



Urban Sustainability, University of Gävle
Stephan Barthel

Research infrastructure of BIG





Radical transformation needed!

Anthropocene



Accelerating

Urban Transformations

BIG play part in creating knowledge based in science



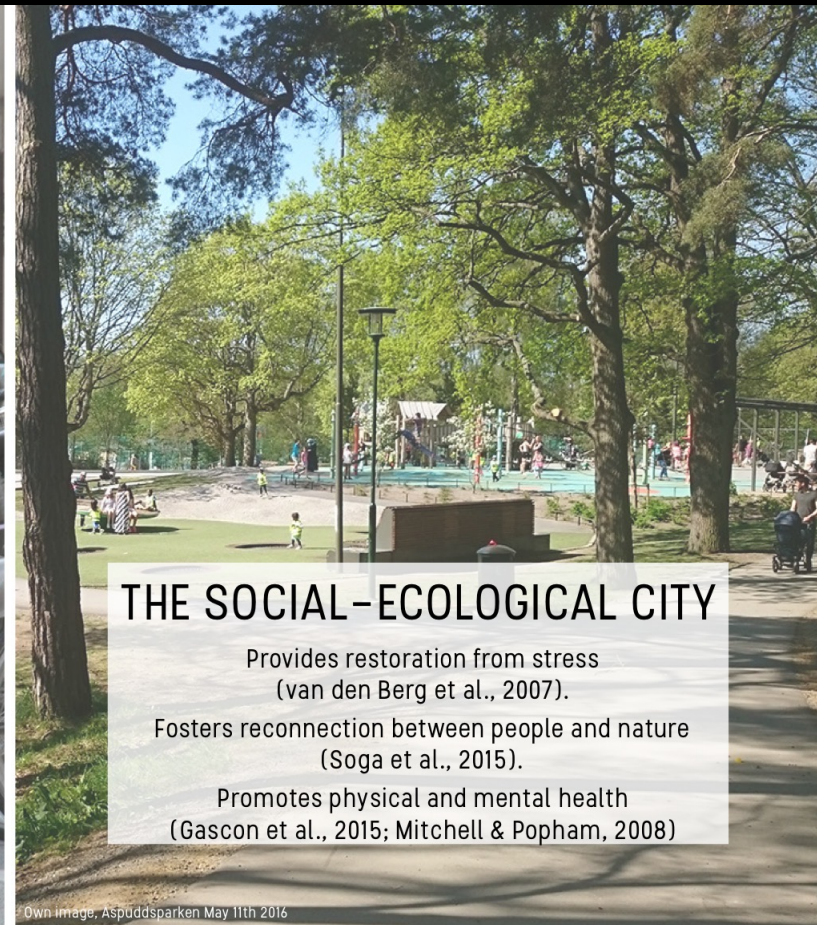
THE COMPACT CITY

Enables sustainable modes of transportation
(Jabareen, 2006).

Requires less energy for heating
(VandeWeghe and Kennedy, 2007).

Maintains ecosystem services outside cities
(Stott et al., 2015).

Image modified from Pix Spotting @ Flickr



THE SOCIAL-ECOLOGICAL CITY

Provides restoration from stress
(van den Berg et al., 2007).

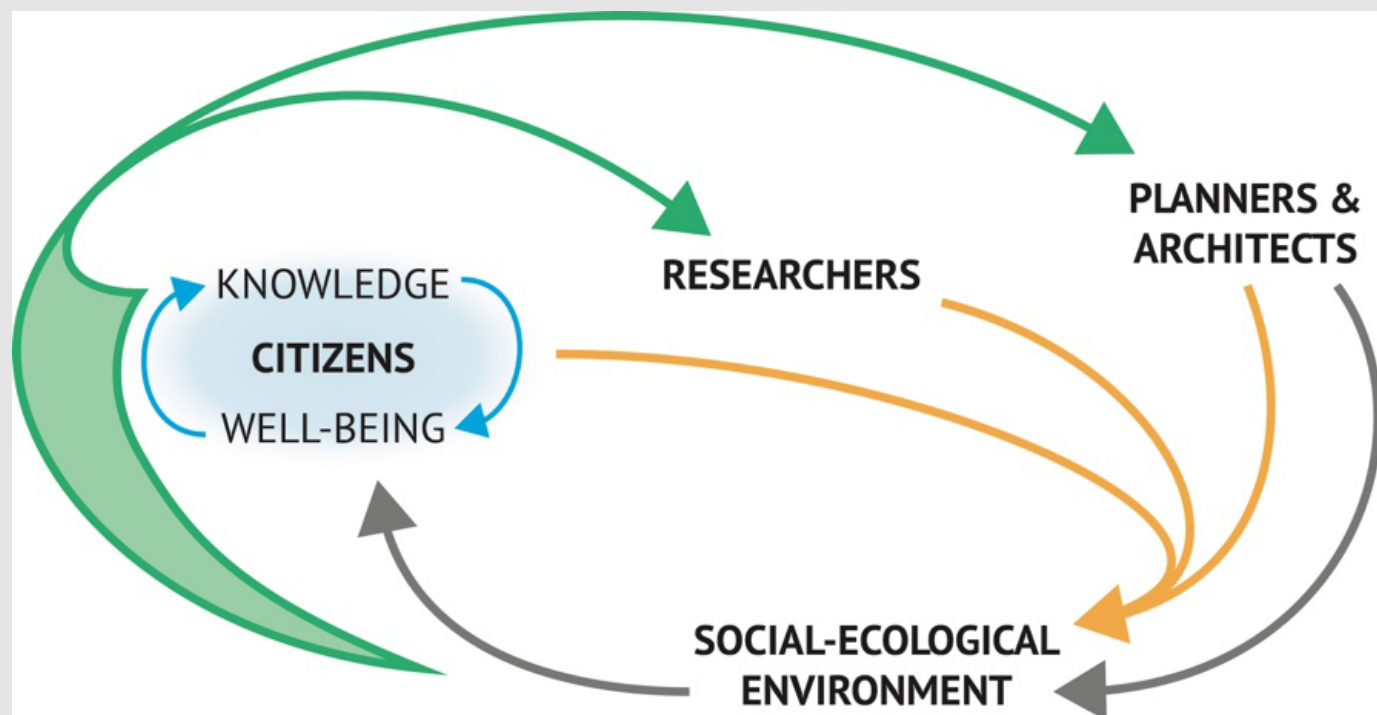
Fosters reconnection between people and nature
(Soga et al., 2015).

Promotes physical and mental health
(Gascon et al., 2015; Mitchell & Popham, 2008)

Own image. Åspuddsparken May 11th 2016

A GROWING RESEARCH INFRASTRUCTURE

Digital approaches for climate transformation and for regenerative urban sustainability



“Feedback attitudes and experiences of residents to researchers, planners and policy makers”

Two new national projects

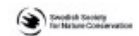


Preliminary programme title:
**FAIR TRANSFORMATIONS TO A
FOSSIL FREE FUTURE
(FAIRTRANS)**

Planned programme host:
Stockholm University

Planned Programme Directors:
Thomas Hahn (SU)
Stephan Barthel (Gävle University)

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Stockholm University
SE-106 91 Stockholm, Sweden



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FAIRTRANS

Thomas Hahn, Stockholm University
Stephan Barthel, University of Gävle

New MISTRA Program 2021

*4 Years 4.000.000 USD (*2)*

FAIRTRANS

- departs from a carbon budget for a fair societal transformations towards the Paris Agreement
- use inter-disciplinary science and an inclusive process for co-creating knowledge and policies (governance)
- address transformation, equity, digitalisation and civil society

- co-creates policy development through stakeholder deliberation
- engages in various learning exercises with CSOs for change and transformation

Confederations of
trade unions with
> 3 M members

Confederation of
Swedish
Enterprises,
"Fossil-Free
Sweden"

Sw. Society for
Nature Conservation
> 0.2 M members

FUTURE-PROOF CITIES

A BUSINESS AND POSTGRADUATE RESEARCH PARTNERSHIP FOCUSING ON SUSTAINABLE URBAN DEVELOPMENT



HÖGSKOLAN
DALARNA



HÖGSKOLAN
I GÄVLE



MÄLARDALENS HÖGSKOLA
ESKILSTUNA VÄSTERÅS

KK-stiftelsen ><

Start 2020



FUTURE PROOF CITIES (FPC)

12 PhD-candidates



Employment at Company
(n=12)

Approved as PhD-student by a
University (n=3)

80 % of time for doctoral
studies (1-3 supervisors)

20 % work at a company (a
mentor/student)



HÖGSKOLAN
DALARNA



HÖGSKOLAN
I GÄVLE



MÄLARDALENS HÖGSKOLA
ESKILSTUNA VÄSTERÅS

Financing FPC first round (six years)



Financier	Amount [USD]
12 Companies (Cash/in-kind)	2.160.000
3 Universities	1.000.455
KKS	2.160.000
Total	5.365.500

Frame for research

The research school will address four major and interconnected research areas;

- **urban social sustainability from the perspective of residents,**
- **climate resilience for the next generation of infrastructures**
- **Governance to achieve climate resilience and social sustainability at the same time**
- **Methods and tools for co-creation**



Back to the Future?

-Integrating socio-ecological with technical infra-structures (SETS)

