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Social and spatial planning aspects of transformation processes

8th Swiss Energy Symposium Thermal Energy Storage, Jan 22 2021

Prof. Dr. Ulrike Sturm
Head of the Institute of Sociocultural Development at HSLU
Interdiscisplinary Cluster – Spatial Development and Social Cohesion

T +41 41 367 48 44
ulrike.sturm@hslu.ch

Luzern 27.01.21

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Population motivation

The transformation of the energy system is to a large extent a task for society. […]

The population is willing to take action, if the specific possibilities are known and can be used.

- Social norms determine behaviour.
- A broadly financed energy supply enjoys high credibility.

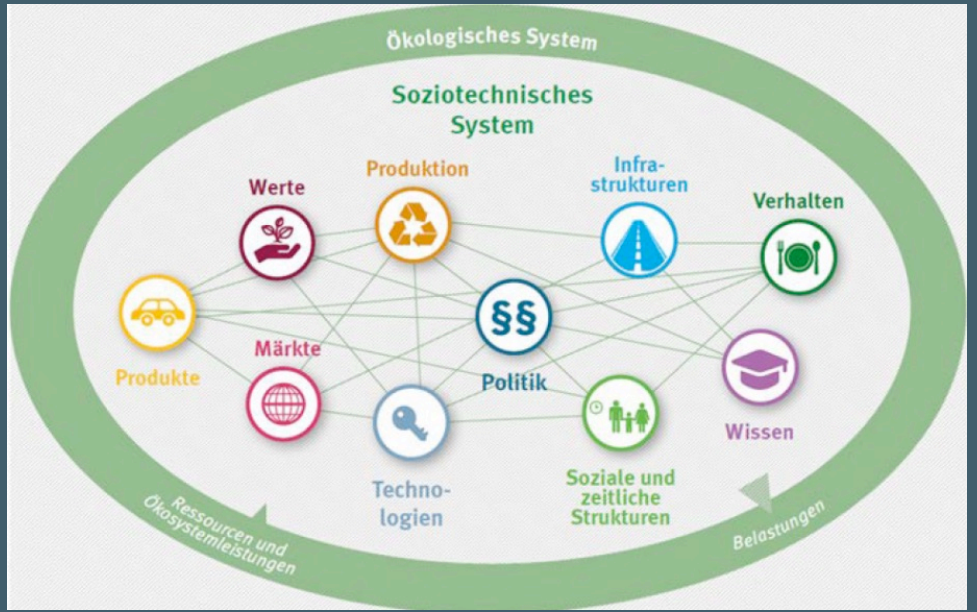
In some respects, however, there are considerable gaps in information and knowledge.

Resumée of the "National Research Programme Energy" (NRP 70 and 71 "Energy")
www.nfp-energie.ch/en/program/resumee/

Energy transition as sociotechnical transformation process

Socio-technical system:
the mutual dependency of societal/social aspects (behaviour patterns of natural persons, institutions, organizations) and technical artefacts.

(Grunwald et al. 2018, 831)



Socio-technical transformation

- leads to a change of the socio-technical system
- takes place over a longer time-period (f.e. 50 years)
- refers to technological, material, organisational, institutional, political, economical and sociocultural changes
- and the way these are perceived and evaluated

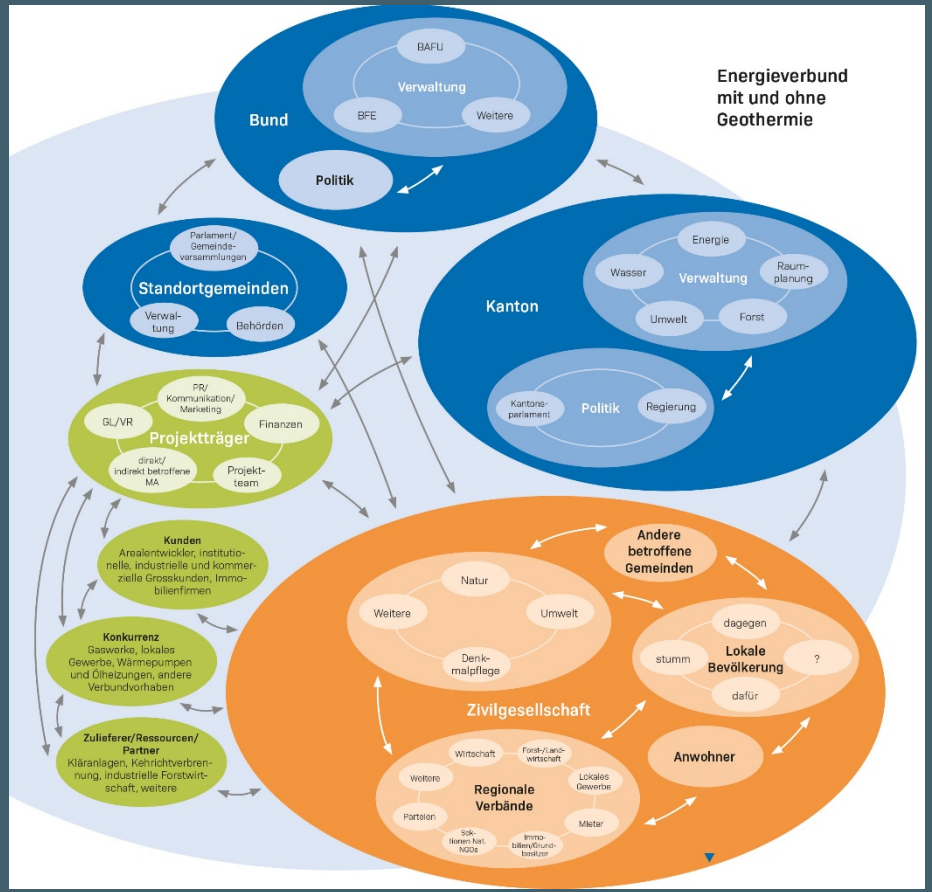
Key question: how do human and non-human elements interact and develop in a socio-technical constellation?

A broad range of actors is involved – multi-stakeholder processes.

Hildebrand et al. 2018; Markard et al. 2012, 956; Rammert und Schulz-Schaeffer Ingo 2002. 22)

Stakeholders involved in energy networks

Schmitt, Dubois, Sachs & Schneider o.J., 16, 30



1. Revision of the Swiss law for spatial planning

vote for revision in 2013
legally binding since 2014

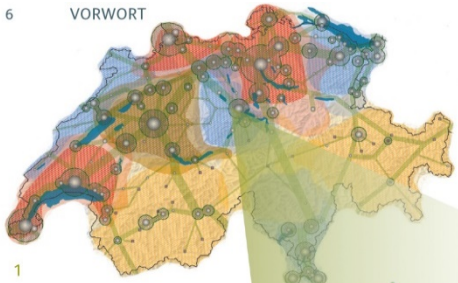
Goals of revised RPG

- *promote urban intensification: all municipalities should identify potentials, prioritise and develop within existing settlement perimeter*

- *secure appropriate dimensions of building zones: reduce them where there is an over-supply*

→ greenfield development as the exception

www.are.admin.ch/are/de/home/raumentwicklung-und-raumplanung/programme-und-projekte/modellvorhaben-nachhaltige-raumentwicklung/modellvorhaben-nachhaltige-raumentwicklung-2014-2018/siedlungsentwicklung-nach-innen-umsetzen/netzwerk-fuer-eine-kooperative-umsetzung-der-innenentwicklung--l.html



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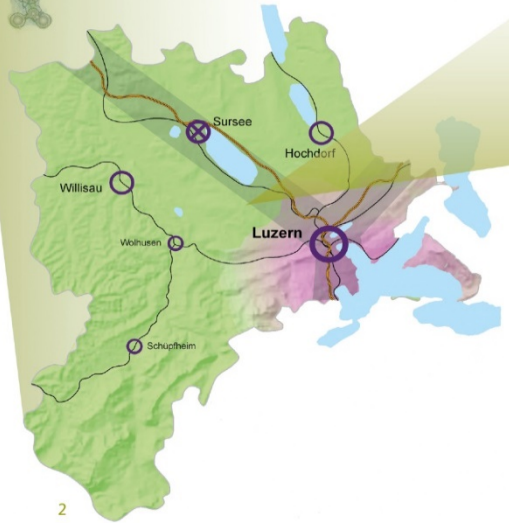

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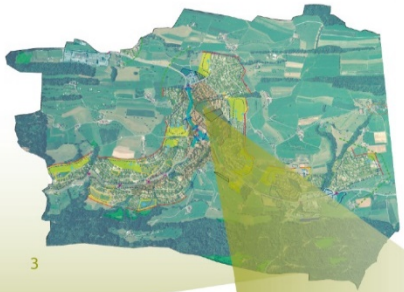

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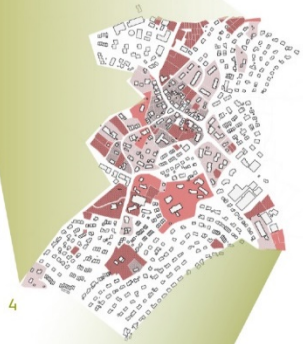

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1 Raumkonzept Schweiz
Quelle: Schweizerischer Bundesrat, KdK, BPUK, SSV, SGV (2012)

2 Kantonale und regionale Raumkonzepte
Quelle: Kanton Luzern (2009)

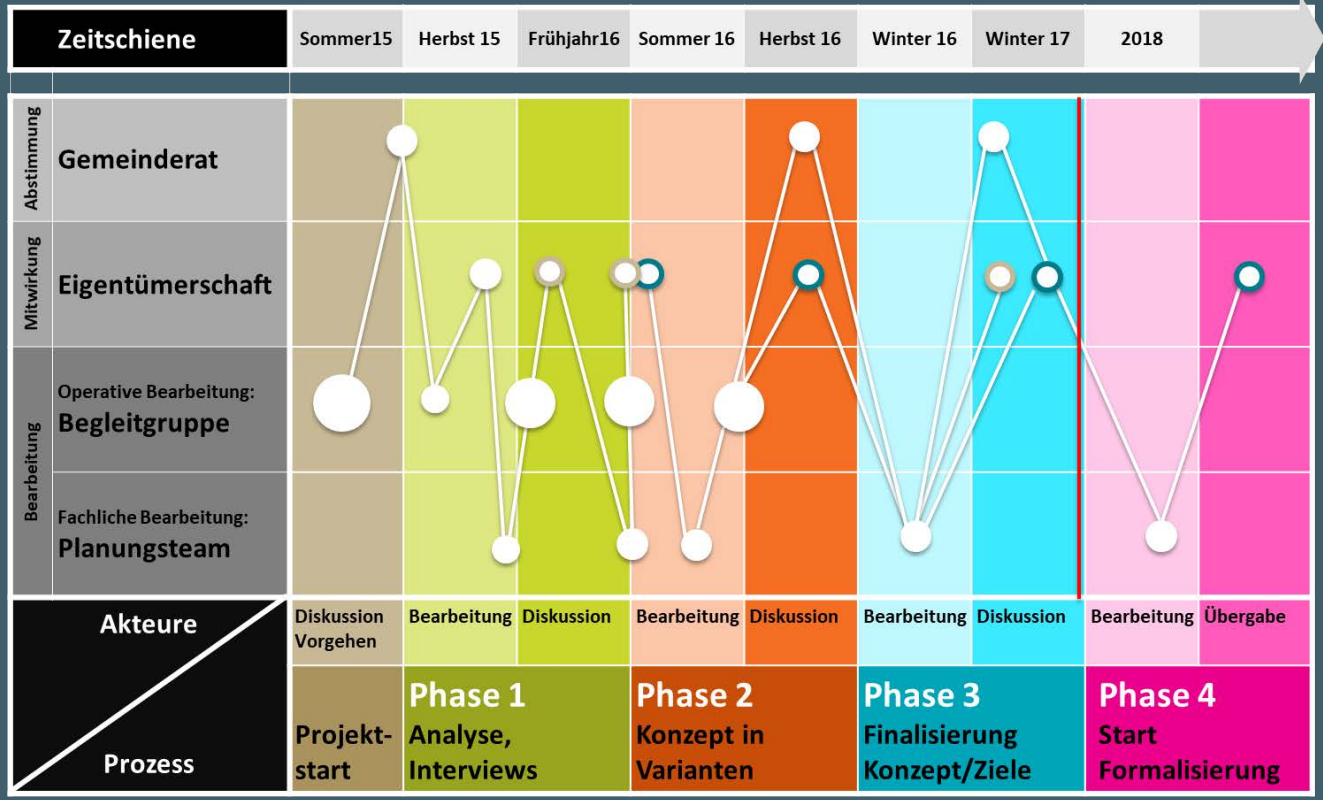
3 Kommunale Leitbilder und Strategien
Quelle: Einwohnergemeinde Adligenswil (2011)

4 Strategische Stossrichtungen und Teilräume
Quelle: Kanton Luzern (2013a)

5 Publikation

Social and spatial planning aspects of transformation processes – Ulrike Sturm

Stakeholders involved in processes of spatial planning



Hochschule Luzern – Netzwerk kooperative Umsetzung der Innenentwicklung

www.are.admin.ch/are/de

Success factors

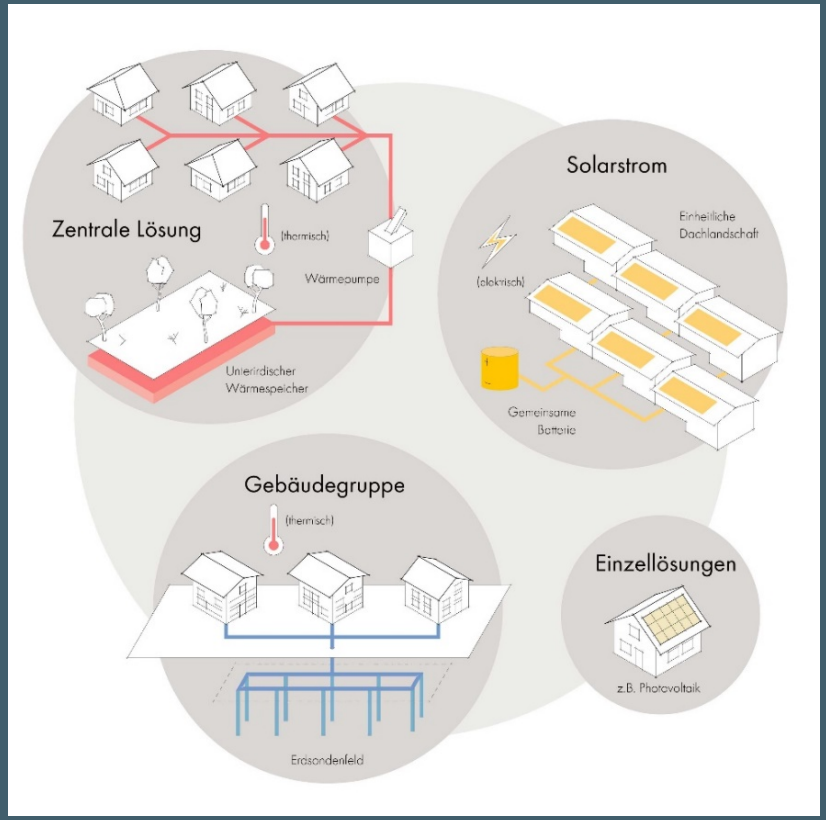
Longterm perspective with clear follow-up procedures (no project logic)

Socio-spatial and interdisciplinary approach
Focus on local knowledge and points of interest of stakeholders

Concept of co-creation – involving stakeholders at an early stage of energy planning

Open for new solutions developed during the process

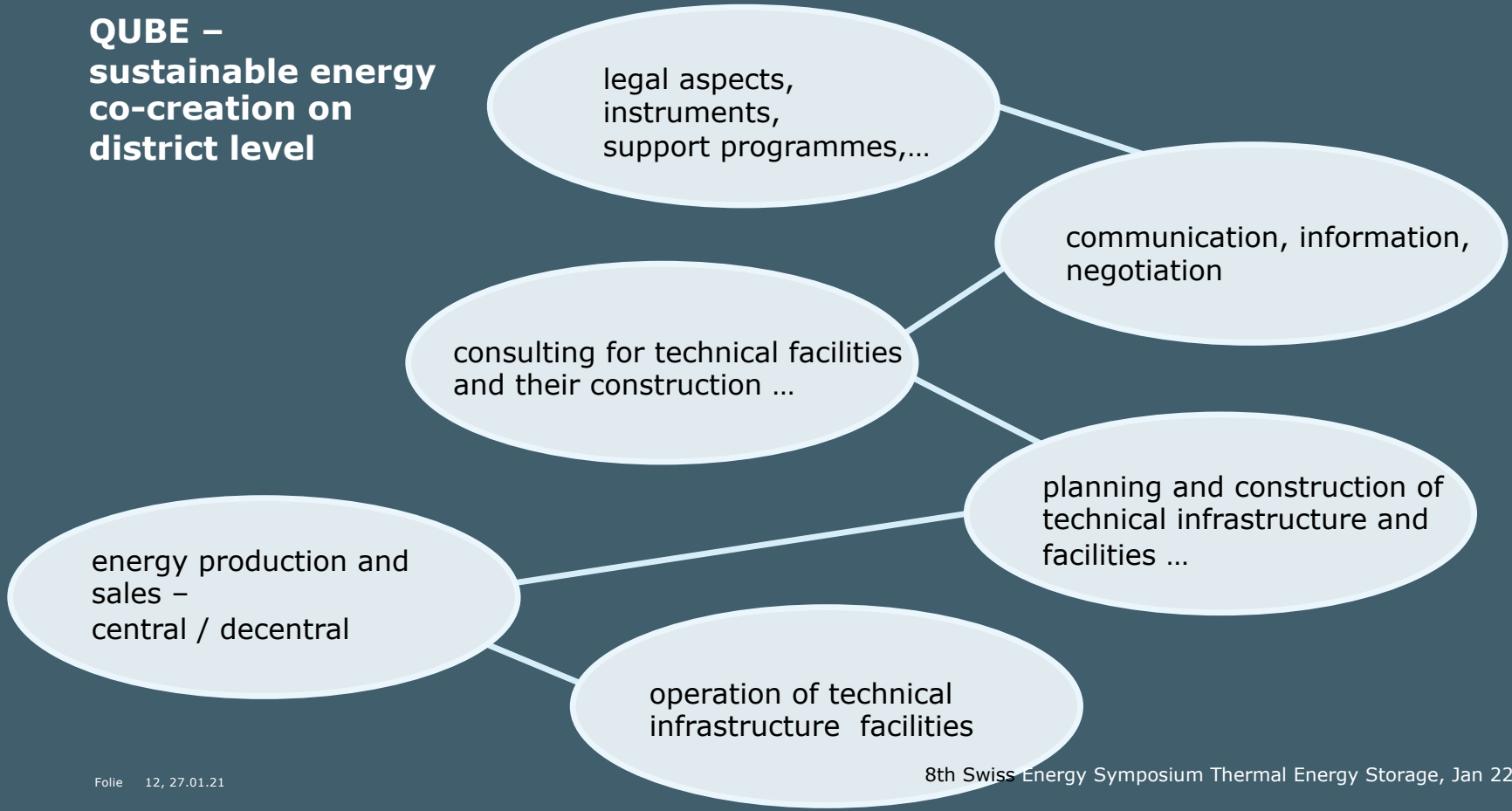
QUBE – sustainable energy co-creation on district level



QUBE – sustainable energy co-creation on district level

- to promote network solutions with renewable energy production and storage at district level
- to assess technical, financial and legal preconditions for implementing a strategy for renewabls in the pilot district in Lucerne
- to initiate and implement cooperative network solutions with local stakeholders in the pilot district
- to make procedural and technical results work for other districts
- to open up additional market areas for the praxis partners in environmental technologies for energy transition

QUBE – sustainable energy co-creation on district level



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- Thanks to Caroline Näther for discussing and sharing her knowledge with me.