City of Fuenlabrada

Horizon 2020 Proposal SCC-02: Nature-based solutions for Inclusive Urban Regeneration



Fuenlabrada is a city in Madrid Metropolitan Area. In 50 years, the city transformed from an agricultural town of 2.908 inhabitants (1960) to a city with a population of 200.705 in 2014. Its main economic activity is within the industrial and the service sectors. It is based on small and medium enterprises and numerous industrial areas that make the city an economic motor of Madrid.

The challenge — which is also relevant to other satellite cities throughout Europe — is how to develop and integrate essential nature-based and innovative solutions in order to regenerate the city environment and to endow it with the necessary attractiveness for people to live and work here in the first place.

The City of Fuenlabrada is seeking to build a European partnership consortium for a bid which would focus on the opportunities which arise when nature-based solutions are systematically leveraged to develop innovative interventions for the urban "social fabric".

Facts & Figures

- It is located on the southwest of the region, 22.5 km from the capital
- Fuenlabrada, with a population of over 200,000, is one of the largest towns in the Greater Madrid area and also has one of the youngest populations of all Spanish cities.
- The city witnessed a dramatic population explosion in the 1980s, due to large scale immigration of young workers coming from the capital city and other agrarian regions (chiefly Extremadura, Castilla-La Mancha, Andalusia and Galicia)
- Fuenlabrada has been one of the first cities in Spain that has successfully segregated the waste to be recycled according to its different characteristics.
- Fuenlabrada also aims to be the "City of 500.000 trees". To reach that goal a major reforestation programme was launched in 2009.

FUENLABRADA'S SMART CITY ATTRIBUTES



Smart environment — large tradition of recycling, large green spaces

Smart people – Informed and collaborative population who take a keen interest in their city

Smart technology – data systems, digital infrastructure with a history of innovation







POPULATION DIVERSITY

Fuenlabrada presents an interesting demographic picture, marked by youth and diversity. The average age of its population is 6 years lower than the national average and more than a fifth of the inhabitants do not exceed 20 years. The average age of immigrants in Fuenlabrada is 32 years, in contrast to the 38 year average of the natives.

14.1 % of the total population of the city is made up by nationals from other countries (28.296), being 31 % EU citizens and the rest from third countries. The countries with the largest representation are Rumania (5.979) with 21.1 % of the migrant population, Morocco 16.1% (4.576), Nigeria 8.6% (2.444) and China 6.7% (1.921), followed by Colombia and Ecuador, which have high numbers of naturalizations.

SOME ACTIVITIES

Fuenlabrada has been working since more than 10 years in favour of Interculturality: in 1999 the municipal service on migration was created.

Fuenlabrada has participated together with other city councils on a European program to support initiatives that fight racism and xenophobia, like the "Anti-Rumours" project and continues to do so, conducting campaigns of municipal awareness raising in order to keep contributing to the best possible cohesion in the municipality.

Thanks to all of these efforts, an important network of citizen participation exists with more than 400 registered entities, among them more than 60 immigrant or pro-immigrant organizations.

In 2013, the Fuenlabrada city council received, together with other nine Spanish municipalities, the PREMIO award, a prize for best practices and experiences in integration of immigrants, awarded to projects financed by the European Social Fund and the Ministry for Employment and Social Security. It was allocated to the activities that were developed by the department of social welfare: Intercultural coexistence with families of distinct nationalities; and work in the area of reception and integration.

European Union Funding on Fuenlabrada's social and urban transformation

Since 1995, more than 35 projects exceeding 53 million Euros of investment have been mobilised. A waste treatment plant, installation of underground containers, the rehabilitation of almost all neighborhoods and industrial areas or a training project to help unemployed people in the city are some examples of the projects co-financed by the EU together with the City Hall of Fuenlabrada.

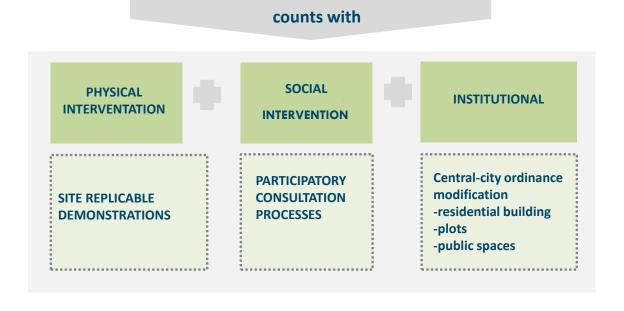
60 millions of euros in ERDF and ESF 1995-2016 +35 EU funded projects

Targets

Fuenlabrada wants to position itself as a liveable and attractive city, reversing a dangerous dynamic of ageing population, vulnerability of the youngest generations and even of lack of access and/or exclusion to proper housing. The surge of population growth in the last two decades of the past century was not accompanied by a corresponding urban planning strategy capable of accommodating this population growth with the diversification of economic activity, education and training of the workforce.

This pattern can only be reversed by a city-led comprehensive and integrated sustainable urban policy, capable of creating the "de facto" conditions for a new urban social fabric, self-sustainable and not dependent on the city of Madrid as the parent megacity. This process can be ignited with the necessary mix of NBS, infrastructure upgrading, building retrofitting and supported by a robust business model led by the City Council itself. Cocreation and co-design will also be of paramount importance in order to guarantee the "systemic Innovation" that a project of this magnitude entails.

H2020 proposal INTEGRAL URBAN REGENERATION



/ ACTION 1: GREEN CORRIDORS FOR URBAN-RURAL CONNECTIONS

Adaptation of the cattle and other routes of the central city with the rural area, encouraging the circulation of pedestrians and cyclists and other green elements to create green corridors

DEMONSTRATION AREA

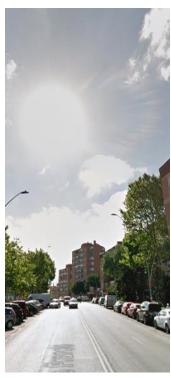
St. / Francia

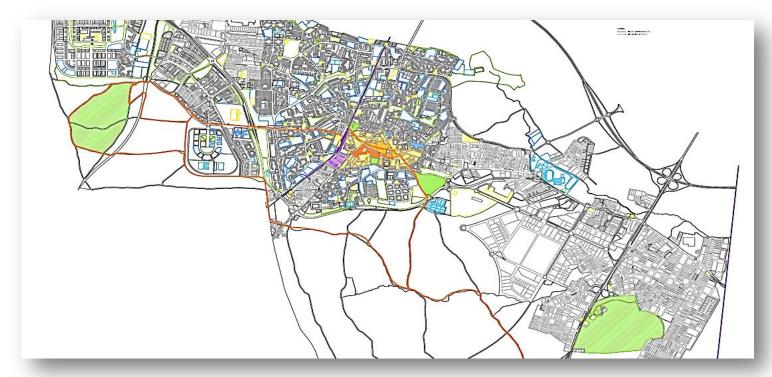
REPLICABLE IN:

Axis St. / Santa Juana and parques lineales
St. / de la Fuente

Axis St. / Extremadura-de Creta







/ ACTION 2: GREEN URBANIZATION ON MAIN TOWN STREETS

Improvement of the city centre' streets and "hard" squares urbanisation by introducing green urban furniture favouring climate change control: pergolas, woodlands, fountains and other green elements for climate change control.

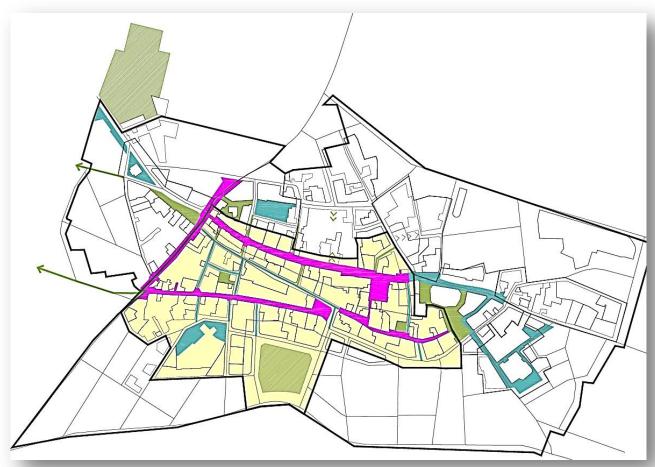
DEMONSTRATION AREA

St. / de la Plaza

REPLICABLE IN:

St. / Arena,
St. /Leganés- Luis Sauquillo
Secondary roads





/ ACTION 3: GREEN AND PRODUCTIVE PUBLIC SPACES

Public spaces intervention with urban agricultural programmes and associated agricultural markets

DEMONSTRATION AREA

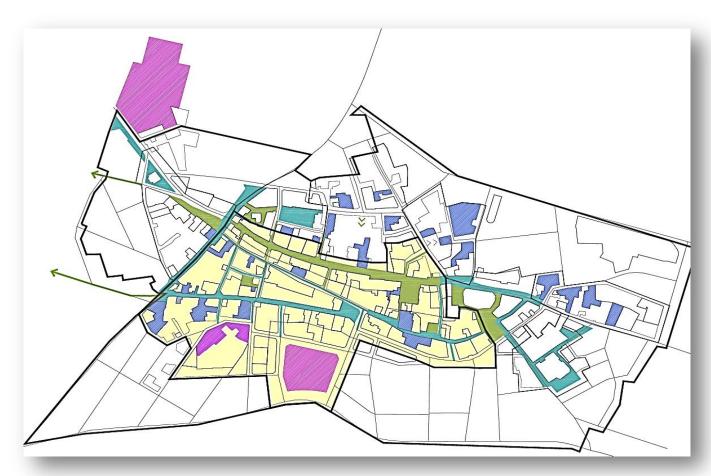
Current Fairground

New public space associated to the senior centre

REPLICABLE IN:

Huerto del Cura Park





/ ACTION 4: TEMPORARY PUBLIC USE IN URBAN VOIDS

Regulatory change which incentive the transfer for temporary public use of empty plots of the historical city centre. The transferred plots will be incorporated to the green infrastructure of the city, maintaining both the permeability and the wooded land. Alternative uses will be decided by participatory process.

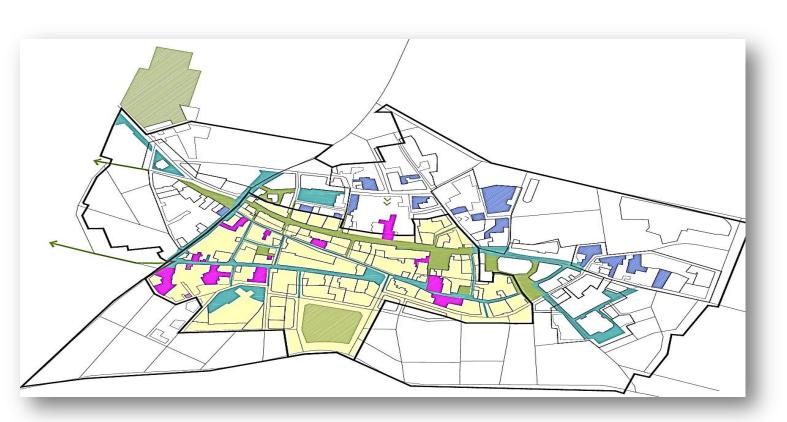
DEMONSTRATION AREA

Design and building of mobile structures will be promoted by public tendering for spatial improvement and climate control for a correct adequacy of the plots.

REPLICABLE IN:

The adequacy structures move to new plots while fist ones are under construction





/ ACTION 5: ENERGY BUILDING REHABILITATION WITH GREEN ENVELOPE

Improvement of energy efficiency through green-roofs, green-walls and / or vegetable façades (for all types of buildings at the city centre)





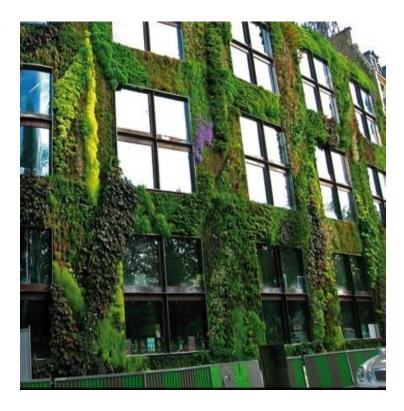


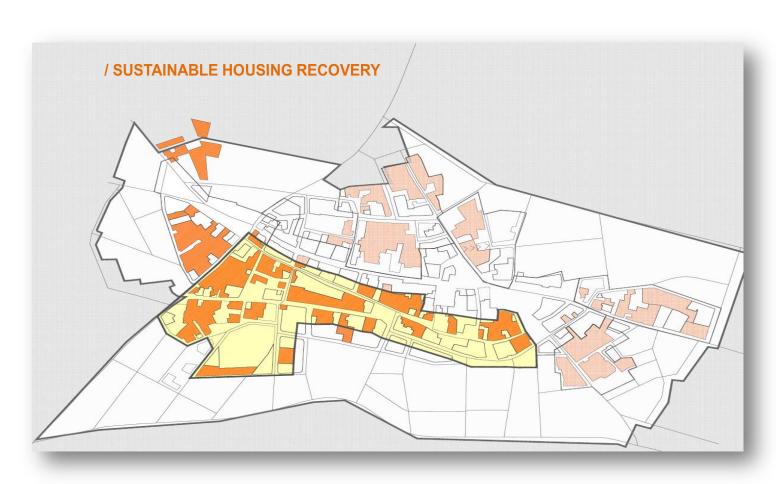




/ ACTION 6: ENERGY BUILDING REHABILITATION WITH GREEN ENVELOPE

Regulatory change. New city town ordinance with definition of construction' volumes that will maintain the rural concept by including green envelopes and some other innovative nature based-design measures





The FUEN-Lab project

We propose to pilot a large-scale demonstration programme which will be a test bed for a range of Nature-Based and smart-city technologies impinging upon the heart of the city.

Intelligent control and monitoring systems, sensors and IoT will improve interoperability, and ensure co-ordination of accessibility of data.

All the projects will be benchmarked against the demonstrators in the partner and follower cities, in order to validate how best practices can be easily replicated in other urban environments, including China, India and LATAM.

A Sustainable urban development plan will be implemented, based on diverse nature-based solutions addressing several issues, including: energy, environment, waste, water, ICT, land use, citizen engagement, social cohesion, human health, air, water and soil pollution, climate change impacts and adaptation, etc.

Partners:

City Council of Fuenlabrada

http://www.ayto-fuenlabrada.es/

Eptisa:

http://www.eptisa.com/es/

Fundacion Cartif:

http://www.cartif.com/

AUIA, Arquitectos Ingenieros Urbanistas Asociados: http://www.quia.es/

Further information:

https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/scc-02-2016-2017.html

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EUROCITIES membership

Fuenlabrada is an associated member of EUROCITIES network, which acts as either coordinator or partner in a range of EU-funded projects that touch upon the policy areas they focus on and involve their members.

As an associated member, Fuenlabrada has the right to participate in specific EUROCITIES forums and working groups.

Fuenlabrada currently participates on the Cooperation and Economy Forums.



Nature-based innovative solutions

A number of nature based solutions are being pursued. The City Council, has designed a multidimensional and integrated strategy to rejuvenate the city center and improve its attractiveness and livability. This strategy will involve Nature Based Solutions (NBS) as main tenets for the recuperation of the urban centrality and attractiveness of this area. The strategy has been strictly codesigned and will follow a thorough participatory and bottom-up process, as this will guarantee the long-term sustainability of the project maximize its social impact. The strategy will also focus on reducing air pollution and the carbon foot print of the city mostly caused by traffic congestion, as well as the "heat island" effect predominant in this region during the summer period.