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Energising peer-to-peer urban futures – Challenges for urban governance

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Abstract

The relationship between urban governance and citizens has to be revisited as citizens and their peer-to-peer networks emerge as central actors in creating the city space. Renewable energy is a key driver, since it enables citizens to produce their own energy. This transition creates pressure for the rigid urban planning system to reinvent itself. No more can urban governance alone define, produce, and create a liveable eco-smart city. This paper claims that new perspectives are needed to help urban planners, city residents, and stakeholders anticipate and shape urban futures co-operatively. Futures images of peer-to-peer organised urban futures and their challenges to urban governance are provided, based on two futures research projects (ENCORE and Neo-Carbon Energy). Core themes influencing the liveability of an urban environment have been identified as 1) meaningful environment, 2) grassroots approaches, and 3) hybrid spaces. To conclude, a conceptual model of anticipatory hybrid governance is presented.

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1. Introduction

The world and the cities are changing at an unprecedented pace. When looking towards the urban transition and the future of cities, we have to bear in mind that the future is in its quintessential character all about change. This paper presents insights on the transformation towards liveable and economically viable urban environments built on renewable energy system. The study builds on foresight efforts of two different research projects, ENCORE and Neo-Carbon Energy. In order to tackle the topic of urban transition, a primary task is to reflect upon futures thinking and systematic futures research. This will be done in the introduction. Accordingly, we will first discuss futures research and the potential it provides for anticipating and analysing urban futures. Secondly, we will briefly present two research projects (ENCORE and Neo-Carbon Energy), which form the backbone and motivation for this paper. Thirdly, we will describe the material and foresight methods used. In chapter 2 futures images based on the two aforementioned projects are presented. A model of anticipatory hybrid governance with a view to potential benefits and limitations is provided in chapter 3. The model aims to answer the challenges resulting from the preceding futures images. Conclusions are given in chapter 4.

The nomenclature used in this paper is the following:

Nomenclature

DIY Do-It-Yourself

ENCORE Research project "Economically Viable City Centre and Urbanizing Downtown"

FFRC Finland Futures Research Centre
LUT Lappeenranta University of Technology
NEO-CARBON Research project "Neo-Carbon Energy"

TECHEMOTH Gigantic corporation mainly in technology, cf. behemoth

TUT Tampere University of Technology

UTU University of Turku

1.1. Urban transition as a futures research topic

The future naturally evokes in us futures thinking. This is thinking about how the future will unfold and what the future may hold for us. Futures thinking is an age-old human phenomenon – we as conscious human beings have always been thinking about the future and what kind of changes it will bring along. We have also been planning our life and activities for the future – in a shorter or a longer term. In Ancient Greece and Rome, as well as several other cultures, there were even specific methods for predicting the future.

Modern futures research advances, however, far beyond that. It is based on a robust futures orientation, but is not a general thing, and definitely not an art of prediction. Futures research is defined as a systematic study and exploration of alternative futures – as foresight instead of prediction, or prophesising. Modern futures research was established in the late 1940s as a scientific field [1]. Now it is even a distinct discipline at university level, even though not everybody knows about its academic existence. The University of Turku provides both an international Master's Programme (http://www.utu.fi/en/units/ffrc/studying/FutureMasters/Pages/home.aspx) and Doctoral Programme in Futures Studies. Some other universities also feature futures courses, for example Tamkang University in Taiwan, the University of the Sunshine Coast in Australia, and the University of Houston in Texas. Futures research means systematic, holistic, multidisciplinary and critical long-term analysis and anticipation of future-related issues and alternative trajectories of development in society.

A more recent field is called "foresight". The EU defines foresight as structured participatory debate about the future of complex issues [2, 3, 4]. It is a very pragmatic approach – we need to have a problem to focus on and look solutions for. In the case of future of cities, the topic of urban transition embodies a challenging research issue: how is urbanisation proceeding and what implications or issues does it bring about. Both futures research and foresight

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