

Urban Metabolism: Definitions, Concepts and Methodologies

André Ribeiro

Sustainable Energy Systems, MIT Portugal

Instituto Superior Técnico, Lisboa, Portugal

1 ABSTRACT

some abstract goes here

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2 Introduction

Urban metabolism as a metaphore has been around for quiet a long time now (Wolman, 1965) and the research around it has evolved towards some specific methodologies for urban areas analysis. The majority of the analysis in the area of Urban Metabolism today is linked to *Material Flow Analysis (or Accounting) (MFA)* essentially as a tool compare regions performances in what regards to their demands, waste discharges or emissions. One of the many uses of MFA studies can be the production of input data for formal predictive models.

Another important concept that is usually linked to urban metabolism is the self sustainability appraisal. Self sustainability is a broad concept which is largely translated (i.e. reduced) to self sufficiency,

and should be gather more efforts for a formal definition. For this work, *resilience* is the key concept to assess the (self) sustainability of urban areas.

In this work I'll be focused on defining the conce

These models In this paper i'll propose some definitions, concepts and methodologies to the citys' metabolism (analysis) should be put to its own res-

cue

However not many authors have settled their opinions

3 Definitions

3.1 City

Plain text!!

4 Concepts

4.1 Urban Services

More plain text.

5 Methodologies

5.1 Measuring Resilience

5.2 System Dynamics

6 Scaling Input Output coefficients

My section

References

Wolman, A. (1965). The metabolism of cities. *Scientific American*, 276–296.