ENERGIES FOR CHANGE
ALIGNING STAKEHOLDERS TOWARDS SUSTAINABLE ENERGY TRANSITIONS

'From Innovation to Acceptance: Challenges and Potentials of a Sustainable Energy Transition'
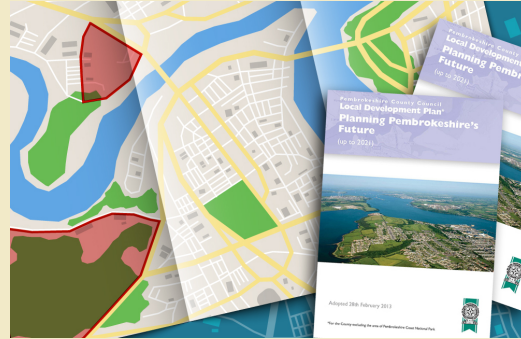UAS Workshop Series, October 21st, 2020.

Maj-Britt Quitzau
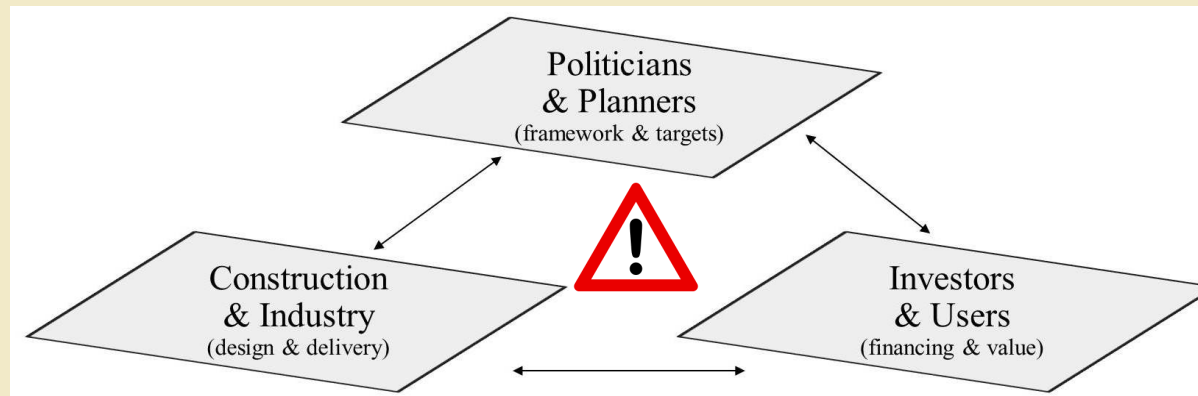
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AN EXAMPLE OF TENSIONS AND RESISTANCE
LOW-ENERGY HOUSING IN STENLØSE SOUTH

A Danish municipality tried to implement low-energy housing through local energy requirements in a new urban development area.

Part of the innovation was to require installation of air-to-air heat pumps as an alternative to centralised heating infrastructure.

As a result of tensions, this requirement had to be abandoned in the process of implementing their strategy.

One of the development companies involved were critical about the air-to-air technology, because they have integrated floor-heating systems in all of their houses:
"I don't think that anybody would dream about not applying floor-heating, when building a new house".
(Technical Director in Danish standard house company)

Politicians
& Planners
(framework & targets)

Construction
& Industry
(design & delivery)

Investors
& Users
(financing & value)

Several future residents were not satisfied with the restrictions that would result in a lack of floor heating in the houses in the new area:
"Nobody was satisfied about that (…). Who on earth would like to build a house, where you can't heat it through the floor?" (Future resident)
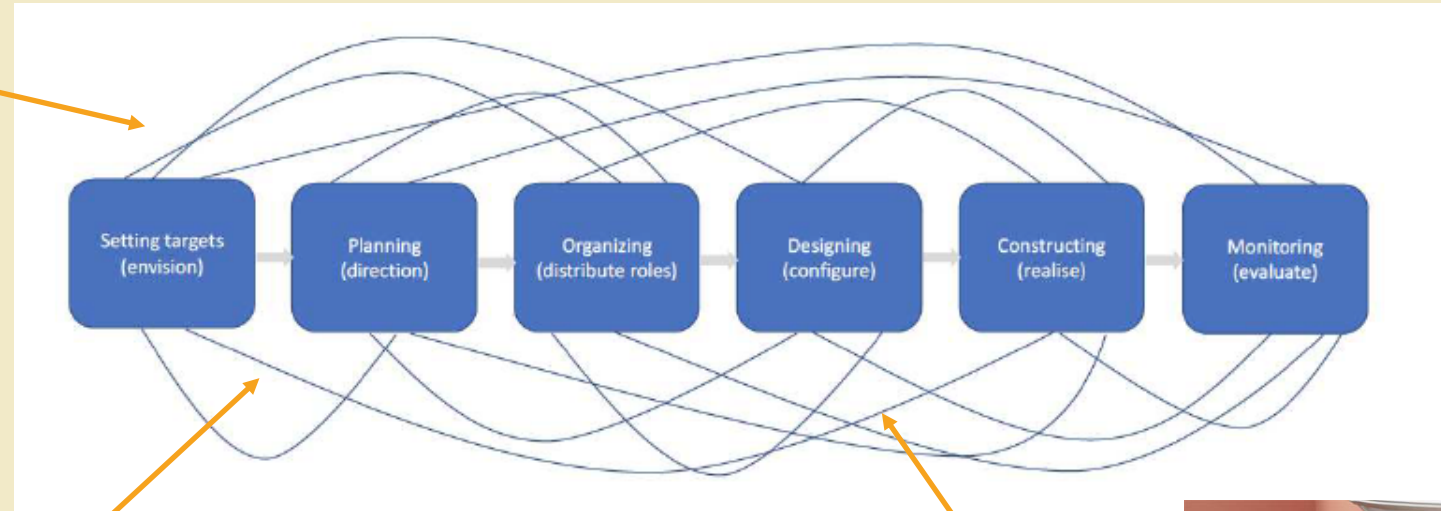
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ACTUAL CHANGE DEPENDS ON RE-ALIGNING PREVAILING SYSTEMS

"Sanger and Levin (1992), in a study of public management innovations and innovators, concluded that **most innovation is not a revolutionary breakthrough**, but depends on "evolutionary tinkering with existing practices"." (Innes & Booher, 1999:23)

Strategies and intentions within policy-making and planning.

Setting targets (envision) → Planning (direction) → Organizing (distribute roles) → Designing (configure) → Constructing (realise) → Monitoring (evaluate)

Succesful implementation of technological innovations is seldom a linear process.

Integration of new ways of doing and thinking require planners to induce re-alignments in prevailing systems through exchanges, iterations and alignments between different values and contextual factors.

Operational conditions for developers, construction companies and suppliers.

Needs and wants from investors and users.

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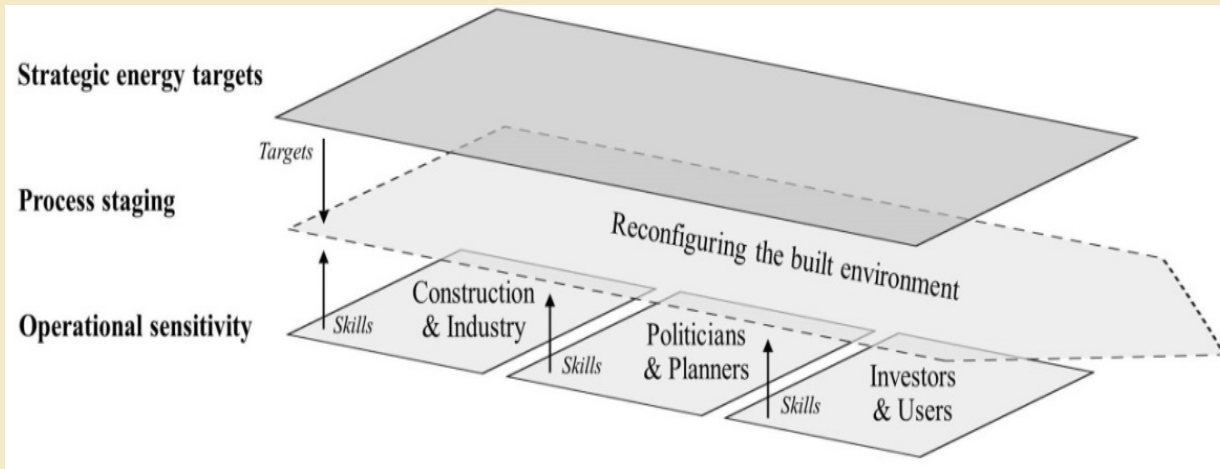DENMARK

A TWO-DIMENSIONAL ALIGNMENT CHALLENGE

Figure: Illustration of the necessary translation of abstract energy targets into feasible socio-technical configurations as interaction at the operational level. From Petersen & Quitzau (in prep.)
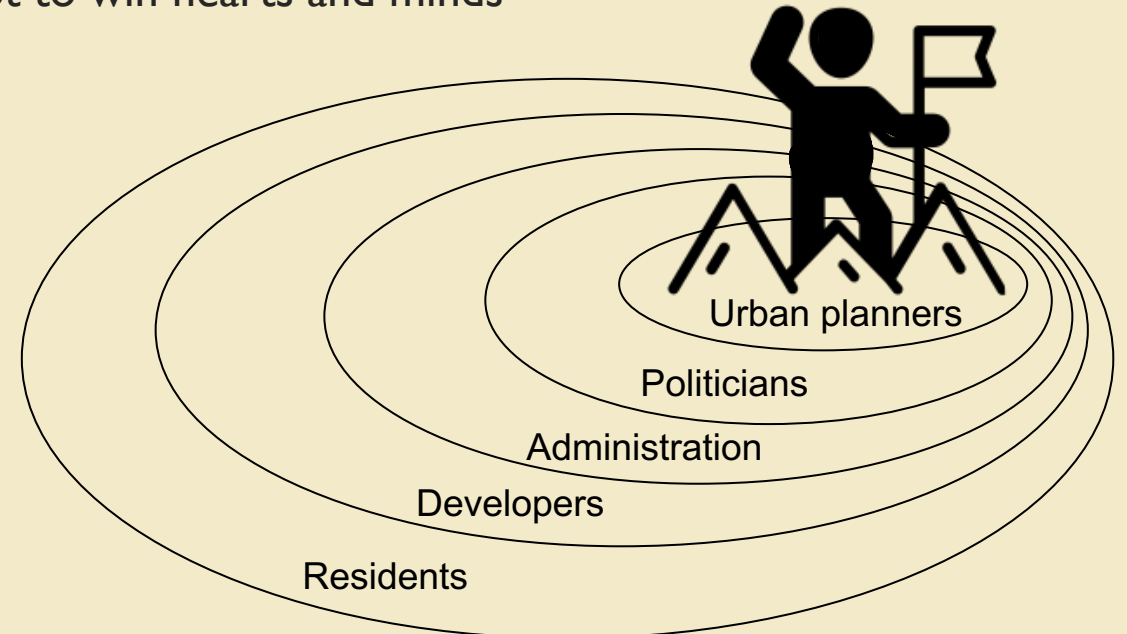
Alignment is needed in two dimensions

- Vertical dimension between abstract and idealised energy targeting and operational actions within relevant sectors. (intention vs operation)

- Horizontal dimension between different operational arenas that fight for their own orders within the urban context. (incompatible arenas of ordering)

Governing practices for climate protection have shifted towards deployment of new forms of governance like inducing and seducing in the attempt to win hearts and minds among urban stakeholders (Bulkeley and Kern 2006).

- Champions can set alignment processes in motion.

- Champions can mobilize other champions.

- Champions can foster successful implementation, as the network of champions expands throughout the process in relevant directions.

Urban planners

Politicians

Administration

Developers

Residents

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Example from development process in Stenløse South, Egedal, Denmark
Based on Quitzau et al. (2013, 2012)

CHAMPIONS NEED 'BRICOLEUR' SKILLS

"As Nicolini, Gheraradi, and Yanov (2003, 27) argue:
From a practice perspective, the world appears to be relationally constituted, a seamless web of heterogeneous elements kept together and perpetuated by active processes of ordering and sense making. Practices—including discursive practices—are a bricolage of material, mental, social, and cultural resources. Not only are people active **bricoleurs**, but the world is not docile or passive. To know is to keep all these elements in alignment, given that order is not given but is always an emergent process." (Bryson et al. 2009:173)

Alignment requires the bricoleur to:
1) Produce operational sensitivity in order to recognise and understand prevailing ordering activities. (which order dynamics to consider and what to understand)
2) Create a stage for dialogue about an intended road by tinkering with existing practices in an evolutionary way. (what to aim for and how to create operational momentum towards that)

What constitutes a home?

What constitutes a house?

How are houses bought?

How are materials and systems chosen?
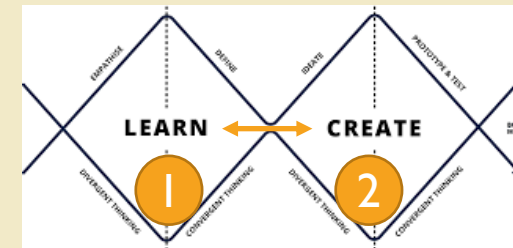
What constitutes planning legislation?
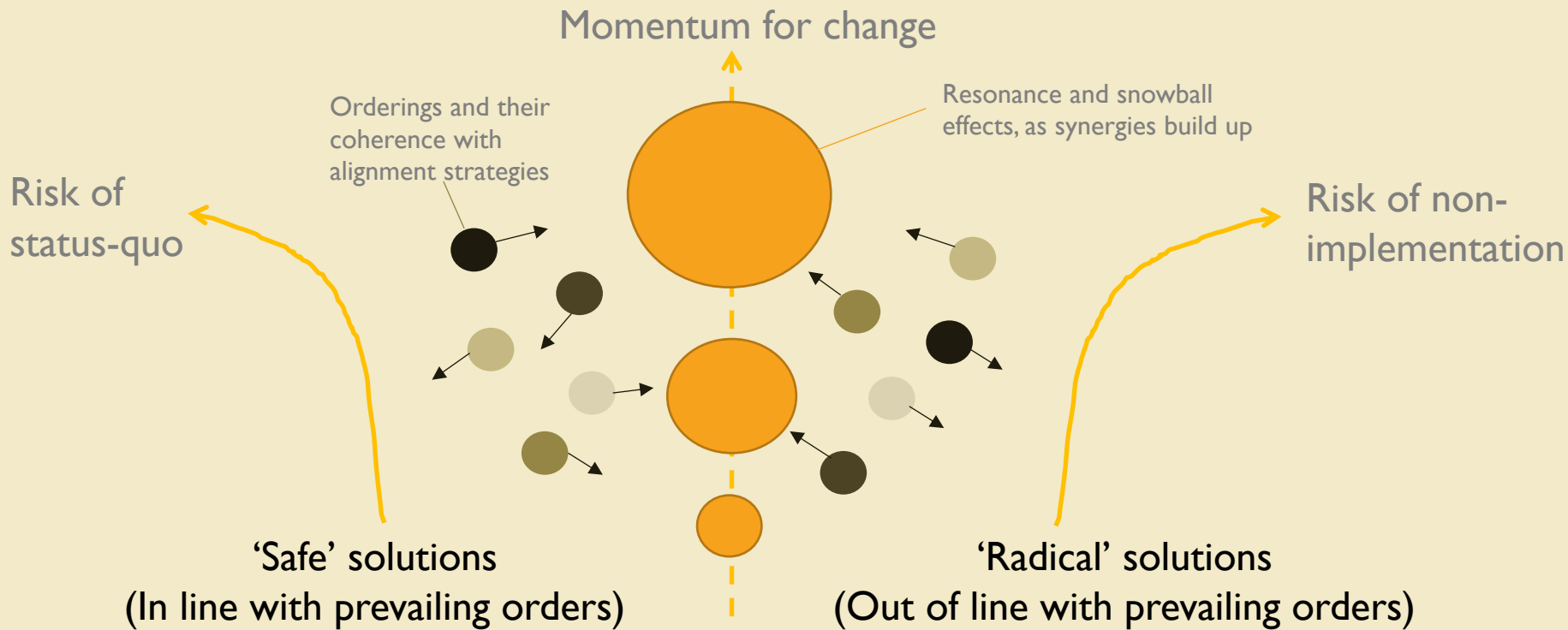
How is a local development plan made?

Ordering dynamics

The double diamond from Design Thinking

LEARN ←→ CREATE
1   2

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CREATING LEVERAGE AND MOMENTUM FOR CHANGE

Momentum for change

Orderings and their coherence with alignment strategies

Resonance and snowball effects, as synergies build up

Risk of status-quo

Risk of non-implementation

'Safe' solutions
(In line with prevailing orders)

'Radical' solutions
(Out of line with prevailing orders)

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Empathy helps to understand operational ordering dynamics and it can be a driving force behind building momentum.

Build empathic strategies of innovations that resonates with key values in relevant ordering processes.

Example of a municipal champion seeking to achieve common value creation:

"If it (a project, ed.) only serves the best of one unit (…) then it becomes an irritation (...). So, if one can see that this is an overall solution that we should solve - and it makes good sense, that talks directly into the core tasks, the vision of our work - then, one will gladly work into it.".

FROM INNOVATION TO ACCEPTANCE?!

Main challenges and potentials

- Ordering dynamics at the operational level tend to obstruct good policy intentions and are difficult to handle for champions that try to mobilize innovative changes.

- Implementation processes within local development projects represent important battlefields, where the ground for acceptance needs to be facilitated by engaged champions that expand their network of allies around an intended strategy.

- Acceptance may be obtained through creation of alignments in ordering dynamics through 'bricolage' or 'evolutionary tinkering' by combining operational sensitivity (present) and staging dialogue (future).

- Leverage for change requires the building up of 'momentum', where empathy towards ordering dynamics are exploited to establish synergies with resonance.

- Strategies to create acceptance is a treacherous and delicate balancing act between doing too little and too much change within a chaos of values and ordering dynamics.

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