



## MADRID AND THE SUSTAINABLE DEVELOPMENT

### **I.- BRIEF DESCRIPTION OF MADRID**

Madrid City is the capital of Spain and its Madrid region. With nearly three million two hundred thousand inhabitants, it is the second most populated city of the European Union. It is an open and multicultural metropoli that welcomes 17% of its population from more that 180 different nationalities.

Its strategic geographical position, the initiatives of its people and the strong investments done during these last years have transformed the city to be the economic motor of the country, with growth rates higher that its neighbor European cities making the 12% of Spanish GDP.

Services and building are the main productive sectors. This fact explains the dense and modern transport network deployed which is a reference of innovation in infrastructure. Barajas is already the fourth airport in the European Union in terms of traffic, and Madrid subway network reaches 319 km long. It also hosts the first marine custom house in Europe.

### **II.- INITIATIVES AROUND SUSTAINABILITY**

The strong demographic and economic development in the city has pushed public administrations to develop policies that forge a sustainable development with the aim of having a more lived, habitable, culturally opened, integrated and competitive city.

Being conscious that most of the environmental issues have a strong urban base, Madrid has developed the biggest ambience balance operation of its recent history. The burying underground of the M-30, one of the main roads that surrounds Madrid, has achieved in the last year the reduction of 35.000 tons of CO<sub>2</sub>, improve the traffic, reduce accidents and make walkers the protagonists of the city. Madrid has recovered the water of its river and has gained more than three million two hundred thousand sqm of green areas that connect both sides



of the city around it. This provides the citizen with better access to leisure and walking areas that reinforce the architectural and historic value of Madrid. Thanks to this project, the city will count with more than 26.000 new trees that positions Madrid as the second city in the world with the highest number of aligned trees.

The local council of Madrid has launched several plans with the aim of diminishing the environmental impact amongst which we find the **“Plan for Sustainable Use of Energy and Climate Change Prevention”** and the **“Water Management”**. The city has achieved some extraordinary results like the recycling of 100% of residual waters (aprox 500 millions of m<sup>3</sup>) that are either returned to the river or used for watering of green spaces and cleaning of streets.

Following the same objectives, a very ambitious **“Remnant Management”** directive has been developed achieving a 50% reduction of organic remnants and the construction of what will be the biggest biometanisation center of Europe, capable of obtaining biogas from a 60% of the total organic remnants of the city. Some other plans like **“Air Quality”**, **“Urban Mobility”** and **“Cycling Mobility”** have also been developed.

Madrid has also achieved great results in the areas of mobility and transport such as the usage of alternative energy in the municipal vehicles and those that provide a public service. This is a project due to complete fulfillment in 2011 and that today counts with more than 1.800 “clean” vehicles. Some other achievements are the only-walkers transformation of downtown streets, specific rails for public transport, a 64 km of only-bicycles ways surrounding the city, and the optimization of collective transport between the center and the outskirts.

Technology has been applied to construction incorporating a new concept, “bioconstruction”. It refers to an innovative way of planning and building of cities, based in energy savings and optimal use of natural resources thru the usage of renewable energies and non contaminant materials. This way, buildings are more efficient, attractive, competitive, intelligent and biological.

The **“Strategic Plan for the Central Area”** is one of the main commitments of the Local Council, which objective is to transform the historical center of Madrid in a better connected and more accessible, attractive and competitive



area. It is a project aiming for the best design of the city of today but, more important, the city that citizens require for tomorrow.

All these achievements have been possible thanks to the collaboration of public and private institutions, campaigns within the Agenda 21 program of United Nations, universities researches and specially the collaboration of Madrid citizens that understand and require a new city model.

### **III.- THE COMMITMENT OF MADRID CITY WITH THE “CONNECTED URBAN DEVELOPMENT” INITIATIVE**

Following this objective of environmental sustainability, Madrid is committed to contribute in the CUD initiative of Cisco collaborating with its IBSG group, focusing in the usage of ICT in the renewal of residential buildings and open areas. The objective is to transform Madrid from a resources consumer and contaminant gas producer city, to one that smartly produces and uses energy without gas footprint.