

URD_9

Title of the doctoral program

Urban and regional development

Title of the research activity

Decision Support Systems toward Post-carbon City

Short description of the research activity

The concept of “post-carbon city” signifies a rupture in the carbon-dependent urban system, which has led to high levels of anthropogenic greenhouse gases and the establishment of new types of cities that are low-carbon as well as environmentally, socially and economically sustainable. The phenomena related to post-carbon cities impose new paradigms in the policy makers agenda. In particular, new uncertainties and vulnerabilities of cities are emerging, that require an holistic evaluation approach and new integrated collaborative methods and tools.

The research activities will develop appropriate Spatial and Multicriteria Decision support systems (Mca-DSS) in connection with a number of cost analysis with the aim of assisting urban planners, built environment stakeholders and policy makers in their efforts to plan, design and manage post-carbon cities.

The proposed research activity will have the opportunity of being included in a number of going EU research projects on the topic, including POCACITO – Post carbon city of tomorrow (<http://pocacito.eu/start>), MILESECURE-2050 (<http://www.milesecure2050.eu/>), DIMMER (dimmer.polito.it), EEB - zero net building in smart district smart cities, Toward sustainable and resilient campus (Politoward.polito.it).

Scientific responsible (name, surname, role, email)

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Marta Bottero, Assistant Professor, marta.bottero@polito.it

Number of vacancies for XXXI cycle (3 years program)

2

Specific requirements (experiences, skills)

There are not specific requirements for the research programme.

Website of the research group (if any)

http://www.dist.polito.it/en/the_department/internal_structures/s3_lab