SCIENCESPRINGDAY



Department of Sciences and Environmental Engineering

Title - PhD Thesis

Municipal Master Plans and Adaptation to Climate Change in Coastal Cities. The Lisbon Case Study

PhD Programme on Climate Change and Sustainable Development Policies







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5 years Degree in Environmental Engineering and two Post-graduate courses: "Spatial and Environmental Planning" and "Local and Regional History".

Objectives

This research aims to establish how spatial planning instruments and policies can contribute to mainstream climate change adaptation measures, at local scale, which assure a land use that improve the adaptive capacity of the urban system. Bearing that in mind, it is aspired to analyze the possibilities of a better use of the current spatial planning instruments and to propose eventual modifications in the future, in a way to integrate climate change adaptation measures, related with sea level rise and the occurrence of flash floods in urban areas, before different climate change scenarios.

Methodology

We are studying the main instruments of territorial management focusing on urban scale and some climate change adaptation strategies /plans of portuguese and international local authorities, mainly coastal cities, such as London and New York City, in order to examine practices of integration of climate change adaptation measures in those strategies, emphasizing on the phenomena resulting from climate variability mentioned above. For Lisbon, we aim to:

- identify and evaluate how specific measures to increase the adaptive capacity of the city to the two above mentioned phenomena are being accommodated in territorial management instruments in force, at municipal scale;
- expose the main limitations and needs encountered;
- and propose recommendations for the future development of these instruments.

Expected Results

As a result of this research work, we intend to:

- present methodologies and propose content to integrate territorial management tools in the future for Lisbon, in particular, and to coastal towns in general, that promote the identification and implementation of adaptation actions vis-à-vis the projected sea level rise and flash floods occurrence, considering the various climate scenarios;
- conceive an approach that encourages the effective participation of stakeholders and promote better coordination and policy integration, focusing on the same territory and that are relevant from the point of view of a climate change adaptation strategy.







