

## Abstract

**Sintra Municipality Green Plan (SMGP)** is a on-going project elaborated in the scope of a partnership established in 2004, between **ADISA/ISA** (Centro de Estudos de Arquitectura Paisagista – Prof. Caldeira Cabral) and **Sintra Municipality** (Vereação-Ambiente).

The aim of this study is the delimitation of the Municipal Ecological Structure (MES), as well as the evaluation of its implications in the municipality landscape-plan that eventually will become a part of Sintra Municipality Master Plan (SMMP). The Master Plan will integrate the Green Plan with other aspects, such as equipments, roads and regulations for existent and new built areas.

The goals of SMGP are:

- i. Studies for the Landscape Characterization, that integrate:
  - Analysis of the biophysical components of the landscape, such as: landscape morphology, geology and geomorphology, hydrology, soils, soil permeability, geological erosion risks, natural and semi-natural vegetation
  - Analysis of the cultural and scenic components of the landscape
- ii. Evaluation of the existing situation, taking into account the studies of landscape characterization aiming of marking out areas with legal policies that are part of the Municipal Ecological Structure:
  - Ecological Municipal Reserve
  - Agricultural Municipal Reserve
  - Habitats Directive nº 92/43/CEE
- iii. Development of an Intervention Concept
- iv. Proposal of the Ecological Municipal Structure, the Potential Landscape Plan, the Operative Plan, and the Image Plan
- v. Proposal of recommendations for land-use policies of the Ecological Municipal Structure
- vi. Proposal of reviewing the expansion of built areas defined by the Municipal Director Plan in order to suitable areas from the ecological point of view
- vii. Contribution for the presentation and spreading of the plan untill one year after the delivery of the Proposal

The Green Plan is based on a landscape planning model that is not currently used in Portugal. This methodology was only used in the scope of Seixal Municipality Green Plan and Loures Municipality Green Plan and is based on a complex meaning of the development and construction of the humanized landscape, settled on it's natural and cultural structures, aiming the application of landscape sustainability principles (MAGALHÃES, 2001).

This strategic intervention is carried through the concept of Landscape Morphology, which is understood as the form of the Landscape that elapses from its Structures. The innovation of this concept results from the conciliation of permanent elements, which are fundamental for the formal and functional territory definition, with areas situated in the interstices of those

structures. In these areas the landscape characteristics are less demanding from it's ecological functioning point of view. These areas named Complementary Areas (of Structures), present potentialities for a more flexible use of the landscape, both in form and use, and they allow the adaptation and change inherent to the development of any municipal territory.

This methodology deeply modifies the dominant planning methodology used in Portugal, still enrolled in the current legislation, where the land-use planning is promoted through the definition of uses (dominant) on zoning areas. In this work the proposal considers the delimitation of systems that assure essential aspects of land use and it's sustainability (the structures originated from the morphology concept). In contrast with zoning land uses, the present methodology allows the definition of potentialities and thresholds of landscape resilience and for these the multiple, preferential, possible or restrictive uses.

This approach will allow a more interpretative management of the landscape, capable of adapting itself to the unknown aspects of land demand guaranteeing it's sustainability and a more flexible utilization of less environmental sensitive areas.

The recent designation of Green Planning (PALOMO, 2003), heir of the ecological planning developed since the seventies (MACHARG, 1969) (MARSH, 1983) (LYLE, 1999) is quoted in the Green Book for Urban Environment (1990), Agenda 21 (1992) Sustainable Cities (1996).

Examples of recent applications developed according the concept of Green Planning, in Holland (National Spatial Planning Strategy, 2005-2020) and Spain (Green Plan of Valencia - PALOMO, 2003) show that this project follows a sound direction and the application to a portuguese study case in a very problematic council of Lisbon Metropolitan Area will be very important for other plans.

## Key-Words

Local Ecological Structure, Sustainable Planning, Healthy Mobility, Landscape Planning, Urban Planning