Call for Papers for a Special Issue:

New Paradigm in Urban Development: Life Cycle Thinking and Sustainability

Background
Today, for the first time in history, more than a half of the world population is living in urban areas (54%), accounting for about 3.5 billion people. This urban percentage will increase to almost 66% by 2050, with nearly 90% of the increase concentrated in Asia and Africa (ESA-UN 2014). The number of mega-cities has nearly tripled since 1990; and by 2030, 41 urban agglomerations are projected to house at least 10 million inhabitants each (ESA-UN 2014). By 2020, approximately 73% of Europeans will be living in urban areas, characterized by medium-size cities (1-5 millions of inhabitants) and by four big cities (Berlin, London, Moscow, Paris) and one big urban area (the metropolitan area Rhine-Ruhr in Germany).

A new perspective in urban development is that urban planning and city management will have to include sustainability solutions in the design of cities (shape and dimension), in a rather different way compared to traditional urban management practices (Jones et al. 2002). Industrial Ecology and life cycle thinking can offer comprehensive methodologies and very powerful approaches to design new paradigm of sustainability in this field.

The special issue moves from theory and tools to policy and aims to handle how to outline a route for sustainable and shared urban planning development (in a triple bottom line sustainability perspective). As an emerging field tools for accounting and defining measures and thresholds of sustainability in urban context are needed. Life Cycle Assessment (LCA) is often used in a hybrid way together with Risk Assessment (RA), Cost Benefit Analysis (CBA) and Multi-Criteria Decision Analysis (MCDA) (Jeswani et al. 2010), or for instance in the LCA-SEA (LCA-Strategic Environmental Assessment case (Nilsson et al. 2005; Börjeson et al. 2006; de Ridder et al. 2007; Höjer et al. 2008; De Benedetto and Klemes 2009; Finnveden 2009; Heijungs et al. 2010; Björklund 2012).

The main goal of this special issue is to define the current state of the art of life cycle based sustainability applications, methodologies and tools as well as their implementation in an urban context as decision support for policy makers, companies and other stakeholders.

We call for papers covering several aspects of sustainability combined with life cycle thinking in urban development scenarios: scientific background (ontology, epistemology), methods and models (inventory and pathways), tools, data, case studies.

Suggested topics (but not restricted to)
- Sustainability in urban development
- Main challenges in applying hybrid-LCA in urban contest
- Urban metabolism in the framework of Life Cycle Sustainability Think
- Tools and databases
- Scientific background
- Indicators for sustainability in urban contest
- Urban sustainable governance
- Etc.

How to Submit
Manuscripts should be original, in English and previously unpublished. The suggested length is between 3,500 and 6,000 words excluding references – resulting in about 10 pages in the Journal. Ancillary data
relevant to articles can be posted on the journal’s web site in the form of supporting information. Submission implies that the manuscript has not been submitted for publication elsewhere and that it will not be submitted elsewhere while the review process is underway. All papers are subject to peer-review by at least two experts. When submitting your paper, you will be asked for suggested names of reviewers. Papers should be submitted electronically via https://www.editorialmanager.com/jlca/. Please indicate that this is a submission for the “Sustainability in urban development scenarios” issue on the author checklist during the submission process. Further details about the preparation of the manuscript can be obtained from the Journal’s Web page or from the editor.

**The deadline for submissions is 31 July 2017.**

**Contact Info**

Please submit articles for this special issue by **31 July 2017**. The Guest Editors for this issue are:

- Prof. Giuseppe Ioppolo, University of Messina
- Marzia Traverso, European Commission, JRC
- Prof. Matthias Finkbeiner, Sustainable Engineering, Technische Universität Berlin.