

Sustainability and Smart Technology

Dora Marinova
CUSP - Curtin University
Perth - Australia
d.marinova@curtin.edu.au

Abstract

Today's cities have attracted the largest share of the global human population and have become symbols of advancements in knowledge and technology. They have however also begun to represent a lifestyle detached from nature and geared towards a high level of consumption. To make cities sustainable, they need to provide better living conditions for everybody, access to resource availability and security – water, energy, food, better opportunities and respond to climate change. Smart technologies can be a tool assisting in achieving sustainability in the city. In line with the UN Sustainable Development Goals, the presentation defines the link between sustainability and smart technologies by putting community livability at its centre. The concepts of (1) community self-governance and self-organisation; and (2) ethical economics and sustainometrics are developed as the principles which can underpin success in improving the livability of urban environments for its current and future inhabitants. The example of working with the community in Geraldton, Western Australia is used to showcase the application of smart technologies for improving the livability of the city.

CCS Concepts/ACM Classifiers

- Sustainability;
- Computer supported cooperative work;
- Government technology policy

Author Keywords

Sustainability; Sustainable Development Goals; cities; livability; smart technology; participatory governance



BIOGRAPHY

Professor Dora Marinova is Director of the Curtin University Sustainability Policy Institute. She has over 400 publications and has supervised 50 PhD students to successful completion. Dora was a member of the Australian National Health and Medical Research Council's Panel on Centres of Research Excellence in Population Health. Her research interests cover innovation models, including global green system of innovation and sustainometrics. Dora is Elected Fellow of the Modelling and Simulation Society of Australia and New Zealand, the International Environmental Modelling and Software Society and elected member of the Australian Institute of Aboriginal and Torres Strait Islander Studies.

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