

TOPIC: Sub-Conference C: Integrated Approaches to Design and Planning

Urban management: concepts and tools for sustainable cities

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Abstract:

This paper is conceptual in scope and outline. It presents an overview of (1) reasons why urban management is becoming increasingly important for sustainable urban development, (2) concepts and models that are crucial to the conceptualization of the city as a sustainable entity and (3) lines of action required to achieve sustainable urban development.

Urban centres all over the world host trading markets and production venues that contribute directly to the wealth of countries. In order to do so, they require an ever increasing demand for consumption of land, water, energy and other natural resources, which are of vital importance to urban sustainability. Additionally, what the cities consume they equally discard. The ecodevice-model (Tjallingii, 1992) succinctly illustrates these dynamics. It also demonstrates that land-use, energy efficiency, climate change, urban air quality, urban water pollution and transport are intrinsically intertwined and need to be incorporated into a overall framework that seeks to reduce flows (of energy, goods, people, etc.) create places (that are safe, lively, etc.) and mobilize people (decision makers, planners, CBOs, etc.). These dimensions constitute the essence of what is called “urban management” in this paper.

In order to manage cities in a sustainable way, it is important that local governments, institutions and organizations involved in managing urban spaces learn as much as possible about the available models, approaches and tools. This learning process should be guided by the underlying principles of cultural vibrancy, ecological viability, economic feasibility, and social equity. To illustrate how these principles can help to integrate various models into a sustainable urban concept, the paper discusses similarities between models such as the ‘linear city’, the ‘lobe-city’ and the ‘fiber city’ model.

Implementation of development models requires the active engagement of all actors involved. Much depends on the commitment and ‘absorption capacity’ of local communities. One way of engaging this potential, is the ‘green mapping’ technique that has been pioneered in Thailand by the Thailand Environment Institute (TEI). The paper illustrates this approach and explores its potential through various on-going research and design project currently conducted by the School of Architecture and Design at KMUTT.

By way of conclusion, the paper lists the various elements that are deemed necessary for an adequate training module in urban management.