

Bringing urban form and urban metabolism into planning - the SUME Project

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The Sustainable Urban Metabolism for Europe (SUME) is a project funded by the Seventh Framework Programme involving nine research centres from eight different countries. The main goal of the project is to understand how future urban systems can be designed in a way which is consistently less damaging to the environment than the current status. Following the overall presentation of SUME in last year conference, *Planning in Times of Uncertainty*, this paper focuses on the main contribution of CITTA to the project – the design of a methodology for evaluating the urban development process from a metabolic perspective – the Metabolic Impact Analysis (MIA). Following a brief introduction to evaluation, the state-of-the-art on urban form, urban metabolism, and planning is outlined, in an attempt to identify theories, concepts, methods and techniques that can contribute to the purpose of the article.

Based on this literature review a set of principles for a metabolic evaluation of the processes of transformation of city-regions is outlined. MIA is proposed, its main influences are identified, and the procedure of evaluation is characterized.

Keywords: Urban form, urban metabolism, urban planning, evaluation methodology, impact assessment