



*Prize awarding to the members of
'Agenda 21 Meeting Club'*

European Green Capital Award 2016

12. Integrated Environmental Management



An initiative of the
European Commission

2016



Spain

12. INTEGRATED ENVIRONMENTAL MANAGEMENT

12A. Present Situation

Vision, Strategy:

Describe if the city has a clearly defined, widely understood and supported environmental vision for the municipality, for example as part of a broader commitment to urban sustainability.

Is this vision reflected in different strategies and action plans, which include objectives and targets for individual sectors? Please list the most important strategies and plans and indicate their relationship to the overall vision.

Have your vision and the corresponding strategies been endorsed and implemented by the city council?

Is there a dedicated budget for implementing the environmental vision?

Management, monitoring and evaluation:

Which stakeholders have participated in the development of the city's environmental vision and associated strategies and action plans? (e.g. contribution of civil society and citizens). What have been the practical arrangements for this?

How are the management structures of your city organised, and what management tools are used, to achieve your environmental objectives and targets? For example management circles, obligatory sustainability impact assessments of policy proposals, project structures, skills promotion, periodic evaluations, etc.

Describe the system of monitoring and reporting.

Leadership

Is the city (administration) leading by example in environmental behaviour? Describe your activities regarding environmental management systems, green public procurement, skills development, etc.

Does your city cooperate with other authorities at different levels or other organisations (regional, national, EU, international) on environmental issues? Which of these cooperation activities or projects has your city initiated or acted as leading partner? Please also refer to your participation in European funded projects and to your commitment to international initiatives, charters, etc. (Agenda 21, Aalborg Commitments, Covenant of Mayors, C20, Climate Alliance, ICLEI, EUROCITIES, etc.)

List any disadvantages resulting from historical, geographical and/or socio-economic factors which may have influenced this indicator area.

Vision, strategy

Zaragoza, through its Strategic Plan 1998-2010 and later on through its Strategic Framework 2020, has worked and is working right now with a strategic vision in one of its mainstays that is sustainability and environmental policies.

These policies have led to an important reduction of CO₂ emissions, a considerable improvement of the quality of air, the introduction of renewable energies and an international recognition in the sustainable management of water. The highest point was reached with Expo 2008 "Water and Sustainable Development".

These strategies are the result of long processes of civic participation with over 200 entities.

For the year 2015 is foreseen a review of the goals 2020 and the launching of the works for the strategy 2030, with the concept of green economy as the pillar of future policies. There are working groups (green economy and social policies) which are already planning the scenario 2030 (graphic 1)



Graphic 1. Working session of 'Commission 21'

Strategies and plans

- Plan for the Improvement of Management and Quality of Water Supply. 2002.
- Internal quality plan of the Agency of Environment and Sustainability by which its management will comply with indicators of efficiency and effectiveness from 2008.
- Strategy for Climate Change Mitigation and Improvement of the Quality of Air. 2009.
- Strategy for Adaptation to Climate Change in the City of Zaragoza, 2010.
- Fight Plan against Noise. 2011.
- Voluntary Agreement between the City of Zaragoza and Industrial Companies. 2011.
- Strategy for the Conservation of Biodiversity in Zaragoza. 2012.
- Sustainable Mobility Plan. 2006.
- Bike Master Plan. 2010.
- Special Plan for the Protection of the Steppe. (Being planned right now).
- Strategy on Energy 2020. (Being planned right now).

Rules for environment and sustainability protection

- Municipal Bylaw for Protection against Noise and Vibrations. 2001.
- Catalogue of Singular Trees. 2007.
- Municipal Bylaw on Energy Ecoefficiency and Use of Renewable Energies in Buildings and its Installations. 2009.
- Municipal Bylaw on Pedestrians and Bike Users. 2009.
- Municipal Bylaw on Ecoefficiency and Quality of the Integral Management of Water. (In pleading period).
- Municipal Bylaw on Fostering the Rehabilitation of Buildings. 2010.
- Municipal Bylaw on the Protection of Urban Trees. 2013.

Municipal Bylaw on Protection, Responsible Possession and Sale of Animals. 2013.
New Municipal Bylaw on Protection against Noise and Vibrations. (Being made now).

Environmental budget

The percentage of spending in environment in 2012 considering the total budget of the city was 22.4%.

Management, control and evaluation

The environmental and sustainability management depends on the Municipality through the Agency of Environment and Sustainability.

Nevertheless, the Environment Sector Board (Agenda 21) created in 1998 is the organ for a dialogue with citizens and companies up to the point that every plan, strategy and/or regulation are analysed and supervised by it.

Citizens are fully and directly informed through the municipal website and participate by means of regulated proceedings in such a way that the plans, strategies and regulations can reach a high-level consensus.

Zaragoza adopted in 2000 the European common indicators passed at Hannover Congress, adding also a pack of local indicators. There is a total of 39 indicators that evaluate the quality of air and sustainability of the city every year

Leadership

The city practices what preaches

Zaragoza passed in 2012 a digital strategy that includes actions for the dissemination of eco-innovation and the reduction of energy consumption:

- Introduction of eManagement to reach ZERO PAPER use.
- Total renovation of public lighting with LED systems.
- Solutions for an efficient driving of private cars.
- Systems of environmental management for all the service companies working for the Municipality.
- Calculation of the carbon footprint in the companies contracted by the Municipality.
- Policies of energy efficiency and water consumption in municipal buildings.
- New “zero emissions” buildings.
- New sustainable municipal vehicles and pre-requisites for contracting public services.

Cooperation

Zaragoza participates in different national and international networks:

- EUROCITIES. 2001. Current member of its Permanent Secretaryship.
- CIDEU. Chair in the last years.
- EUROPEAN COMMON INDICATORS.
- SPANISH NETWORK OF CITIES FOR CLIMATE. 2005.
- ICLEI. 2005.
- ENERGIE-CITÉS. 2005.

Zaragoza has participated in the following European projects:

LIFE 96 "Zaragoza, a Water-Saving City: Small Steps, Big Solutions"

LIFE 98 "GALACHO-Zaragoza"

LIFE 98 "GALACHO-Zaragoza, development and demonstration of a pilot project for the implementation of strategies for multi-agent participation in the decision-making process"

LIFE 99 "Zaragoza Saves in Paper and Trees"

LIFE 03 "OPTIMIZAGUA"- Demonstration of water saving for watering uses through the experimentation of artificial intelligence integrated in traditional systems for controlling water"

INICIATIVA CONCERTO. Renaissance projects. Sustainable construction

SWITCH PROJECT. 12 cities of the five continents led by UNESCO-IHE Institute for Water Education

COHESION FUNDS. Water Infrastructures Plan

FEDER FUNDS. Hydrological-Forest Restoration at Torrero Mounts.

Zaragoza has benefited from two projects in the last official announcement of LIFE+12:

LIFE "ZARAGOZA NATURAL"

LIFE "HUERTAS Km 0". (Graphic 2)



Graphic 2. Km0 Agro-ecological Market of Products

Commitments

Aalborg Charter on Sustainable Cities. 2000.

Aalborg+19 Commitments. 2004.

Earth Charter. 2005.

Network of Cities for Climate. 2005.

ICLEI – Association of Local Governments for Sustainability. 2005.

Cities for Climate Protection. 2008.

Spanish Network of Cities for Biodiversity Protection. 2008.

Declaration of the 2010 Countdown of the International Union for the Conservation of Nature. 2008.

WWF Initiative "The Hour of the Planet". 2008.

Siege of the International Exhibition on Water and Sustainable Development. 2008.

The biggest difficulties to develop environmental and sustainable policies are:

Cultural. Part of the population is reluctant to accept measures of sustainable mobility forcing us to launch strong campaigns of information and public awareness.

Coordination. Occasional resistance against the internal municipal coordination of the environmental policies since other departments think that there is a certain interference in its actions.

Economic. The environmental policies demand big investments in water treatment, sustainable mobility, waste, that are necessary to be rethought with the economic crisis, not the policies in themselves but the completion of the deadline and its adaptation to the changing situation every year.

12B. Implementation

Describe the organizational structure of the city administration and show how the environmental strategies are embedded in the organization. Please include an organogram.

Which department or political body is the driving force behind the environmental vision?

What is the total budget of your city for the current financial year and how much is allocated for environmental activities? Is this budget increasing or decreasing?

Innovative instruments

Does the city use, in its environmental policy, innovative instruments like 'nudges':- citizen participation in environmental enforcement, awareness-raising through social media, innovative financing, etc?

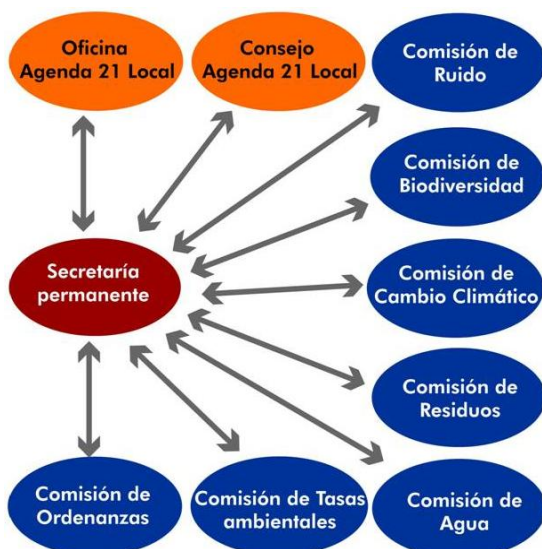
To what extent do you evaluate the progress of your policies / strategies / projects and do you adopt them according to findings?

Council Government is structured by Departments covering the different fields of the municipal management.

The Department of Culture, Education and Environment is the organ in charge of the city maintenance and the sustainability of its resources.

The Agency of Environment and Sustainability is the local entity in charge of the planning, management, coordination and implementation activities and guidelines on sustainability.

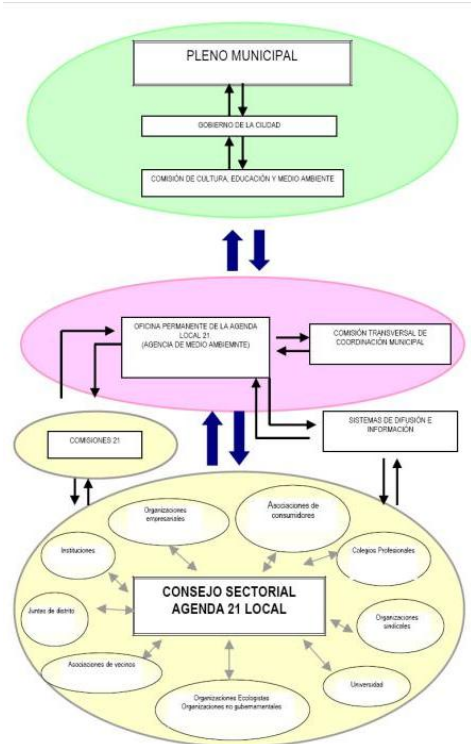
It is also the transversal organ of the municipal policies since environmental sustainability must be extended to the all the actions of the City Council.



Citizens and civil society participation is made through the Local Agenda 21 Board.

The Agency is its Technical Secretariat. (graphic 3)

Graphic 3. Mainstreaming of the Agency of Environment and Sustainability



The Board is an active participant in the thought and decision-making actions of the local government by using structured participation systems (Graphic 4).

Graphic 4. Interrelation between the Local Administration and the Board of Agenda 21

The total budget 2013 is 652,304,667 €, from which 143,767,883 € are for environmental policies, representing a 22.4% of total.

Although the global budget has been reduced in the last years, the sum for environment has been maintained.

Innovative tools

25,000 school children have spread good environmental practices (2012). (Graphic 5)



Graphic 5. School children learning on saving energy and growing their school orchard

200 companies voluntarily committed to the Meeting Club with Agenda 21 Local for reaching sustainable guidelines in manufacturing and distribution (Graphic 6).



Graphic 6. Plenary session of Agenda 21 Local Board. New firms join it

Citizen participation, specifically Environmental Volunteers, is essential element in integrated environmental management. Working with NGOs is not only consultation but of cooperation in the design and management of projects and activities in natural areas.

Municipal website

Zaragoza right away. Information on real time on the city's map.

IDEZar (Zaragoza Data Infrastructure). It is a system of horizontal information for all the municipal areas based on standards (according to INSPIRE Directive) with the possibility to combine different layers. (EUROGI/eSDI-Net Awards 2011)

Data Set Open Data: 27 environmental indicators.

Open Government Platform: Information about all the municipal initiatives. (Barack Obama Award 2009).

Active listening. Citizen participation tool to making decisions and receiving suggestions.

Transparency website. The City considers that the free access to information from the public sector is a basic right. "Bylaw on Transparency" is in process.

Integrated management. Environmental data. (Awards: eMobility 2011, TAW Accessibility 2006, Good Practices W3C 2007, OPEN DATA – LINKED DATA. 2010)

e2democracy project. Project Eurocores. Impact over energy saving and CO₂ reduction through the eParticipation.



Every program, above all educational and raising awareness, is evaluated by Indicators System (39). This allows us to make a global evaluation through the ecological footprint.

Graphic 7. Adult people informed on solar batteries charger

12C. Future Plans

Describe the short and long term objectives for the integrated management of environmental policy and the proposed approach for their achievement.

Describe present and future flagship projects that demonstrate your commitment to an integrated management of the urban environment.

Demonstrate Public Awareness of this bid i.e. public consultation, available to read etc.

Short and long term goals

- Limit urban sprawling to the area defined by the fourth ring road set up by the current Urban Development Plan and maintain and increase the city's recycling policies.

Urban rehabilitation of areas, neighbourhoods and households using the criteria of constructions with a bioclimatic and efficient use of energy and water, in agreement with the Municipal Bylaw on Energy Ecoefficiency and the Use of renewable energy in buildings and its installations. The consequence is that, thanks to the Municipal Bylaw on Urban Rehabilitation, the goals of reducing energy consumption, CO₂, emissions, water consumption, quality of the green areas and quality of air, in coordination with the plans of sustainable mobility and the strategy on biodiversity will be fulfilled.

These are transversal strategies that must influence on all the political decisions focusing on the city.

- Move forward with the improvement of the municipal systems of internal communication and those of relation with the citizens:
 - include more data groups in the Open Data Catalogue
 - publish services making it easier the visualization and comprehension of datasets
 - put tools at the disposal of the citizens to make it easier the combination of datasets and the generation of new services
 - creation of a personalized map according to the necessities.

Main projects

- One of the goals the city is working on is the integration of renewable energies in the urban planning and design, avoiding unnecessary losses in its transportation. In other words, produce energy in a clean way and be closer to the consumption points

Related to this and forming part of the actions of the Strategic Plan on Energy -Smart City-, a proposal is being prepared for the incorporation of systems of superfast charge by induction developed by the College of Industrial Engineers for its use in urban buses (hybrid-electric).

- Implementation of two LIFE projects presented by Zaragoza Council in call for 2012, with a calendar of actions 2013-2016 and a joint budget of 3.9 million euro.
 - LIFE "ZARAGOZA NATURAL" (LIFE +12 ENV/ES/000567)

Increase of the value of the green infrastructures of the city to boost its biodiversity and strengthen the green and blue grids. Set out at the same time an alternative to green tourism respecting the natural environment.

- LIFE “HUERTAS Km 0”. (LIFE+12 ENV/ES/000919)

Recovery of the periurban areas traditionally devoted to orchards for creating employment through the development of ecological farming and direct distribution channels. The estimated number of jobs is 150.

12D. References

References and links

- Official website of the City of Zaragoza
www.zaragoza.es
- Zaragoza environment website
www.zaragoza.es/medioambiente
- Ebrópolis
www.ebropolis.es
- Agenda 21 Board and Commissions
<http://www.zaragoza.es/ciudad/medioambiente/agenda21/consejo.htm>
- Zaragoza Sustainability Indicators
<http://www.zaragoza.es/ciudad/medioambiente/agenda21/observatorio/indicadores.htm>
- Plan for the Improvement of the Quality of Water 2002
http://www.zaragoza.es/ciudad/grandesproyectos/plan_mejora.htm
- Strategy for Adaptation to Climate Change and Quality of Air
<http://www.zaragoza.es/ciudad/medioambiente/atmosfera/estrategia.htm>
- Strategy for Climate Change Mitigation
http://www.zaragoza.es/ciudad/medioambiente/atmosfera/estrategias_adaptacion.htm
- Strategy for a Sustainable Management of Energy 2010-2020
<http://www.zaragoza.es/ciudad/medioambiente/estrategia-sostenibilidad.htm>
- Biodiversity Strategy
<http://www.zaragoza.es/ciudad/medioambiente/espacios/bio/estrategiabiodiversidad.htm>
- Sustainable Mobility Plan
<http://www.zaragoza.es/ciudad/movilidad/>
- Bike Master Plan
<http://www.zaragoza.es/ciudad/viapublica/movilidad/bici/plan.htm>
- Science and Technology Strategy
- Program of Environmental Education for School Children
<http://www.zaragoza.es/ciudad/medioambiente/educacionambiental/actividades.htm>
- Projects on environmental education
<http://www.zaragoza.es/ciudad/medioambiente/educacionambiental/>
- Action Plan against Noise
<http://www.zaragoza.es/ciudad/medioambiente/atmosfera/maparuido/>
- Participation in city networks
<http://www.zaragoza.es/ciudad/zaragozainternacional/redes/redes.htm>

Regulations

- Municipal Regulation on Provisions of the Department of Sanitation and Water Treatment of the City of Zaragoza
<http://www.zaragoza.es/contenidos/normativa/Exp-655001-13-Reglamento-saneamiento-depuracion.pdf>
- Municipal Bylaw on Ecoefficiency and Quality of the Integral Management of Water
- Municipal Bylaw regulating the price for the provision of services related to water sanitation and treatment
- Agreement of the Municipal Plenary Session of 27.09.2013 on Water Sanitation and Treatment
- Municipal Bylaw on protection of urban trees
http://www.zaragoza.es/ciudad/medioambiente/enlace/normativa/detalle_Normativa?id=4084
- Regulations of the agroecological fair
http://www.zaragoza.es/ciudad/medioambiente/enlace/normativa/detalle_Normativa?id=3883
- Municipal Rules for Saving and Efficiency
http://www.zaragoza.es/ciudad/medioambiente/enlace/normativa/detalle_Normativa?id=88
- Use of ecological fuel
http://www.zaragoza.es/ciudad/normativa/detalle_Normativa?id=88
- Municipal Bylaw on Ecoefficiency and Use of Renewable Energies in Buildings
http://www.zaragoza.es/ciudad/medioambiente/enlace/normativa/detalle_Normativa?id=245
- Municipal Bylaw on Animal Protection
http://www.zaragoza.es/ciudad/proteccionanimal/detalle_Normativa?id=4523
- Municipal Bylaw on Fostering Rehabilitation
http://www.zaragoza.es/ciudad/normativa/detalle_Normativa?id=1442
- Municipal Bylaw on eAdministration
http://www.zaragoza.es/ciudad/normativa/detalle_Normativa?id=922
- Municipal Bylaw on Transparency and Access to Information
http://www.zaragoza.es/ciudad/normativa/detalle_Normativa?id=3983
- More municipal rules
<http://www.zaragoza.es/ciudad/normativa/>