

EnergyCity

Ridurre i consumi energetici e le emissioni di CO₂ nelle città dell'Europa centrale

Project No.

2CE126P3

Starting Date:

1°March 2010

Duration:

36 months

Total Cost:

€ 2.490.500

Total Cost for the Municipality of Bologna:

€ 240.400

EU Funding in favour of the Municipality of Bologna:

75% = € **180.300** (FESR) +

25% = **€ 60.100** (Rotation Fund)

Funding Programme:

Central Europe Programme (European Territorial Cooperation)





EUROPEAN UNION EUROPEAN REGIONAL

Coordinator:

Budapest University of Technology and Economics (HU)

Partners:

Municipality of Bologna, **Environment Department (IT)**

Veneto Energy Consortium - CEV (IT)

City of Ludwigsburg (D)

Prague 11 Metropolitan District (CZ)

Department of Structure, Transport, Water, Territory and Survey Engineering - Alma Mater Studiorum, University of Bologna (IT)

CERE - Centre of Excellence for Renewable Energy, Energy Efficiency and Environment (A)

National Institute of Oceanography & Experimental Geophysics - OGS (IT)

City of Munich, Department of Health and Environment (D)

Energy Agency of Savinjska, Saleska and Koroska Region - KSSENA (SL)

BACKGROUND

One of the major challenges faced by European countries today is the reduction of CO₂ emissions contribute to climate change. This is particularly important in cities as they account for 80% of the buildings and 75% percent of carbon dioxide emissions. They are therefore obvious areas where efforts have to be focused, as improvements in their efficiency can reach very good results in the fight against climate change.

OBJECTIVES

The **general objective** of EnergyCity therefore to reduce energy consumption and CO2 emissions of towns and cities in Central Europe. EnergyCity intends to address the lack of user-friendly methods and information systems to measure and visualise CO2 emissions in urban areas at different scales, as well as to analyse energy efficiency and renewable measures to reduce the carbon output generated in urban areas. EnergyCity intends to collect and make available, during the three years of the project duration, standardised data on energy efficiency in urban agglomerates that can be readily used by planners and local authorities to make city- or district-wide estimates on possible reductions of CO₂ emissions.

PLANNED ACTIVITIES

EnergyCity will first collect the known and existing data in the fields of energy efficiency and CO_2 emissions' measurements, thermal mapping and use of multi- and hyper-spectral data

for the roof surface classification, which is necessary to set the correct methods of mapping temperatures and CO₂ emissions in the city areas.

An extensive set of digital data will be collected in the seven partner cities (Budapest, Prague, Munich, Bologna, Treviso, Ludwigsburg and Velenje), via aerial and ground surveys. The captioned urban areas in the project cities will be flown over, in order to collect thermal images that will reveal heat losses from buildings, ground features and even objects underground.

These data will be analysed on the basis of standardised data and included into a so-called Spatial Decision Support System (SDSS), to display and compare the costeffectiveness and potential of the different solutions offered by renewable energies in the project cities. A series of pilot actions in the seven cities will test the effectiveness and viability of the implementation strategy (SDSS).



EXPECTED RESULTS

The expected outputs of the project are a number of joint strategies and action plans, the development of transnational tools and the creation of a permanent transnational management structure.

They will allow city planners and local governments to develop and quantify measures and strategies to reduce CO2 emissions and energy consumption in the seven project cities, by improving the energy efficiency and extending the use of renewable energies. This will lead to define some guidelines for local and European governments and help them reach their targets of energy efficiency

http://www.energycity2013.eu/

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