

SUPERVISORY AND CONTROL OF URBAN SERVICE NETWORKS IN SMART CITIES. THE CASE of VALDESPARTERA, Zaragoza (SPAIN)

SUSTAINABLE URBAN PLANNING




ECO CITY VALDESPARTERA

ecidad Valdespartera ZARAGOZA

TARGET
 “Sustainable Urban planning”
 “Quality of life”

Action lines

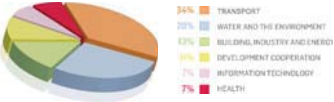

- ENERGY EFFICIENCY
 - Decreasing energy consumptions
 - Using renewable energies
- DECREASING URBAN WASTE AND EMISSION
- EFFICIENT USE OF RESOURCES
 - WATER
 - ENERGY CONSUMPTION



Established in 1956, Eptisa is an international engineering, architecture and information technology company clearly oriented towards services to the client.

Eptisa implements some of the most complex projects in the sector of Transport, Water, Environment, Energy, Industry and Building.

Eptisa closed the financial year 2011 with a gross income of 150 million Euros and currently employs more than 2,100 people, with over 900 professionals involved in international projects.

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Check that planned improvements have been achieved

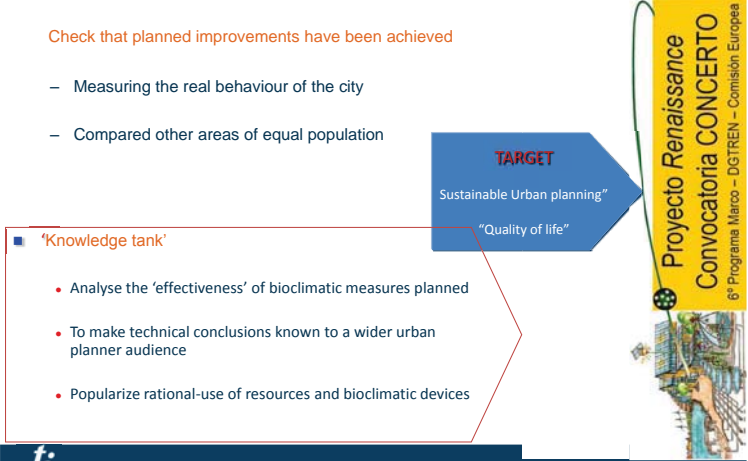
- Measuring the real behaviour of the city
- Compared other areas of equal population

TARGET
 Sustainable Urban planning”
 “Quality of life”

Knowledge tank

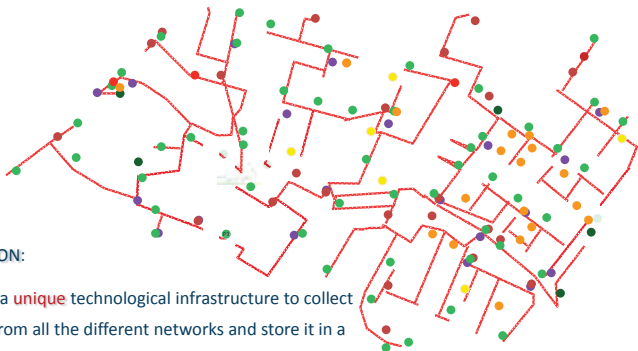
- Analyse the ‘effectiveness’ of bioclimatic measures planned
- To make technical conclusions known to a wider urban planner audience
- Popularize rational-use of resources and bioclimatic devices

Proyecto Renaissance
 Convocatoria CONCERTO
 6º Programa Marco – DGTREN – Comisión Europea





TECHNOLOGICAL INFRAESTRUCTURE



MISSION:

Using a **unique** technological infrastructure to collect data from all the different networks and store it in a main-server-computer.

CENTER FOR SUSTAINABLE URBAN DEVELOPMENT (C.U.S)

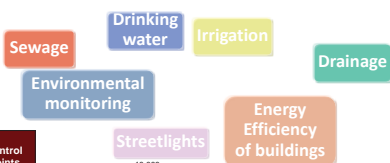
■ 'DATA INTERPRETATION' CENTRE

■ Data collected:

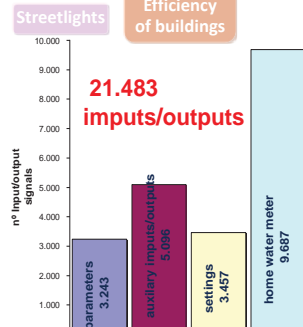
- Meteorological data
- Environmental conditions
- Power and gas consumption
- Energy efficiency of buildings
- Water supply
- Irrigation network
- Urban Solid Waste
- Sewage and rainwater



URBAN SERVICE NETWORKS



SERVICE NETWORKS	Control Points
WATER SUPPLY: PLOTS	91
WATER SUPPLY: distribution network	22
WATER SUPPLY: tanks & pumping station	2
STREET LIGHTS	20
IRRIGATION: OPEN-TANKS	1
IRRIGATION: PUMPING STATION, FILTERS, TANKS	
IRRIGATION: DISTRIBUTION NETWORK	55
SEWAGE DRAINAGE	2
RAINWATER DRAINAGE	3
Total general	196
HOME WATER METER	9.687



CENTER FOR SUSTAINABLE URBAN DEVELOPMENT(C.U.S)



- Promote sustainable habits



- Learn about energy efficiency and urban sustainability

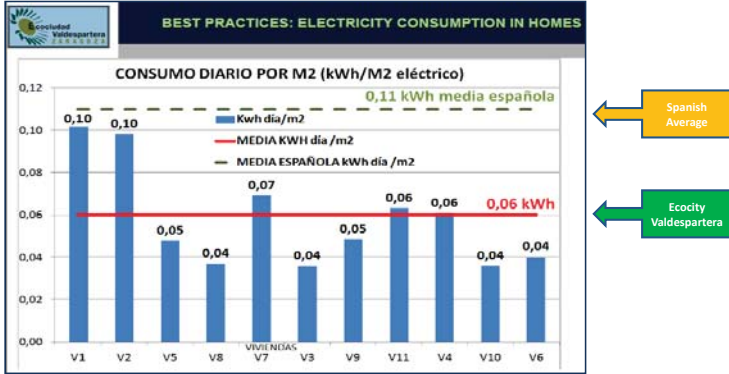


- Teach 'sustainability'



- Check results, share experiences and distribute the knowledge
- Share and create a sustainable urban planning

Valdespartera: Energy Savings



Valdespartera: Achievements and Awards

✓ International Awards



2004 & 2006



2005



2007

✓ Improvement of Quality of Life in Zaragoza outskirts

