Greening the maintenance and conservation of municipal fountains in Barcelona.

Barcelona City Council, Spain - Winner of the Green Public Procurement (GPP) Good Practice Award in Spain 2006

Municipal Profile
Population: 1.5 million
Land Area: 101 km²
Municipal Budget: Euro 1.640.000.000 annually (US$1.8 billion)

Issue Addressed
The incorporation of environmental and social criteria in the public procurement process.

Programme Name
Green procurement for the maintenance and conservation of public and ornamental fountains in Barcelona.

Programme Goals

Abstract
The City of Barcelona initiated an internal "greening" programme called "City+Sustainability", which forms part of the internal action plan of Agenda 21.

The programme has the following general objectives:
- Reduce CO₂ emissions
- Reduce the consumption of water and the production of waste;
- Promote a social and sustainable local economy;
- Exclude products and services which cause social injustice such as child labour;
- Create a culture of social responsibility and environmentally friendliness, that is also communicated to companies, organisations and citizens.

One of the priorities of this programme is the incorporation of environmental and social criteria in the public procurement process.

In this framework, in October 2006 the general administrative tenders of the city to contract works, services and goods were modified and published to include environmental criteria which are in line with the new European public procurement directives. In detail, the latter refers to the criteria used to evaluate technical capacity, award criteria and the obligations and responsibilities of the contractor.

Importance of the issue
Green public procurement (GPP) can make a significant contribution to achieving sustainable development, and help to improve efficiency in products and services. With their enormous purchasing power – around 16% of Europe’s GDP - public authorities can have a major
influence on suppliers and can stimulate the production of more sustainable goods and services.

To effectively develop and implement sustainable procurement criteria requires local governments to guide, and work closely together, also with the business sector, in addressing innovation, technology, development and effective services. Such cooperation is likely to have an impact on cross-sector cooperation as well – in this case transport, urban planning and building construction, thereby also widening the potential impact of environmental practices.

Case

Context of region and municipality
Barcelona is the capital of Catalunya (Catalonia), a long-established autonomous region in the north-east of the Iberian Peninsula, with a population of 6 million and its own regional government, the Generalitat de Catalunya.

The Barcelona City Council is committed to building a city that is aware of environmental challenges, a city that shows increasing sustainability and solidarity. Since the year 2000 Barcelona has been developing the “Green Office” programme with the aim to introduce environmental sustainability into workers’ behaviour and in municipal purchasing.

In the year 2001 the City Council passed a governing measure declaring it will introduce environmental requirements in the contracting of goods and services. Staff of the city council developed the Green Office Guide. This tool contains information and tips that will help improve environmental coherence, with regard to the use of materials, products and services.

The Barcelona City Council has been developing its green procurement activities through the implementation of a wide range of strategies:
- Eco-audits
- Information dissemination, awareness-raising and training
- Normative actions (legislation and directives)
- Diverse support actions for change in services and departments
- Investments in renewable energy in public buildings
- Greening public tender specifications.

Case description
The purchasing for the maintenance and conservation of public and ornamental fountains, initiated in January 2005, is a 4 year long process (2006-2009), with the possibility of a 2 year extension. The total amount is Euro 14,400,000, that is, €3,600.00 annually. It is a special administrative contract (services, works, consultancy, supply), approved by the City Council Government Commission.

The contracted work covers 1,650 public fountains, 220 ornamental fountains and the ‘Eje María Cristina’ (50 fountains).

The specifications included in the call for tender include the following:
- Subject matter of the contract: “Cleaning, maintenance and operation of public fountains, of ornamental fountains, and the execution of the necessary conservation and repair works with new criteria for the improvement of sustainability”.
- Description of the works, materials and programming: criteria related to:
  - the obligation of water re-circulation,
  - waterproofing of the fountains,
  - introduction of flow regulating valves and remote control programming systems,
  - use of soundproofing materials and elements,
  - energy saving systems,
  - water saving systems, and
  - use of mobile machinery with environmental improvements.
- Environmental requirements: the use of clean and sustainable technologies is prescribed in order to reduce environmental and acoustic pollution, and to promote energy and water saving.
- Criteria used for awarding the tender, the following points were considered:
  - the technical offer (50 points),
  - the economic offer (28 points),
  - the technical / environmental innovation (22 points), for example includes:
    - more energy saving (calculation based on a formula): 5 points
    - more water saving (calculation based on a formula): 5 points
    - lower emission machinery: 3 points
    - other management improvements: 5 points.

**Results**

The call for tenders was published in April 2005, and was awarded in September 2005 and achieved a reduction in price of 13.09%, equating to €3,128,600 annually. The contracted offer (or winning bid) includes a team of 72 workers, 35 vehicles, a vacuum truck, a mobile water purifier, two trailers, two pressure cleaning equipment and one boat.

The resulting environmental improvements include:
- The use of a sucking-in cleaning system, without having to empty the water from the ornamental fountains (water is only lost by evaporation).
- The use of fibre optics and led lamps, which results in an electric energy saving of 200% and 10% respectively.
- The use of trucks for cleaning filled with phreatic water (groundwater, subsurface water that occupies the zone of saturation) instead of drinking water. The consumption of phreatic water by municipal services has increased 140% (more than 700,000 annual cubic metres of water are used, including park maintenance). Drinking water consumption by municipal services has been reduced 35.6%.
- All vehicles are operated by gas.
- Instead of chlorine compounds, bacteria are used for cleaning water.
- Ultrasounds are used to eliminate algae and micro-algae.
- Drinking water fountains are equipped with a new “marble” button, which avoids waste of water before and after drinking.
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