



## Scenario simulation decision support tool for sustainable land use and planning

Main results and E-learning module for the SULD web-based demonstration version



### Sustainable Urbanizing Landscape Development

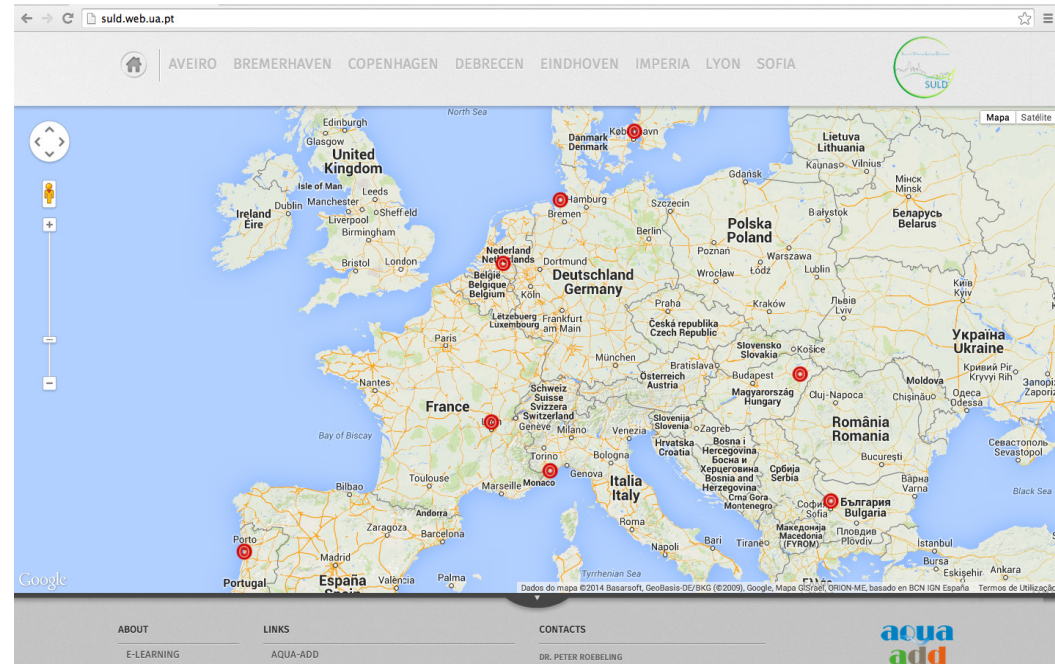
The SULD decision support tool is a hedonic pricing simulation model that allows us to assess the impact of location-specific green/blue space projects, infrastructure developments and socio-economic scenarios on the location and density of residential development, population density and composition, household living space and real estate values. SULD provides information that is normally not available to stakeholders in the urban planning process and, hence, aids local authorities and stakeholders in sustainable land use and planning.



Testing the SULD decision support tool in the eight partner cities (Copenhagen, Bremerhaven, Eindhoven, Lyon, Aveiro, Imperia, Debrecen and Sofia), we were able to uncover four major tendencies regarding the establishment, re-introduction or re-qualification of green and blue spaces.

The value-added of green and blue space depends on: i) the quality and size of the intervention; ii) the location of the intervention relative to existing residential areas, urban centers and environmental amenities; and iii) the social classes attracted to the intervention area.

- 01** Cities become more compact as people are willing to live in smaller spaces when closer to an attractive area.
- 02** Population density increases as green and blue spaces attract more people.
- 03** Appreciation in real estate values as people are willing to pay more when living closer to an attractive area.
- 04** Changes in demographic distribution patterns will occur as higher income households are attracted to these more attractive areas.



<http://suld.web.ua.pt>

DR. PETER ROEBELING - peter.roebeling@ua.pt  
 Centre for Environmental and Marine Studies (CESAM)  
 Department of Environment and Planning  
 University of Aveiro, Portugal  
[www.cesam.ua.pt/roebeling](http://www.cesam.ua.pt/roebeling)

University of Aveiro  
 Campus Universitário de Santiago  
 3810 193 Aveiro, Portugal  
 Tel: +351 234 370 200  
[www.ua.pt](http://www.ua.pt)

