes) are taking part in the European Climate Protection Programme Concerto/act2. Hannover is implementing advanced energy-efficient standards and renewable energy systems in the building stock in three selected city areas.

Abstract:

Climate change and fuel shortages on the one hand and the worldwide increase in energy consumption and rising energy prices on the other have put the energy problem at the top of the agenda for policymakers and politicians.

The European Union recognised the interrelationship of these factors early on, and made it the basis of its energy policy and programmes. The cities of Europe are not named as the principle activists in this field, but the fact that over 80 percent of Europeans live in urban communities led the EU to realise that towns and cities could assume an important role in

addressing the energy issue. European Commission funding policy should be seen against this background. 'Concerto' is the most recent programme and will be continued in the new funding period, from 2007 to 2013.

The main activities within Concerto are demonstration projects aiming to present exemplary solutions to energy problems at this very important municipal level. Cities are called upon to devise and apply innovative energy concepts that increase the proportion of energy from renewable sources and concurrently make marked improvements in energy efficiency, particularly that of buildings. Innovative technologies should be used to minimise energy consumption and improve the quality of the housing.

The Concerto/act2 consortium which is managed by the City of Hannover was approved in 2004 along with eight others from the 42 applicants. With their act2 measures, focused on closely-defined city districts, the cities are pursuing a long-term objective: if they achieve the ambitious aims of act2, of retrofitting existing private and public buildings for energy efficiency, of promoting low-energy new buildings, and of using renewable energy sources in a city district, the experience and lessons learned can be applied to other districts. Such long-term effective programmes can, in years to come, halve the energy consumption of an entire city as a contribution to European Energy Policy at local level. In this sense, the act2 project is an especially important entry point to sustainable local energy policies.

Meeting such ambitious targets demands the involvement of all process stakeholders. These principally include the users and tenants of the buildings and apartments, property owners and developers, energy producers, local politicians and civic administrations, planners, architects and craft trades.

act2 Demonstration Measures in Hannover concentrate on typical 1950s and -60s apartment houses in the inner suburbs of Ahlem and Vahrenwald, Vinnhorst and Hainholz. Housing associations, as act2 partners, are applying an integrated energy concept for almost 300 apartments. Most of the buildings will be retrofitted to the German 'EnEV Neubau' standard for new buildings (25 % better than the basic national standard), and a small proportion modernised to achieve even better efficiency using Passive House components. The buildings in Vahrenwald will be connected to existing district heating lines; act2 partner Stadtwerke Hannover AG will generate the necessary thermal energy (1.100 MWh) from the nearby Stöcken heat and power station from wood pellets instead of coal. For the buildings in Ahlem, decentralised heat provision from a wood pellet boiler is planned. All construction work is accompanied by comprehensive support and advice to tenants. To exploit the energy saving potential of user habits to the full, property developers and tenants were informed individually about ways of saving on electricity consumption such as installing low-energy light bulbs, switching off standby devices and buying energy-efficient appliances.

Within act2, Hannover City Council is planning energy efficiency retrofitting of a school, converting the heating system in three buildings to biomass combustion. The main components of the renewable energy concept are presented by a wood energy centre to be set up by Stadtwerke Hannover, providing the Hannover Region with a reliable supply of wood pellets, wood chips and logs.

Further to the retrofitting measures defined so far, modernisation for energy efficiency along with renewable energy uses for detached, two-family and multiple-occupancy house owners are foreseen. Comprehensive press and public relations work will be carried out to attract clients for this part of the project.

Resumé:

Astrid Hoffmann-Kallen has worked for 15 years for the City of Hannover in the field of climate protection and energy issues. She is head of the Unit for Energy and Climate Protection and responsible for the Climate Protection Programme of Hannover and the EU Programme Concerto/act2 as coordinator.

Further recommended reading:

www.hannover.de

www.concerto-act2.eu

www.concerto-hannover.de

www.concertoplus.eu

C 08 Education and awareness raising for urban biodiversity

A National strategy in support of local action for biodiversity

Nieves Díaz García

Function/Title: Advisor

Department: Technical Cabinet

Organisation: Environment Ministry of Spain

Street: Plaza de San Juan de la Cruz s/n

Postal code city : 28071

Country: Spain

Tel: 00.34.91.597.62.37

Fax: 00.34.91.597.59.96

e-mail: ndiaz@mma.es

www:

Executive Summary of your Abstract:

The presentation will address some actions to improve the knowledge about biodiversity preservation among different actors.

Abstract:

INICIATIVAS Y PROYECTOS PARA CONSTRUIR CIUDADES SOSTENIBLES

EDUCACIÓN Y FORMACIÓN PARA EL DESARROLLO SOSTENIBLE

ESTRATEGIA NACIONAL EN APOYO DE LA ACCIÓN LOCAL PARA LA BIODIVERSIDAD

El 3 de octubre de 2006 el Ministerio de Medio Ambiente firmó un Convenio Marco de Colaboración con la Federación Española de Municipios y Provincias para la puesta en marcha de una estrategia común para la preservación de la biodiversidad.

Con la firma de este Convenio se dispone de un marco estable que permite la colaboración en el desarrollo de una estrategia que contemple acciones para la preservación de la biodiversidad, y específicamente, aquellas actuaciones que permitan dar respuesta a las demandas de los Ayuntamientos y de los diferentes sectores sociales para afrontar y desarrollar políticas municipales que mejoren el patrimonio natural y la biodiversidad local, así como la sostenibilidad en el uso de los recursos naturales y en particular, del agua, de

los hábitats de interés, del paisaje y de los dominios públicos hidráulicos y marítimo-terrestres.

En base a este Convenio, ambas partes, se comprometen a desarrollar políticas ambientales y acciones que sirvan de ejemplo para la puesta en valor y protección del patrimonio natural y de la biodiversidad local.

Entre las actuaciones que se están llevando a cabo al amparo de este convenio tenemos,

1. Apoyo técnico a municipios en el ámbito de las competencias asumidas. Entre estas acciones, se encuentra la puesta en marcha de acciones conjuntas de sensibilización, dirigidas a responsables municipales y a la sociedad sobre la Estrategia para la preservación de la biodiversidad y la sostenibilidad en el uso de los recursos naturales y la creación de una comisión bilateral para el análisis y desarrollo de los elementos básicos para establecer una Estrategia de preservación de la biodiversidad y de uso sostenible de los recursos naturales y del incremento del patrimonio natural y de la biodiversidad a nivel local.
2. Evaluación y seguimiento de las actuaciones. Se trabaja sobre:
 - un sistema de indicadores sobre el patrimonio natural y la biodiversidad local, así como sobre la sostenibilidad del uso de los recursos naturales.
 - Control, seguimiento y evaluación de los procesos de desarrollo de las Agendas locales 21 en los aspectos ligados al patrimonio natural y la biodiversidad.
 - Coordinación de iniciativas del Gobierno en materia de preservación de la biodiversidad.

Estas actuaciones se llevarán a cabo en estrecha colaboración con las Comunidades Autónomas y las Corporaciones Locales que tienen atribuidas sus competencias sobre la materia.

En base a este Convenio Marco de Colaboración, el Ministerio de Medio Ambiente, a través de la Fundación Biodiversidad y la Federación Española de Municipios y Provincias, están promoviendo la creación de la "Red de Entidades Locales +Biodiversidad 2010", así como la puesta en marcha de un concurso de incentivos a la recuperación de la biodiversidad.

Resumé:

Licenciada en Farmacia. Año 1981.

Inspectora del SOIVRE (Servicio Oficial de Inspección, Vigilancia y Regulación del Comercio Exterior).

Ministerio de Medio Ambiente desde Octubre de 2006.

Coordinador de Área. Responsable en el gabinete técnico de:

* La gestión de las ayudas a la Investigación, Desarrollo e Innovación de proyectos relativos a recursos naturales y conservación de los hábitats y ecosistemas, de la Secretaría General para el Territorio y Biodiversidad.

* Seguimiento de todos los asuntos relativos a la biodiversidad.

C 08 Education and awareness raising for urban biodiversity

Tilburg, the first European city signing up to the Countdown 2010

Name

Paul Scherrenberg

Environmental programme manager

Environmental Department

City of Tilburg
Stadhuisstraat 1
5000 AS Tilburg
The Netherlands

Tel: 0031135428061

Fax: 0031135428510

e-mail: paul.scherrenberg@tilburg.nl

www: www.tilburg.nl

City Profile*: City of Tilburg, The Netherlands

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

200.000

Social, economic and environmental background:

see summary

Summary:

Tilburg, with ± 200.000 inhabitants, is the 6th largest city in the Netherlands. The Netherlands, one of the smallest and most densely populated countries in the world. The city is located in the south of the country. Within the city's boundaries, there are ± 100.000 jobs, mainly in industry, commerce, financial services and logistics. Tilburg is also an important centre for education (University of Tilburg and various colleges), health care (2 hospitals) and culture. Tilburg values the natural environment and its biodiversity and was the first city to sign Countdown 2010. In 2005 and 2006, Tilburg was awarded the title of most sustainable city in The Netherlands.

Executive Summary of your Abstract:

Tilburg recognises the importance of biodiversity. To stop the degradation of biodiversity, local action is imperative and awareness a crucial start to get organisations and people involved. Since we signed the Countdown 2010 initiative, we have been active to involve other stakeholders. The number of cities and organisations joining the campaign is growing rapidly. Networking, awareness building and education have been essential elements in the success. What are the lessons learned here and what is still ahead of us?

Abstract:

In 2005 Tilburg was host to ICLEI's 4th European Conference on Sustainable Cities and Towns. At this conference, Tilburg drew attention to the issue biodiversity. Tilburg was the first city to sign the Countdown 2010 initiative. Our province, the Province of Noord Brabant was the first regional government to sign. Since then, the biodiversity movement has grown.

In cooperation with the province and other organisations, regional, national and international conferences have been held and networks been set up. Representatives of local communities, European regions, leaders of European institutions, and other stakeholders all conclude that biodiversity is the basis for people's lives and an important precondition for our well-being. There is great concern about developments that jeopardise the 'ecosystem services' which biodiversity provides, such as nutrition, natural flood control, possibilities for recreation and regulation of air and water quality. In Europe biodiversity is decreasing rapidly due to changes in land use. On top of that there are the negative effects of climate change on biodiversity

'Regions and local authorities should step up their efforts to halt the decline of biodiversity', was the main message of the latest international conference 'European regions as champions for biodiversity 2010 – Europe meets Brabant, Brabant meets Europe', held in Oisterwijk (the Netherlands) on 15 and 16 February 2007, and brought together 200 participants from 27 European countries.

During a Countdown 2010 signing event, 17 new parties signed the 'Countdown 2010 commitment', thus expressing their willingness to actively contribute to enhancing the quality of biodiversity and halting the decline of biodiversity by 2010. The Countdown 2010 initiative was launched by a partnership of governments and NGOs to create awareness about the importance of biodiversity and the 2010 target. The conference resulted in concrete recommendations on ways and means of putting the European biodiversity 2010 commitments into concrete actions at regional and local levels by learning from inspiring examples and views.

It was decided to develop a down-to-earth and bottom-up interregional European biodiversity programme, which will facilitate practical cooperation between regions and local authorities across Europe. During the conference various interregional biodiversity 2010 project concepts were elaborated, including on the interaction between landscape identity and biodiversity, climate change and biodiversity, and support to safeguarding biodiversity hot spots in Eastern Europe.

Besides being actively involved with biodiversity on a local and regional level, Tilburg has also joined a worldwide LAB-project: Local Action for Biodiversity. Under the ICLEI banner, 15 cities work together to push biodiversity a step further. The city of Capetown is lead partner.

Resumé:

Paul Scherrenberg, has a BSc in Forestry and Nature conservation, a MSc in Environmental Science and a MSc in Occupation Health and Safety. Worked for different NGOs nationally and internationally, has been an environmental and occupational health and safety consultant for industries and is presently working as environmental programme manager within the city of Tilburg, the Netherlands.

Further recommended reading: www.biodiversitybrabant.nl;
www.ecnc.nl

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 08 Education and awareness raising for urban biodiversity

La insularidad como un factor determinante de las estrategias de sostenibilidad en los espacios insulares

Moisés R. Simancas Cruz

Jesús Hernández Hernández

Professors Geography Department,

Department:Geography

Organisation:La Laguna University

Street: Campus de Guajara

Postal code 3871 City: La Laguna

Country: Spain

Tel: +3 922 317228

Fax: +3 922 327723

e-mail: msimancas@ull.es

www: <http://webpages.ull.es/users/moisiman/>

Executive Summary of your Abstract:

La insularidad constituye un rasgo de identidad territorial que dota a esos ámbitos espaciales de características específicas, únicas y permanentes que los hacen diferentes a los territorios continentales. A su vez, la acumulación de todos los elementos, características y procesos que conforman el hecho geográfico de la insularidad se plantea como una cuestión determinante que incide sobre cualquier estrategia de sostenibilidad proyectada para tales ámbitos territoriales. Sin embargo, en la práctica, tales estrategias se aplican sin considerar dicho hecho diferencial, aplicándose de manera similar a los ámbitos continentales. En este trabajo se presenta un análisis del impacto de los factores territoriales relacionados con la insularidad sobre el proceso de diseño de cualquier política, programa o proyecto de sostenibilidad a implementar en espacios insulares, prestando una atención especial a la dimensión ambiental de la misma.

Abstract:

Planteamiento del trabajo

La variedad de definiciones del desarrollo sostenible conducen a una variedad de mediciones, que pueden diferir en su nivel de aplicación de acuerdo con la posibilidad de su observación. En cualquier caso, la implementación de cualquier estrategia vinculada con el paradigma de la sostenibilidad implica per se la adaptación de la correspondiente política, programa o proyecto a la idiosincrasia del ámbito territorial en cuestión, siendo, por tanto,

necesario tener claro la pertinencia de lo que se quiere medir en función de la sostenibilidad del mismo. De esta manera, la aplicación de tales estrategias en espacios insulares implica su adaptación a los elementos, características y procesos que conforman el hecho geográfico de la insularidad, entendida como un rasgo de identidad territorial que dota a esos ámbitos espaciales de características específicas, únicas y permanentes que las diferencian de los territorios continentales, exigiendo un tratamiento y un procedimiento de toma de decisiones distinto, singular y de mayor complejidad al que se emplea en estos últimos.

Con una orientación básicamente conceptual y propositivo, más que estadístico, el presente trabajo tiene como principal objetivo sistematizar y conceptualizar los principales criterios y factores clave que desde la perspectiva territorial definen a la insularidad, con el fin de que sean considerados en los procesos de diseño e implementación de estrategias de sostenibilidad a aplicar en espacios insulares. Se trata, por tanto, de definir el impacto del denominado "hecho insular" sobre tales operaciones, en la medida en que sus factores estructurales suponen condicionantes diferenciales básicos y limitantes que hacen que los modelos, metodologías e indicadores de sostenibilidad convencionales no deban emplearse de manera estandarizada, procediendo a su aplicación ad hoc. La hipótesis de partida del trabajo es que los elementos clave del denominado "hecho insular" no se describen por las cifras o los indicadores de uso habitual en los análisis de la sostenibilidad de un determinado ámbito territorial; por el contrario, se trata de plantear una serie de parámetros conceptuales que, si bien hacen singular ese análisis en este tipo de ámbito geográfico, a modo de condicionantes territoriales, no deben entenderse como determinantes, a pesar que han condicionado la evolución y el desarrollo socioeconómico de estas regiones a lo largo de su historia. De este modo, las estrategias de sostenibilidad se van a ver decisivamente condicionadas por estos factores limitativos, a la vez que se produce una mayor dificultad en su definición. La relevancia de este trabajo radica en que, entre otras cuestiones, la superficie territorial de las veintiséis regiones insulares de la Unión Europea es de 109.423 Km², lo que representa un 3,4% de su extensión total, dando cabida a un 3,4% de la población de la misma.

Para ello, desde el punto de vista metodológico, este trabajo se articula en dos fases. La primera consiste en un inventario y una sistematización de los condicionantes territoriales de la insularidad a las estrategias de desarrollo sostenible en espacios insulares. Con el fin de aportar algo de contenido empírico —no especulativo— y dotar de una perspectiva aplicada a los diferentes enunciados generales planteados, la segunda parte supone la aplicación de tales criterios a la dimensión ambiental de la sostenibilidad de las regiones insulares de la Unión Europea; para ello, se procede a la utilización de grafos de interacción causa-efecto, en la medida en que, como una forma de representación de las cadenas de relaciones causa-efecto, se plantea como muy apropiados para profundizar en la identificación y comprensión de la incidencia de los mencionados condicionantes de la insularidad, facilitando el seguimiento de un proceso lógico de razonamiento.

Principales resultados:

Desde el consenso general acerca de la influencia de la insularidad en la configuración de ciertas especificidades regionales, los principales condicionantes territoriales diferenciales básicos del hecho insular que inciden sobre la dimensión ambiental de la sostenibilidad en los sistemas insulares que se proponen son los siguientes:

- La situación oceánica
- El alejamiento de los ámbitos continentales
- El aislamiento geográfico en su entorno
- El reducido tamaño físico
- La discontinuidad
- La fragmentación insular: "la doble insularidad"

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

□ La extraordinaria vulnerabilidad ambiental

Este catálogo puede aumentarse en otros aspectos más específicos correspondientes a ámbitos concretos, como los siguientes:

- a) Dificultades para la sostenibilidad en el transporte, tanto en la vertiente de la conectividad exterior como en la interior.
- b) Dificultades para la sostenibilidad de las actividades económicas en su dimensión ambiental y territorial, con difícil cómputo de las importantes externalidades asociadas.
- c) Dificultad para la definición de modelos territoriales y urbanos sostenibles.
- d) Dificultad para la planificación en la gestión de residuos sostenibles
- e) Dificultades en la sintonía entre las perspectivas de los ciudadanos de los principales problemas económicos, sociales y ambientales, y las respuestas que se hacen a ellos desde la planificación y gestión de las diferentes administraciones.

Further recommended reading:

ASÍN CABRERA, M.A. (1988): Islas y archipiélagos en las Comunidades Europeas, Tecnos, Madrid.

BROOKFIELD, H. (1990): "An approach to islands", en Sustainable development and environmental management of small islands, UNESCO, Paris.

CONSEJO ECONÓMICO Y SOCIAL DE CANARIAS (1996): "Precisiones metodológicas en torno a la insularidad", en La economía, la sociedad y el empleo en Canarias en 1995, Las Palmas de Gran Canaria, páginas 255-259.

HERNÁNDEZ, J. & SIMANCAS, M. (2003): "Canarias, región insular: la insularidad como condicionante en el análisis socioeconómico y territorial instrumentos de ordenación de espacios insulares", en CES, Informe 2002-2003, Consejo Económico y Social de Canarias, páginas 453-494.

ROYLE, S. (2001): Geography Of Islands: Small Island Insularity. Routledge.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

C 10 Sustainable development strategies in the Mediterranean region

PRACTICAL EXPERIENCES OF THE IMPLEMENTATION OF LOCAL AGENDA 21 – ENVIRONMENTAL PROTECTION PROGRAMME FOR MARIBOR

Dr. Vesna SMAKA KINCL

Director of the Environmental Protection Agency

Environmental Protection Agency
Municipality of Maribor
Slovenska 40
2000 Maribor
Slovenia

Tel: +386 2 22 01 445
Fax: +386 2 25 24 815
e-mail: vesna.smaka@maribor.si
www: www.maribor.si

City Profile*: Municipality of Maribor, Slovenia

* only relevant if city/local government is presenting

Short city/region profile:

Maribor is the second biggest Slovene city; with 114.349 citizens. It is the economic, cultural, scientific research, congress and a complete tourist centre of northeast Slovenia. It is also a traffic centre, as it is on the crossroads from west to east and southern Europe, just 11 km from the Austrian border.

It has a continental position at 275 metres above sea level lying between Pohorje, Slovene hills and Kozjak on the gravelly terraces of the River Drava. Or more simply said it lies in the green embrace of Pohorje and the wine growing hills along the River Drava.

Number of inhabitants:

114.349

Social, economic and environmental background:

During the 1980s and 1990s the city of Maribor was a major industrial city. After independence in 1991 we witnessed bankruptcies, which affected also big companies. This resulted in great unemployment and some social problems. At the end of 1990's the city started to develop tourism, service and university capacity. The state of environment gradually improved from critical pollution to the state of environment today, which reaches all EU environmental standards.

Summary:

City of Maribor gradually developed from the city with economic and social problems in the 1980's and beginning of 1990's to the city which reaches all EU environmental standards. Tourism, service and development of educational institutions now substitute industry. One of the major turning points of the environmental awareness raising of the Maribor citizens was the preparation and implementation of the document Local Agenda 21 – Environmental Protection Programme for Maribor in the widest democratic way.

Executive Summary of your Abstract:

The Municipality of Maribor adopted Local Agenda 21 - Environmental Protection Programme for Maribor (LA 21 - EPP for MB) in 2001. In 2005 we have prepared an integral Report on the state of the environment in the Municipality of Maribor for 2002 to 2004. In the beginning of 2006 we have prepared evaluation of the implementation results of LA 21 - EPP for MB.

Abstract:

During the 1970s and 1980s, the city of Maribor, as the second biggest in Slovenia, was a major industrial centre with textile, chemical, automotive, metallurgical, food-processing and wood-processing industries. Due to the lack of environmental laws of the time, the city was faced with numerous environmental problems. Critical pollution levels of air, ground water (as a source of drinking water, resulting in an emergency situation in the supply of drinking water), noise, soil and surface water were exceeded, and many illegal dumping sites for municipal as well as hazardous waste emerged. Following independence in 1991, we witnessed ownership transfers, the reform of technological processes and bankruptcies, which affected small as well as large industries. These changes, and the gradual harmonisation of national and municipal legislation with EU guidelines, resulted in a gradual improvement of environmental conditions during the 1990s.

In 1978 the environment monitoring was established in Maribor. First data from the monitoring of environment pollution – air quality, quality of drinking water and groundwater, showed critical pollution levels of natural resources in the 1980's and in the first half of the 1990's. To monitor the state of the environment means to follow and supervise the environment through systematic measurements or other methods and related procedures. Database of emission and immission monitoring is used for:

- analysing the state of the environment and the trends
- evaluation of the results of the implementation Local Agenda 21 – Environmental Protection Programme for Maribor
- education and the awareness raising of the public.

Environmental Protection Agency of the City Municipality of Maribor is proud to receive two Awards from European Commission (City Towards EU Compliance Award in 1999 and 2001). In the process of the preparation of the documentation for these two awards we found out two very important chapters:

- Local Agenda 21 – Environmental Protection Programme for Maribor

- education and public participation and cooperation with the environmental nongovernmental organisations

We are working on these two fields since the end of 1990's.

City Council of the City Municipality of Maribor adopted the Local Agenda 21 – Environmental Protection Programme for Maribor (LA 21 – PVO for MB) in 2001. The basic goal of the LA 21 – PVO for MB is the production of an integral programme of environmental protection, an umbrella document treating in one place all the issues influencing the state of the environment. The document contains the assessment of the situation by individual fields, the priorities, goals and strategies for their achievement, the framework programme for 2008, and the programme of measures for the four-year period from 2002 to 2004. One of the important goals was to prepare and implement the document in the widest democratic way, i.e. by involving, informing and raising the awareness of the expert and other interested publics and non-governmental organisations concerning the environmental and nature protection programmes. In the frame of the implementation of the LA 21 – PVO for MB was Ecoprofit one of the important projects, which we did together with city of Graz, Austria. The very important goal of the project is environmental management in the companies, that not represent only the costs but also high savings.

In 2006, we produced the document Evaluation of the Results of Implementing the LA 21 – PVO for MB for the period 2002 – 2005. Important result of the LA 21 – PVO for MB is higher environmental interest in the city and public participation in the decision making process. The goals in the LA 21 – PVO for MB are considered as very broad, that is why the partial realisation of the document means great progress of the state of the environment in the municipality.

In 2006 we began to prepare the Municipal Environmental Protection Plan for Maribor (OPVO for MB), a key strategic document for guaranteeing environment protection and preserving nature in the local community. OPVO for MB is the basis for the municipal budget and the budget of other partners in the project.

Also in the wings is the COMPASS PLUS project, which will take place between April 2007 and 2009. The European Commission selected Maribor as one of the 12 cities to take part in the EMAS project. Within the framework of this project, the Commission will provide a special EMAS consulting team that will offer the advice needed for the city to register under the EMAS system. The closing phase will see the municipality get registered under the EMAS system.

Resumé:

Education: B. Sc. - 1978 University of Ljubljana, Faculty of biotehnology,

M. Sc. - 1983 University of Ljubljana, Faculty of biotehnology,

Ph. D. - 1994 University of Ljubljana, Institute Jožef Stefan,

As a director of Environmental Protection Agency I managed following projects:

- Sanitation of the air in Maribor (in the frame of Slovenian ecological project with the financial support of World bank),
- Sanitation of Drava river in Maribor, pre-treatment of waste water and rational use of the water for Maribor industry in cooperation with Japan governmental Cooperation International Agency,
- Local Agenda 21 – Environmental Protection Programme for Maribor,
- project Management with groundwater as a source of drinking water and public participation,
- Nations in Bloom, Bursary Award,
- project Ecoprofit and Ecoprofit International,
- project TUSEC – IP,
- preparation of the Municipal Environmental Protection Plan for Maribor.

International cooperation:

- Regional Environmental Centre at European Commission, DG env., Sustainable city and town Campaign, Japan International Cooperation Agency, Landeshauptstadt München, Deutschland , Stadt Graz, Austria

Further recommended reading:

Communicating local sustainability

Campaigning for a Sustainable Energy Europe

Pedro Ballesteros Torres

Administrator

DG Energy & Transport
European Commission
rue de la Loi 200
1049 Brussels
Belgium

Tel: +32.2967839

Fax:

e-mail: pedro.ballesteros@ec.europa.eu

www:

City Profile*: City / town, Country

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

Communication as a pillar of new EU energy policy. Rationale, available instruments. Presentation of the Sustainable Energy Europe Campaign.

Abstract:

Energy affects every aspect of our life – it gives us light, heating, and provides us with fuel for transport and other appliances. More than ever before, however, we need to think about the security of our energy supply, as well as the environmental impact of energy produced from fossil fuels.

The landscape of European energy production and use is undoubtedly changing. As we look towards greater use of renewable energy sources and begin to use energy more efficiently, we can be proud of the fact that Europe is already a leading developer of new technologies and pioneering initiatives.

However, there remains much work to be done in spreading the message about the intelligent use of energy. Both consumers and social stakeholders need to be persuaded of the benefits of sustainable energy production and use.

The Commission has proposed targets for the year 2020 for renewable energy, energy efficiency and reductions of CO2 emissions that we hope that will be endorsed by national governments. Set in this context Sustainable Energy Europe 2005-2008 gives a strong endorsement of these goals, by ensuring greater public awareness, understanding and support of a wide range of outstanding European initiatives.

Sustainable Energy Europe 2005-2008 is about imagining a better energy future for Europe and its children. The majority of Europeans now understand that we face an irreversible environmental crisis unless we begin to change the way in which energy is produced and used, which means that in the future we will have to make much greater use of renewable energy sources and focus more upon energy-efficient methods. The purpose of this Campaign is to reinforce this message to the widest possible audience and to highlight ways in which we can ensure positive change in the landscape of

European energy.

Across Europe today, many projects and programmes have been launched, offering a range of outstanding good practices in the field of sustainable energy. Our commitment, via the launch of the Sustainable Energy Partnership, is to showcase and publicly recognise the pioneers that model effective sustainable energy development, in the expectation that it will lead to large-scale replication at local, regional, national and European level. We truly believe that the key to success is having strong, efficient and coherent communication channels that can increase the visibility of these actions and create a 'network of excellence' at European level.

The Sustainable Energy Partnership is also intended to motivate new initiatives, encouraging organisations – by providing support, sharing good practice and putting at their disposal a range of promotional and communication tools – to consider their own contribution to this European effort.

Partnerships are publicly recognised at EU level as leading examples of good practice and acknowledged for their commitment to sustainable energy models. Partners are given exclusive rights to use the Campaign logo for any communication concerning their partnership. Partners also benefit from receipt of a promotional toolbox and official Campaign Acknowledgement signed by the European Commission, exclusive inclusion in the Annual Catalogue (comprising a description of all Partnership programmes or projects), a bi-annual Campaign Newsletter showcasing project results, as well as European-level networking opportunities. They will also be the contenders in the Annual Competition.

Applications are made online. All Partnerships are required to sign and complete the Partnership Declaration and online Application Form. All applications are decided after full consideration by the European Commission. Once accepted, the organisation becomes a full Partner of the campaign.

The Sustainable Energy Europe 2005-2008 Campaign is committed to ensuring that Europe's citizens everywhere are better informed about the intelligent use of energy in all aspects of our daily lives - our homes, schools, offices and modes of transportation.

With this objective in mind the European Commission supports, within the –framework of the Campaign, the organisation of sustainable energy days across Europe. Energy days mobilize consumers, businesses and decisions-makers to take a day to think about the future of European energy production and use. They are public events, demonstrating to a wide audience that sustainable energy technologies and patterns of behaviour are viable, cost effective and better for the environment.

Resumé:

Further recommended reading:

D 01 Communicating local sustainability!

Sustainable change - through individual commitment!

Kasper Arentoft

Team Manager

The KaosPilots International
Mejlgade 35
8000 Aarhus
Denmark

Tel: +45 86129522

Fax:

e-mail: kar@kaospilot.dk

www: www.kaospilot.dk

Executive Summary of your Abstract:

The key elements for anchoring sustainable change are motivation, the best possible organisation and empowerment of the individual. We believe that every organisation has to ask themselves why they want change and then they need to locate and empower the dedicated individuals that can carry the initiative forward. We call them the "fiery souls".

Abstract:

All change and all new ideas start with an individual realising a need or an individual having the wish to make a positive change. This is why the KaosPilots approach to the work with sustainability and sustainability management focuses on enabling these individuals – enabling them to move from idea to realisation. We call them the fiery souls and we believe you can find them in any organisation and that they can make a significant positive difference.

One of the main challenges for the organisation is to locate the fiery souls and to create the best possible platform from where they can act. We believe this can be done through defining and working with the key elements in a change process - motivation, defining the organisation and empower the individual.

We believe that motivation comes through a strong vision and by allowing ourselves to ask the question "why" - why do we want a change, why is this needed and what is the vision that

will drive us forward? To often we forget to focus on a shared vision and instead we start to work with the questions "what, when and where" - what is the action, when will it happen and where will it take place. These questions are all valid - but without the strong shared vision we risk working in different directions and the changes for a sustainable positive change diminish.

When there is a strong shared vision - that motivates the individuals to take action - it is time to create the organisation that can carry through the vision. When doing so we believe that you must start from the fact that the organisation must be adapted to the assignment and not the other way around. To create a strong organisation we need to agree on the challenges ahead of us, what is needed to solve these and what values and principles which should guide our work.

And finally it is important that we as an organisation empower the individuals to be able to lift the challenge and to make a positive change. It is important that we as an organisation set a platform with a minimum of boundaries and regulations, built on trust to the individual and supportive to the initiatives taken. We believe that every organisation contains a lot of fiery souls with unlimited potential - but that organisations today have great difficulties in locating these people and actually take advantage of the potential knowledge, ideas and input. We need to empower the fiery souls - to give them a platform from where they can act, to provide them with the tools that they can work with and to give them a voice so that they can stand out and provide the whole organisation with best practises, good stories and energy. We need to make them visible so that they can be role models who motivate and set the standard for the future.

All in all we believe in the fact that enabling these individuals in the organisation will create a stronger team - and that a shared vision will create a much stronger change. To create a positive change in the organisation and in the society you need to define a strong vision and the values, to establish a strong project organisation and train the individuals to act and communicate within this. And this is the focus that we (the KaosPilots) keep at all times when working with external partners and sustainable change projects.

Resumé:

The KaosPilots is an international Project Management University located in Aarhus, Denmark. The school focuses at Sustainability, Cultural Diversity and Social Innovation. In addition the KaosPilots works with a long list of external partners and customers – offering workshops, long-term projects and personal development courses both in Denmark, Europe and other countries.

Further recommended reading:

D 01 Communicating local sustainability!

Implementing the Aalborg commitments in the town of Deal - capturing the popular imagination

Ben Bano

Lead Councillor, Aalborg Commitments

Department
 Organisation Deal Town Council
 Street High Street
 Deal CT14 6BB
 United Kingdom

Tel: 01304 366559

Fax:

e-mail: benbano@aol.com

www:

City Profile*: Deal Town, UK

* only relevant if city/local government is presenting

Short city/region profile:

Market Town

Number of inhabitants:

24000

Social, economic and environmental background:

Former coal mining area with significant areas of deprivation..

Summary:

Executive Summary of your Abstract:

The contribution will focus on how the profile of some of the key Aalborg commitments can be raised through local campaigns and events to capture the popular imagination.

Abstract:

Deal Town Council is a third tier authority established in 1996 and serves an urban population of 24,000. Deal is situated some 18 km north of the port of Dover, which is the major port of entry for the UK. It is situated near to the former East Kent Coalfields which closed some 20 years ago – hence there is considerable social and economic deprivation present in the area.

The Council has been interested in sustainability for some time and promotes initiatives such as fair trade accreditation, alternative transport through provision of cycle ways, etc. It is the only parish level authority in the UK to have signed the commitments and it is now involved in the baseline audit process which will involve a number of local stakeholder organisations, for example Friends of the Earth.

While the Council has limited direct powers it has committed itself to an extensive programme of consultation and engagement with the local Community. It is currently involved in producing a Town Plan which draws on the responses to a large number of questionnaires

from individuals and community organisations – one of the key themes resulting from the plan is the overall perception that initiatives which fit the Aalborg commitments are seen as important by a large section of the community. The Town Plan process will feed into the baseline audit.

Presentation

The presenter, Cllr Ben Bano, will present the results of a number of initiatives designed to 'take Aalborg to the streets'. Recent initiatives include:

- A community 'beach clean' which took place on a public holiday
- A barbecue in the Town Centre promoting the Town's Fair Trade Initiative

Overall, the presentation will focus on how a small municipal authority, with limited direct powers, is working to capture the popular imagination in implementing the Aalborg commitments and the sustainability agenda.

(1-2 pages)

Resumé:

Cllr Ben Bano, M.Sc, CQSW, DMS, is a retired Senior Manager of health and Social Services. He is Chair of Deal Town Council's Strategic Planning Committee and he has taken a particular interest in sustainability issues. He believes that small municipalities such as Deal have a particularly important role to play in acting as a catalyst in raising awareness of sustainability issues.

Further recommended reading:

D 01 Communicating local sustainability!

Energy SQUARE: un evento para llevar los compromisos a las calles

Name: Mario Filippini

Function/Title: General Director

Department

Organisation: Agenzia per l'Energia e l'Ambiente della provincia di Teramo - AG.EN.A.

Street: Viale Crispi, 28

Postal code: 64100 City: Teramo

Country: Italia

Tel: +390861410111

Fax: +390861410111

e-mail: direttore@agenateramo.it

www: agenateramo.it

City Profile*: City: Provincia de Teramo, Country: Italia

* only relevant if city/local government is presenting

Short city/region profile:

La Provincia de Teramo es una de las cuatros Provincias de la Región Abruzzo, en Italia. La superficie es de 1948 km2, con una población de 287.441 personas y 47 Ayuntamientos.

Number of inhabitants:

287.441

Social, economic and environmental background:

La economía de la provincia de Teramo es variada: industria, artesanía, comercio, turismo y agricultura. La provincia tiene una buena actividad social y cultural, con muchas asociaciones que actúan también con la ayuda de las instituciones públicas. Por lo que se refiere al medio ambiente, una parte importante de la provincia pertenece al Parque Nacional "Gran Sasso-Monti della Laga".

Summary:

Energy SQUARE es una iniciativa técnica, científica, demostrativa, cultural y de educación. Durante cinco días se llevan a la calle, a directo contacto con los ciudadanos, las actividades y los compromisos en energías renovables, desarrollo sostenible, respeto del medio ambiente y consumo responsable.

Executive Summary of your Abstract:

Energy SQUARE es una iniciativa técnica, científica, demostrativa, cultural y de educación. Durante cinco días se llevan a la calle, a directo contacto con los ciudadanos, las actividades y los compromisos en energías renovables, desarrollo sostenible, respeto del medio ambiente y consumo responsable.

Abstract:

La Provincia de Teramo, con la suscripción de la carta de Aalborg, asume entre otros compromisos lo de construir una Agencia para la Energía y el Ambiente.

En el año 2003 nace AG.EN.A. (Agencia Energía y Medio Ambiente de la provincia de Teramo), gracias a una iniciativa de la Provincia de Teramo con siete socios locales y también gracias a la aportación del programa europeo "SAVE II"

En el mes de Febrero del 2004 la Agencia empieza su propia actividad basada sobre todo en la promoción de las fuentes renovables, en el ahorro de energía, en el control de la eficiencia energética de las calderas de calefacción y, en general, en todo lo que está relacionado con energía y medio ambiente.

En el mes de Junio del 2004 se empieza a pensar sobre la realización de un evento capaz de llevar a directo contacto con los ciudadanos los compromisos de Aalborg y especialmente la eficiencia energética, las fuentes renovables, el consumo inteligente y responsable de la energía.

Nuestra idea era realizar una caja capaz de acoger las iniciativas técnicas y científica, la participación de empresas, las acciones educativas para estudiantes y alumnos: un abanico de oportunidades para los ciudadanos de todos grupos de edad.

Cada ciudad tiene una plaza que es su corazón, un lugar donde los ciudadanos se encuentran, donde hablar es natural y escuchar los demás es natural; nuestra caja ha sido la plaza más significativa en el casco antiguo de Teramo, donde desde siempre la gente se encuentra.

Nuestra apuesta era: dar un cambio a la manera de comunicar con los ciudadanos, ir a la calle, ser personas entre las personas, demostrar que la tecnología y la ciencia, así como la cultura y las expresiones artísticas, pueden ayudar a pensar y a realizar una ciudad mejor y un mundo mejor.

El nombre del evento ha sido una consecuencia natural del lugar elegido: "Energy SQUARE", o sea Plaza de la Energía.

Tres ediciones de "Energy SQUARE", en el 2004, 2005 y 2006, cada una de cinco días de iniciativas han llevado las fuentes renovables, la eficiencia y la sostenibilidad energética a directo contacto con los ciudadanos.

Con más de 700 metros cuadrados de área equipada "Energy SQUARE" ha acogido, en las tres ediciones, más de 20.000 visitantes.

La participación ha ido creciendo en los años, así como la atención y la curiosidad de los ciudadanos.

En las áreas preparadas se han realizados encuentros y congresos sobre los biocombustibles, las biomasas, la eficiencia energética, la producción de energía hidroeléctrica, la planificación energética, la movilidad sostenible, el desarrollo sostenible y solidario.

Los encuentros y los congresos han visto la participación del mundo académico y científico, de invitados españoles, portugueses y polacos, de técnicos y profesionales, de representantes institucionales del Ayuntamiento y de la Provincia de Teramo, de la Región Abruzzo y del Gobierno Italiano.

Importantes empresas nacionales y locales, operantes en los sectores de energía y medio ambiente, han tenido la posibilidad de encontrar familias, para explicar los provechos derivados de la utilización de instalaciones para la producción de energía de fuentes renovables y de sistemas para la eficiencia energética.

Después de la positiva experiencia del 2005, con la organización de un acontecimiento cultural y artístico para sostener la oferta técnico-científica y comercial, en el 2006 Fulvio Roiter, uno de los maestros más admirados de la fotografía italiana, ha presentado a "Energy SQUARE" una de sus exclusivas exposiciones fotográficas sobre el "Cántico de las

Creaturas", compuesta por 25 clickeos realizados en el curso de más de cincuenta años de actividad.

Sobre las huellas del compromiso dispensado por AG.EN.A. para el crecimiento de una educación a la energía en las escuelas de cada tipo y nivel, "Energy SQUARE" ha visto la presencia, en tres años de más de 2.500 estudiantes y alumnos que han participado a las actividades programadas: lecciones didácticas, visitas con guía, proyecciones cinematográficas y laboratorios creativos para los niños.

"Energy SQUARE" ha sido la ocasión para presentar también a la opinión pública un programa de cooperación internacional para realizar en Burundi una comunidad energéticamente autosuficiente basada en fuentes renovables.

Las actividades de difusión y de información han visto la distribución gratuita de casi 8.500 bombillas de ahorro de energía, miles de ejemplares de la revista REN, redactada por AG.EN.A., más de 2.000 cd-rom con contenidos didácticos y multimediales, miles de opusculos sobre la eficiencia energética, la arquitectura sostenible y la certificación energética de los edificios y por fin bolígrafos, bloques, sombreros y molinetes.

La iniciativa "Ciudad en bicicleta", un bici-paseo por las calles de la ciudad, con la participación de centenares de personas, ha sido en el 2005 y en el 2006 el momento final de cinco días en los cuales, realmente, la plaza mayor de Teramo ha sido "Plaza de la Energía".

Tecnología, cultura, educación, información, presentación de los mejores sistemas para la producción de energía de fuentes renovables y de eficiencia energética, son estos algunos entre los muchos lenguajes que se aunen en "Energy SQUARE", implicando los ciudadanos de todos grupos de edad y facilitando el crecimiento de una nueva y difusa conciencia para modificar las perspectivas de la producción y del consumo de la energía.

Resumé:

"Energy SQUARE" es una iniciativa que se puede realizar en todas las ciudades.

Nuestro objetivo es realizar y participar en una red europea de iniciativas de este tipo y presentar un proyecto europeo en la convocatoria "Energía Inteligente Europa 2007-2013".

Further recommended reading:

D 01 Communicating local sustainability

European Mobility Week & Sustainable Mobility strategies in Koprivnica, Croatia

Helena Hecimovic

Town Councillor
Municipal Authority
City of Koprivnica
1, Zrinski trg
48000 Koprivnica
Croatia

Tel: +385 48 279 555
Fax: +385 48 279 543
e-mail: gradsko.poglavarstvo@koprivnica.hr
www: www.koprivnica.hr

City Profile*: City of Koprivnica,
Croatia,

* only relevant if city/local government is presenting

Short city/region profile:
Seat of Koprivnica-Krizevci County in North-West Croatia

Number of inhabitants:
33200

Social, economic and environmental background:
High quality of life has been achieved through successful development of industry (food, pharmaceuticals, beer, wood, paper) and boosting SMEs. Future development is planned in the area of education and small entrepreneurship based on sustainable use of rich environmental assets (arable land, rich reserves of thermal and drinking water, woods and minerals).

Summary:
European Mobility Week has provided a framework for planning and implementation of several urban mobility strategies. These have not only improved the life of citizens of Koprivnica but have initiated and strengthened various participatory processes. Awareness raising campaign has become especially effective after the international recognition of the Koprivnica example of urban mobility scheme based largely on the active promotion of cycling and walking.

Executive Summary of your Abstract:

European Mobility Week has been the central sustainability campaign event in Koprivnica for five years. It has initiated and promoted several sustainable mobility strategies which have been enthusiastically implemented by local authority in partnership with business and civil sector. The success of this initiative and lessons learned in its implementation have encouraged other participatory processes in the long-term planning of sustainable development and raised public awareness of the sustainability issues.

Abstract:

City of Koprivnica is the centre of Koprivnica-Krizevci county in the North-west Croatia. Situated in the flat Pannonian plains near the Drava river, the town owes its development to food production and wood and paper processing. For the last few decades, the threat to unsustainability has arisen from the sharp increase of transport sector, lack of new technologies and know-how and unsustainable use of natural resources.

Municipal authority declared its sustainability goals in 2001, and immediately translated them into the first action for sustainable urban mobility - Car Free Day. The response of the citizens was so enthusiastic that four long-term mobility strategies followed, based on the active participation of numerous stakeholders, ranging from municipal educational, cultural and sports institutions, local businesses and transport experts to health, mobility and environment non-governmental organisations. The strategies were launched in the first edition of European Mobility Week. They included systematic construction of cycling paths and pedestrian walkways, systematic building and reconstruction of roads, ensuring accessibility and an efficient system of public lighting, systematic enlargement of green and traffic-free areas and City bike - an experimental free bicycle rental scheme.

All strategies, especially the latest-City Bike, met with a high general interest. The destruction and vandalism displayed on the free bicycles led - unexpectedly - to a strong feeling of ownership of the project among the citizens of Koprivnica. The network of cycling paths made roads safer and encouraged cyclists to use them. Sports cycling clubs and recreational cyclists groups developed and immediately started promoting a wider use of bicycles in commuting to work and school. A strong partnership developed between the local authority institutions and citizens groups concerned with mobility and health. The increase of accessibility in transport and public infrastructure has been strongly promoted and achieved high results at the national level. The format of European Mobility Week, with seven themes and a new focus each year, has put several very important issues into public focus: mobility and health, public transport, green areas and the town centre as the place for entertainment, shopping and public life, safe streets for children and climate changes in its latest edition.

These themes have served as starting points for other participatory processes and new partnerships established during the years. A new programme of the development of towns that promote sustainable urban mobility has led to the planning of new cycling tracks and tourist cycling routes in the international river Drava region. The latest programme that has been relying on the Mobility Week partnership network is the development of the Local Agenda 21 for the town Koprivnica which is currently under way.

Results of the five years of implementation of sustainable urban mobility strategies in Koprivnica have been impressive. The town of 90,94 km² and 33200 inhabitants now boasts a network of over 50 km fully accessible roads with energy-efficient public lighting, 60 km of safe and accessible cycle paths and pedestrian walkways, 330000 m² of green and traffic free areas with 31 fully equipped children's playgrounds and 250 public bicycles in the rental scheme. Besides several towns in the region as well as the national capital, Zagreb, cooperation and promotion programme includes Beltinci in Slovenia and Kaposvar in Hungary. Local agenda 21 programme has currently initiated several projects of energy efficiency and climate change awareness and mitigation.

International cooperation and especially the national and international recognition of the results achieved by the Town Koprivnica in European Mobility Week have contributed to the sense of achievement and ownership of the programme at the level of individual citizens. The lack of national cooperation and programmes of development sustainability has been overcome by efficient international networks and bottom-up promotion at a regional level.

The improvements can be expected in the partnerships with business sector who has not yet fully and efficiently embraced sustainability as its permanent policy as well as in the systematic education for sustainable development. New programmes also address remaining issues in the transport sector, especially public transport which cannot be developed without national and international development policy.

Resumé:

Member of Town Council as a representative of civil society organisations, Ms Hecimovic has led most initiatives referring to sustainable town development. These include four initial town strategies of sustainable mobility as well as programmes based on these strategies. She has also founded and led the association of environmental organisations for the protection of the Drava river, known as the Drava League. For the latter, she was awarded WWF Austria Panda Award in 2006. Currently, Ms Hecimovic is in charge of the Local agenda 21 team. As a teacher of English, she runs Hello English Language Club.

Further recommended reading:

Koprivnica-sustainable urban mobility Champion, ICLEI Newsletter, Issue no 27, autumn 2006

SMILE programme, European Mobility Week initiative, www.mobilityweek-europe.org

Local agenda 21 in Croatia -challenges for sustainable development in local communities, REC for Central and Eastern Europe, Country office Croatia

Koprivnica-Town on the move: Programme of sustainable urban mobility 2001.-2006.,

Report by Municipal Department for spatial planning and environment, Koprivnica, 2007.

D 02 daily Sustainable Practice

ChangeLAB, Changing lifestyles attitudes and behaviour

Hilary Lowson

Senior Policy and Development Manager

Policy and Performance Directorate
Surrey County Council
County Hall
KT1 2DY Kingston upon Thames
UK

Tel: +44 20 8541 9318

Fax: +44 20 8541 8612

e-mail: hilary.lowson@surreycc.gov.uk

www: www.changelabproject.org

City Profile*:

* only relevant if city/local government is presenting

Short city/region profile:

Number of inhabitants:

Social, economic and environmental background:

Summary:

Executive Summary of your Abstract:

ChangeLAB is a European project funded by the Interreg IIIC (West) programme involving 8 partners from 7 Member States. Its aim is a better understanding about the effectiveness of policies, projects and methodologies that seek to influence behaviour and arrest unsustainable trends at local and regional level. What works best and why? ChangeLAB is focusing on water, waste, transport and energy and on cross-fertilisation and transfer of successful techniques from one sector to others. The presentation will update the conference on progress and prompt feedback from delegates on their experience in this area.

Abstract:

ChangeLAB partners are from the UK (County Councils of Surrey and Hampshire), the Netherlands (Province of Utrecht), Sweden (Municipality of Solna), Hungary (Regional Environmental Centre for Central and Eastern Europe - REC - Head Office), Estonia (REC Country Office), Greece (Municipality of Sykies) and Italy (Regione Liguria). They share concerns about rising consumption of natural resources and unsustainable trends particularly relating to four target 'sectors': water, energy, waste and transport. Local and regional authorities are testing many initiatives to reverse these trends and influence more sustainable lifestyles for citizens. There is much experience within particular sectors, but often little transfer between them. There is also a need to understand what interventions are

most effective with particular target groups, how to evaluate results and how to measure the actual change in behaviour that is brought about.

ChangeLAB has already compiled a Knowledge Base of 140 existing projects on behaviour change and will continue to add to this. We have analysed what worked well and what was less successful, defining a number of key methodologies with potential for transferability across the four sectors and with different target groups. We have developed a software tool called the Technique Planner designed to help practitioners match their target group to appropriate behaviour change techniques. We have also identified a number of 'criteria for success' in behaviour change activities and are currently testing these in pilot actions in each partner area. Partners with greater experience in particular sectors are supporting or 'mentoring' others in carrying out their pilot actions in order to maximise the transnationality and real exchange of experience within the project.

ChangeLAB will produce an interactive toolkit on behaviour change designed for local decision-makers in authorities, organisations and agencies working on public participation initiatives. We hope this will contribute to a better understanding of where and how to intervene more effectively. This in turn will inform the dialogue between national and local policy makers about future strategies, targeting of resources and the conveying of consistent and 'joined up' messages to citizens on the complex and challenging issues relating to sustainability and climate change.

ChangeLAB has already attracted considerable interest from the UK government (being mentioned for example in the UK's Sustainable Development Strategy, 'Securing the Future'). It has relevance across the whole EU, to local and regional government and to academics and experts working on behaviour change strategies.

The project ends in December 2007, but before then, partners are keen to share findings and incorporate new ideas and experiences into the toolkit. As this is still in development, we are hoping for feedback and constructive criticism! In particular Sevilla 2007 gives an excellent opportunity to test the ChangeLAB Technique Planner.

Resumé:

Hilary is a local government officer from Southeast England. She has worked on European networking and partnership development for seven years on behalf of Surrey County Council, an authority with over one million residents situated to the south of London.

Further recommended reading:

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

D 02 Daily Sustainable Practice

Traborgo, mobile laboratory of environmental education

Giancarlo Moca

Manager

Environment and Energy Department
Province of Chieti
Corso Marrucino 97
66100 Chieti
Italy

Tel: +39-0871-4084218

Fax: +39-0871-4084307

e-mail: g.moca@provincia.chieti.it

www: www.provincia.chieti.it

City Profile*: Province of Chieti, Italy,

* only relevant if city/local government is presenting

Short city/region profile:

The province of Chieti is the most southern province of Abruzzo Region and contains 104 Municipalities. The Province has a perimeter of 255 km and an area of 2568 kmq. It can be defined a puzzle territory, beginning from its geographical aspect: in a few kilometres it's possible to go from a seascape to the peaks of the middle-east Appennine mountain. As local authority the Province of Chieti is divided in 10 departments; in the environmental field this local body has institutional functions of control and environmental protection.

Number of inhabitants:

390.000 inhabitants

Social, economic and environmental background:

In the context of its local Territorial Plan of Coordination, the Province of Chieti has individuated the strategical priorities for the sustainable development of the territory. In this framework, The Province of Chieti gave its adhesion to the Aalborg document and since 2001 has been working in a synergic way in the LA21 process together with the other Provinces of Abruzzo Region. In the same year, within the Community Programme SAVE II, the Province created a techno-structure of support, the local Energy Agency, A.L.E.S.A., which acquired a strategic role in the implementation of territorial policies of development in the energy field. In this sector the Province of Chieti is carrying out a campaign for the energy building certification and meetings with local actors to adjust its energy planning policies. The Province is partner and promoter of several community and national initiatives too and it developed in the last years a good experience in the research of strategic partnerships and financing opportunities. Within the project "Sustainability Plan in the Municipality of Ortona", started in 2004 with the co-financing of the National Ministry of Environment, the Province became partner of the EU "Sustainable Energy Europe Campaign 2005-2008". The Province realised many actions and plans for the exploitation of local resources like the IPRE (Integrated Plan for Renewable Energies) project, cofinanced by the EU Commission in the Altener programme, and the LIFE Natura project for the reintroduction of river shrimps species in the SCIs of

central Italy.

Summary:

It has been many years since the Province of Chieti has addressed many efforts towards the activation of projects aiming at the sustainable development of the territory and at the valorisation of local resources: the LA21 project, the creation of a Local Energy Agency (ALESA) started up in 2001 within the SAVE programme, plans for the sustainable development of specific areas of the territory cofinanced by the National Ministry of Environment and projects for the exploitation of renewable energies like the IPRE (Integrated Plan for Renewable Energies) project, cofinanced by the EU Commission in the Altener programme, the LIFE Natura project for the reintroduction of river shrimps species in the SCIs of central Italy.

Executive Summary of your Abstract:

The mobile Workshop "Obiettivo Ambiente", promoted by the Environment and Energy Department of the Province of Chieti, is an innovative project focused on four thematic areas (Energy, Waste, Water and Biodiversity and the Shop of Knowledge/citizens' space). Through consultations, presentations and interactions the laboratory, called "Il Traborgo", represents a new method of achieving and spreading environmental education.

Abstract:

"Traborgo" is the name of the project that the Province of Chieti carried out last year from July to December 2006, co-financed by the Abruzzo Region. It regards the realisation and usage of a mobile laboratory for environmental education. Its main goal was to involve citizens of the internal provincial areas to a formative pathway, in order to increase their knowledge about environmental issues. Expected results were to increase the awareness towards the rational usage of resources and the revival of interest in local old lifestyles, quite often more respectful of our planet than the newer ones. In fact, due to historical and geographical problems, citizens of internal areas have fewer chances to get information and public services than the citizens living along the coast.

Below a short recapitulation of the project objectives:

- increase the awareness of local population towards environmental problems and study a model of sustainable development that could be shared among the interested areas. Concrete actions of participated planning for the requalification and enhancement of the small historical centres (thought as social wealth) can be developed;
- spread good practices, repeatable in identical and different districts, by means of mutual exchange actions among the areas involved during the project;
- encourage the restoration of the quality of life in the small municipalities of the territory through the promotion of innovative and technologically advanced solutions, respectful of the local environmental characteristics;
- promote joint and individual actions based on the respect of the social and environmental sustainability, also aiming to support opportunities of new jobs.

The TraBorgo idea takes its conceptual inspiration from the project of "laboratory for residential neighbourhood" conceived by the famous architect Renzo Piano for the sustainable recovery of districts and historical centres. In the project of the Province of Chieti, this idea has been adjusted for environmental education purposes. The physical realisation of the TraBorgo consists of a mobile structure whose inside is divided into different areas, each one representing one theme of environmental interest. In this way dissemination activities and technical advices could be brought directly to the citizens, in front of their houses and out of the traditional conference rooms. Unlike other means of communication, the TraBorgo requires more active efforts for its application (in line with the local peculiar characteristics), giving in the meantime larger potentialities. According to its physical shape (a light cubical gazebo that can be easily moved and erected) the laboratory is organised in 4 thematic areas, in which information and advice services are available for citizens and students on: 1. Water and Biodiversity; 2. Energy; 3. Waste and 4. The Shop of the Knowledge. The last one is the most innovative part of the TraBorgo, conceived as real recovery space of local identity, in which citizens themselves are protagonists. In this way the inhabitants of the small Municipalities involved in the project were called to personalise this sector of the structure that follows the principle of the traditional craftsman's shop and becomes a source of ideas, ancient arts, uses, works and practical knowledge, in a "self-education" process (learning by doing). Local associations and old people - which live mostly in the internal areas - were involved in the preparation of the "Shop of Knowledge" in order to spread their personal experience. These people, in fact, are the holder of that country culture in which good practices, such as those of saving, transformation and recovery of materials, are strongly sedimented also today. The TraBorgo was presented in the period July-August 2006 in n. 6 Municipalities of the provincial territory, situated in the mountain and middle-hilly areas, with less than 5.000 inhabitants. The laboratory was prepared in these centres within a larger event, titled "Obiettivo Ambiente (Environment Objective)", with the projection of films on environmental issues to create new arguments of discussion. Inside the laboratory, the technicians of the Province of Chieti, provided people with advisory services and information on environmental subjects, such as technologies for water saving, waste sustainable management and rubbish collection, solutions for domestic composting, advice for energy saving, information on the renewable energy sources and economic incentives etc. Informative panels and demonstrative kits were fitted out to illustrate how photovoltaic and solar-thermal systems work. Brochures, cd-roms, newsletters, comics for students, ecological gadgets and many dissemination materials realised by the Province of Chieti were also distributed in order to make the local collectivity aware of the subjects of the sustainable development. Citizens were invited to fill out questionnaires, allowing the promoters to monitor the results of the initiative and to adjust it in progress on the real public demand of information. In the over 1.200 questionnaires filled, users expressed extremely positive judgments on the event and a very good level of satisfaction about the quality and thoroughness of the information received. Most of the citizens polled gave their availability to be recontacted for further dissemination initiatives (seminars, workshop etc.), showing a particular interest in increasing their knowledge. Other local authorities, such as the Municipalities and public bodies committed in the development of internal areas, cooperated with the Province in the organisation of this initiative for the best involvement of local population. In one of the Municipalities interested by the project, it was also signed a programme agreement for the start up of an experimental station of waste composting for small citizens' community. The laboratory was proposed again during the Christmas holidays in other two centres of the Province: the Municipality of Chieti (over 56.000 inhabitants) and the coastal town of Ortona (24.000 inhabitants). Citizens and in particular students (at each level: primary, junior and high schools) were the targets of the TraBorgo laboratory.

After these activities, the mobile laboratory will be used for other educational initiatives, exhibitions and dissemination events. Point of strength of the project is the opportunity it offered end-users of a more direct and integrated approach to the environmental issues by the mean of a qualified team of experts with specific competence in the different fields (energy, waste, water, biodiversity etc) of the sustainable development. All this was possible thanks to the ability of the Province of Chieti to create and consolidate in the time a network of experienced structures in the energetic-environmental field that are respectively: the Provincial Waste Agency (A.P.R.), the LA21 project working group, the local Agency for Energy and the Environmental Development (A.L.E.S.A.) and the educational centre named "Resources Centre for the Sustainability" of the Province of Chieti. All these structures already promote in their respective roles and competence strong dissemination and training actions for specific target groups (public administrations, public and private technicians, enterprises, associations, schools and citizens) on the whole provincial territory. The creation of a network of experienced structures, that contribute together, with their personnel and Know-How, to the promotion of more "sustainable" culture and lifestyle, assures coherence and continuity of "Traborgo" project with the other initiatives that the Province of Chieti is carrying out in the framework of local, national and community programmes.

Resumé:

Giancarlo Moca, 1962, Civil Engineer graduated at the University of L'Aquila, attended a refresher course on the environmental impact in Sanitary Engineering and achieved a Master in Innovation and Managerial Ability in the Public Administration; he carried out private practice in technical advice and planning for several private firms and companies. Since 2001 he has been teaching as temporary professor in two courses on Energy and Environment at the "Gabriele D'Annunzio" University of Chieti - Pescara. Since 1995 he has been working as Manager of the Environmental and Energy Department of the Province of Chieti and he coordinated many projects at local, regional and european level.

Further recommended reading: www.centrorisorse.chieti.it

D 05 Latin America presents

Simulación para determinar la futura realidad de una ciudad en función de variables conocidas.

Klaudia Laffaille Sevilla

Director General

Department of Investigation
Digital Magazine of todoarquitectura.com
Urb Los Sauzales, vereda 7A, N6, Mérida, Edo
Mérida
Postal code City 5101
Venezuela

Tel: 0058 274 2637084

Fax:

e-mail: k.laffaille@gmail.com

www: todoarquitectura.com

Executive Summary of your Abstract:

Se propone un modelo que explica la dinámica existente entre el crecimiento poblacional de la ciudad de Mérida (Venezuela) y el área de terreno ocupada por las viviendas de dicha población. El modelo ha sido realizado en función de dos variables principales, la población y la cantidad de viviendas requeridas para dicha población. Una vez implementado el modelo se simula el sistema aplicando una política de control de natalidad con la finalidad de estudiar la sensibilidad del sistema y su comportamiento ante los cambios de esta variable y permitiendo el estudio de las posibles consecuencias de la implementación de esta política.

Abstract:

Introducción: Gran parte de las decisiones importantes de miles de sistemas a nivel mundial son tomadas por seres humanos que deben valerse de sus conocimientos previos sobre el sistema y la "intuición" para tomar decisiones acertadas y aplicar políticas adecuadas y efectivas para resolver problemas que influncian y modifican sistemas complejos. Sin embargo, gran parte de la responsabilidad se ve acrecentada por la probabilidad de cometer errores que desequilibran y empeoran el estado del sistema. Todo esto se debe a que, sistemas sociales, empresas, ciudades, industrias, etc. pueden clasificarse como sistemas complejos donde las relaciones entre las variables que lo conforman no son lineales. Estas razones (y otras mas) llevaron a Jay Forrester [1,2] a plantear un conjunto de teorías sobre la dinámica de sistemas que son aplicadas en esta investigación para explicar la dinámica existente entre el crecimiento poblacional de la ciudad de Mérida y la manera como es ocupado su espacio físico. Para ello se modeló la ciudad con un software creado para simular sistemas dinámicos llamado VENSIM [3]. Se estableció como hipótesis principal que el crecimiento de la población merideña, al igual que el resto de las ciudades del mundo, está regulado por varias limitaciones entre las cuales se encuentra el espacio disponible para la construcción y se deberán aplicar políticas reglamentarias para evitar que el agotamiento del recurso cause un colapso en el crecimiento urbano.

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

Creación del modelo. La ciudad de Mérida ha sido edificada sobre una terraza de origen fluvial formada principalmente por la cuenta del río Chama y por aportes de diferentes subcuencas transversales que determina cierta variabilidad en la composición y estructura de sus suelos. Este hecho puede implicar, entre otras cosas, que algunos de los suelos no soporten densidades de población elevadas (400hab/ha por ejemplo) factor que contribuye a disminuir la cantidad de terreno urbanizable. Por otra parte, el crecimiento urbano está limitado físicamente por el aumento de la pendiente del terreno y la ubicación de los taludes correspondientes a los ríos Chama y Albarregas que han entallado la terraza. Bajo este contexto es de gran importancia conocer el sistema de crecimiento de la ciudad, las posibles soluciones que podrán ser implementadas y su efecto dentro del mismo. En esta investigación, se utiliza como herramienta para lograrlo, un modelo de simulación basado en dinámica de sistemas. Dicho modelo fue realizado en función de dos variables principales, la población y la cantidad de viviendas requeridas para dicha población. Por lo tanto posee dos sistemas separados que se comunican por lazos de información. Las premisas establecidas son:

- El crecimiento poblacional, en función de nacimientos, migraciones, muertes y emigraciones.
- La cantidad de viviendas, que esta relacionada con el ritmo de la construcción, sobre la base de la premisa de que si la cantidad de viviendas existentes es menor que la cantidad de viviendas necesarias, se deberán construir más viviendas hasta que se alcance el objetivo.
- La fracción de ocupación esta definida por el terreno ocupado por cada vivienda por el número de viviendas actuales entre el área total del terreno
- El espacio que fue considerado para la simulación fue el correspondiente a un distrito de la ciudad (Libertador)
- Se considero que la tasa de emigración es mayor que la tasa de inmigración, especialmente debido a las características universitarias de la ciudad y a la carencia de industrias.
- Como política de regulación de la población en función del espacio se estableció como hipótesis que la tasa de natalidad y las inmigraciones deberán disminuir cuando la fracción de ocupación se acerque a uno (1).
- Para no exceder la cantidad de variables y complicaciones consideradas en el modelo en función del objetivo, no se incluyeron factores económicos dentro de los parámetros del modelo, como calidad de vida, disponibilidad de trabajo, desarrollo comercial, etc.

Se realizó una simulación preliminar para validar los resultados del modelo con los arrojados por el sistema real durante el periodo comprendido entre los años 1998 y 2001 y predijo con suficiente exactitud el crecimiento poblacional de la ciudad. Posteriormente, se agregaron las variables que permitirán estudiar los cambios en la dinámica del sistema si se aplican políticas para el control del crecimiento poblacional en función del espacio urbanizable.

Ejecución del modelo: La política que fue implementada por medio del modelo consistió en disminuir la tasa de natalidad y aumentar la densidad de población por hectárea con el paso del tiempo. Dicha política es simulada como una decisión implementada por los habitantes de la ciudad de forma progresiva en 152 años (tiempo de simulación).

Entre los resultados obtenidos en la simulación podemos citar:

- Al implementar la política de control de natalidad se prolonga el tiempo que la población demora para ocupar el espacio disponible, sin embargo, cuando es ocupado el máximo de terreno posible, la construcción es detenida y la población no posee lugares donde albergarse.
- Una vez alcanzado este punto se hace indispensable la demolición para disponer de nuevos terrenos para la construcción y la aumentar la densidad de población, la

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

construcción se activa cuando hay terreno disponible y decae a cero nuevamente cuando la tasa de ocupación se acerca a 1. Esto implicaría para la planificación urbana de la ciudad (el sistema real) construir edificaciones de gran altura que abastezcan las necesidades de la población. Sin embargo, para una ciudad ubicada en zona sísmica con suelos sedimentarios, como es nuestro caso, dicha construcción está altamente limitada.

- Al disminuir la tasa de natalidad y aumentar la densidad de población por hectárea con el paso del tiempo se alargan las posibilidades de continuar habitando el mismo espacio de la ciudad con mayor cantidad de población. Sin embargo, se observa que el terreno es la limitante primordial que determinará la posibilidad de que la población continúe logrando albergue en la ciudad.

El modelo de simulación planteado en esta investigación es una herramienta que permite predecir con suficiente exactitud el crecimiento urbano de la ciudad, realizar análisis dinámicos de sensibilidad del sistema ante variables relevantes y describir de manera clara y efectiva la dinámica que compone el crecimiento y la densidad poblacionales del caso en estudio. El potencial de la utilización de la simulación en este sistema consiste en la posibilidad de estudiar la manera en que políticas de regulación poblacional cambian el sistema modelado y la dinámica que lo conforma. El aporte de este trabajo es el desarrollo de un modelo de simulación para determinar la futura realidad de la ciudad de Mérida en función de variables conocidas que acarrea consigo todas las ventajas propias de la simulación.

Resumé:

Simulación, crecimiento urbano, Dinámica de Sistemas.

Further recommended reading: [1] Jay Forrester. "Urban Dynamics" The Massachusetts Institute of Technology. Septiembre de 1.969. Tercera edición. 285 Pág .

[2] Jay Forrester, System Dynamics Group. "Road Maps" The Massachusetts Institute of Technology. Latest Revision: December 20, 2002.

[3] <http://www.vensim.com/venple.html>

Disclaimer: Content of abstracts is the sole responsibility of the author.

Conference organisers: City of Sevilla, ICLEI and the European Sustainable Cities and Towns Campaign
www.sevilla2007.org

