Girona Pilot: Green Scenario

Pilot Leader: University of Girona - SIGTE

Overview

GeoSmartCity contributes to the Smart City implementation by establishing a cross-platform, re-usable and open hub able to publish open geographic information and to provide specialized services based on open standards.
The GeoSmartCity cross-platform toolkit and operational methodology allow further integration of third-party data (open or restricted) as well as crowd-sourced data. The potentiality of the toolkit will be demonstrated through the development of 11 operative and re-usable pilot cases in the frame of two scenarios: Green-Energy scenario, to facilitate diffusion and management of renewable energy within cities, and Underground scenario, to support integrated management of underground utility infrastructures.

General Information

- Population: 97,198 in the Municipality of Girona
- Surface: 34km2 and at 75 meters above sea level.

Girona is the capital of the region and the province of Girona, located in the northeast of Catalonia, the municipality is 100 km from Barcelona, 40 km from the Costa Brava and 60 km from the border with France.
At the confluence of 4 rivers (Ter, Onyar, Güell and Galligans) Girona is a city on a human scale with all the charm of a larger city and very well connected through the high speed train (Madrid-Barcelona-Paris) and the highway.
Its Historic Old Town is one of the most evocative of Catalonia, with unique monumental elements in Europe.

Description of the pilot background

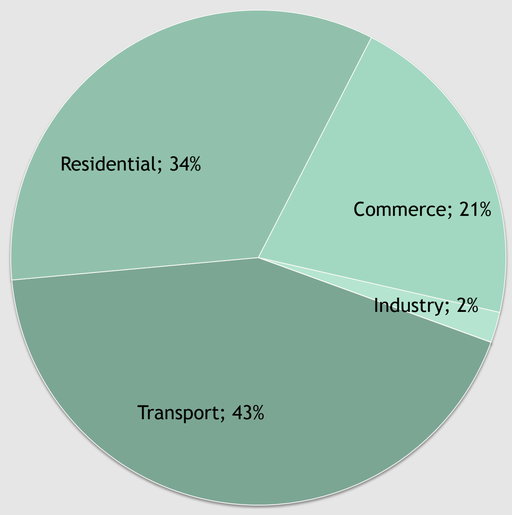
In 2008 the city of Girona formalized its commitment to the fight against Climate change adhering to the European initiative Covenant of Mayors. Participated by about 2000 municipalities around the EU, the pact encourages the contribution of cities to fulfil the objectives of the Protocol Kyoto climate change. This contribution is based on achieving three objectives by 2020:

Reducing emissions of greenhouse gases (GHG) in the city by 20% compared to per capita emissions of the reference year, in 1990.

Improving the energy efficiency achieved savings in energy consumption per 20% compared to 1990.

Increasing the contribution of renewable energy in the municipality until these represent at least 20% of the total energy consumed.

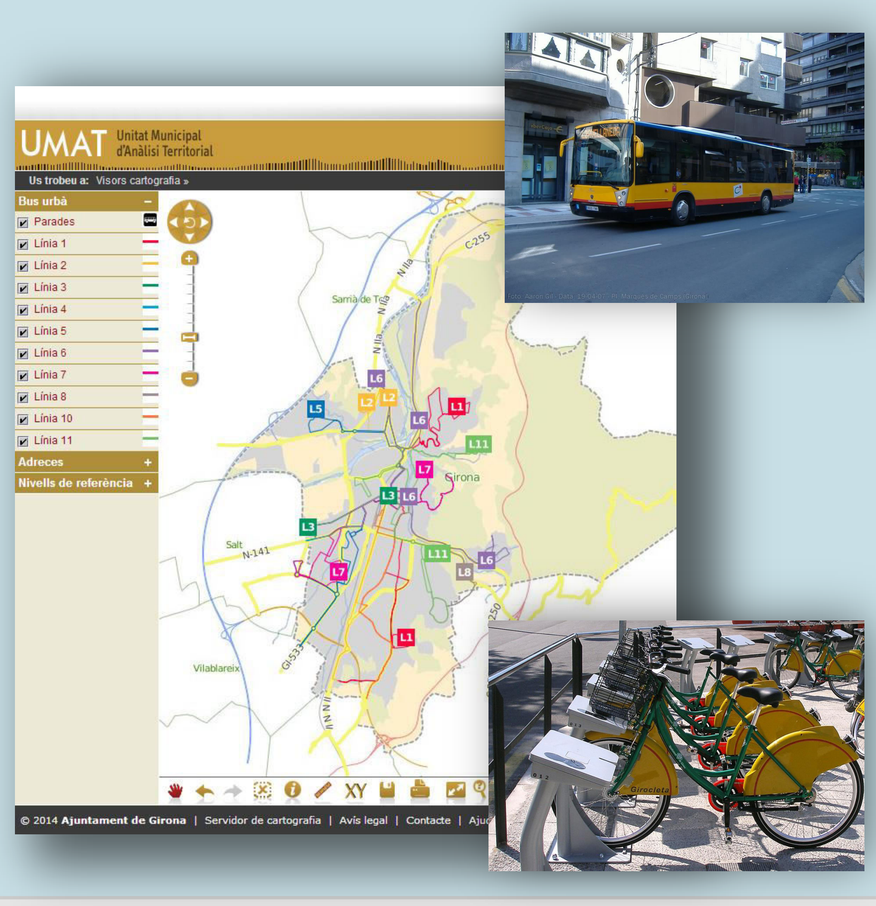
The greenhouse gases emissions breakdown by sectors shows an important contribution from the transport sector.



Objective

The pilot will be carried out from a Geo-Smart Information System (GSIS) that will collect and integrate geo-data (mainly open) in order to contribute to the municipality actions planned related to the reduction of the C02 consumption from the transport sector. Some of theses actions are related to:

- Decrease the searching time to park.
- Facilitate and encourage the use of alternative transportation
- Promote healthy routes with a lower presence of CO2.
- Inform about optimal routes
- Incorporate traffic incidents
- Inform about the electric vehicle charging points



Specific Data sources used for the scenario:

- Public and private car park spaces
- Bicycle: official routes, user routes, bike park, public sharing service
- Urban bus: real-time information, bus stops, routes.
- Traffic and transport incidents
- Electric vehicle charging points
- Healthy routes
- City services and equipment
- Roads, streets, points of interest, ...
- Green areas
- Noise map

Stakeholders

- Public Administration
- Citizen
- City visitors
- Utility Companies
- Mobility companies

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