

Governing energy transitions towards
a low-carbon society:
the role of reflexive regulation and
strategic experiments

Annikka Berg, Suvi Borgström, Mikael Hildén, Jukka Similä

Environmental Policy Centre, Climate Change Programme

Finnish Environment Institute (SYKE)

PEER Conference, 4th October 2013

New approaches to govern low-carbon transitions

- Promoting low-carbon transitions requires **innovative policy development**
- Novel approaches to governance include **reflexive regulation and strategic experiments**
- Need to better understand reflexive regulation and experiments on their **own terms**, in relation to one another and as **parts of wider societal transitions**.



Strategic experiments

Strategic experiments

- Local experiments on low-carbon solutions **widely applied**
- Definition: 1) making something **new and concrete** that is 2) **restricted** in terms of time, space, scope and/or actors but that 3) has the **potential** of having wider societal relevance through various up-scaling mechanisms
- Some experimentalist localities have managed to make **impressive cuts of CO2 emissions**
- Need for their in-depth analysis
 - **Capacity to contribute to systemic change?**

Strategic experiments can refer to...

- **Governance** experimentation
- **Socio-technical** experimentation as part of **sustainability transitions**
- **Living laboratories** taking place at local level

-> Our focus will be on experimenting as a broader **societal/governance phenomenon** and on the ways how strategic experiments **materialize and challenge** existing regimes and landscapes.



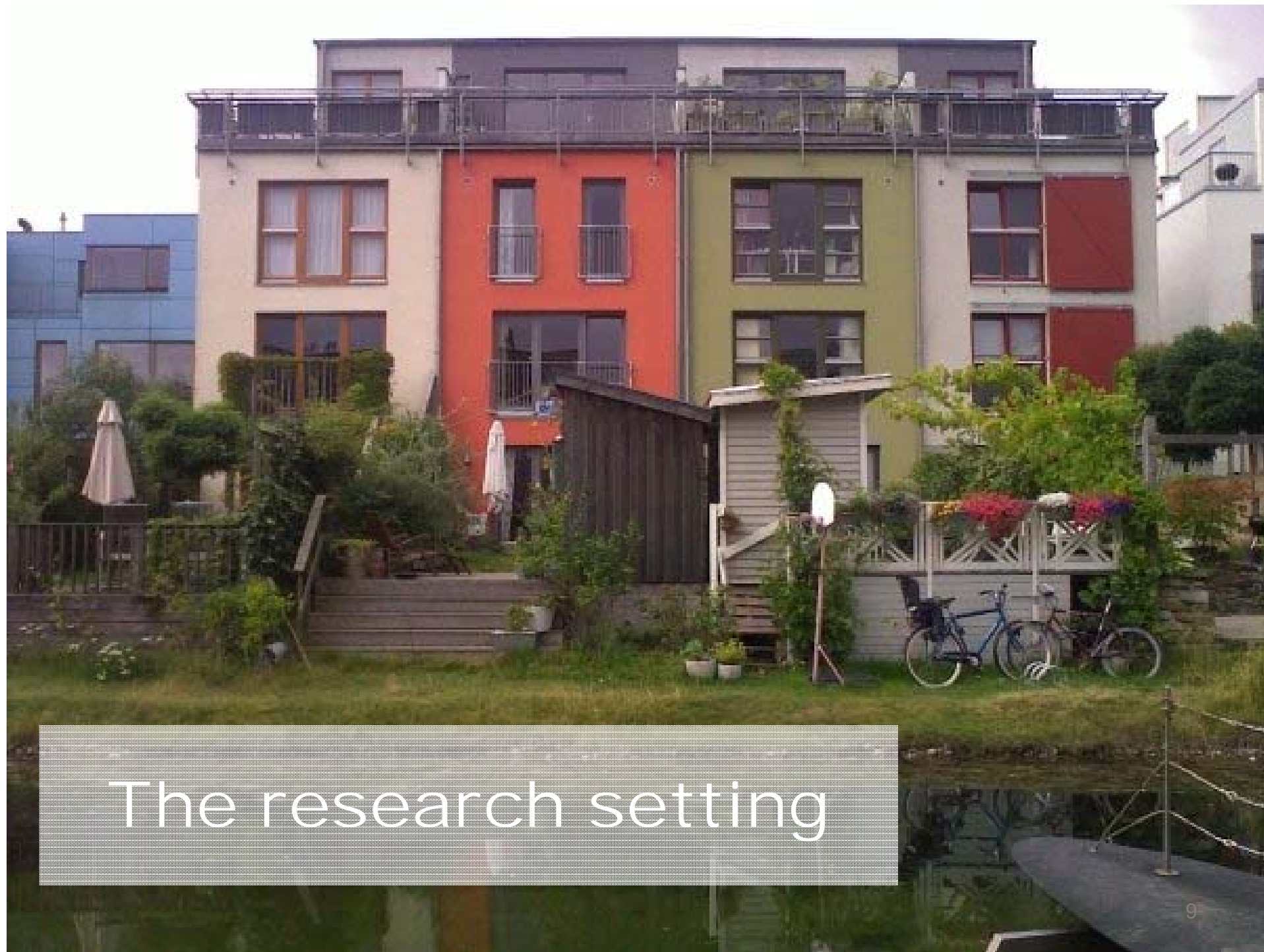
Reflexive regulation

Reflexive regulation

- Focus of legal regulation on the process of **communication** instead of substantive outcome
 - Tentative, experimental, and **learning**
 - **Responsive**, adaptive, flexible
 - How to solve the tension with other values, i.e. precision, predictability, **legal security**?

Reflexivity of regulation a way to deal with...

- Economic, social and political **risks**
- **Dynamic and complex** nature of socio-ecological systems
- Scientific **uncertainty**
- **Technological** development

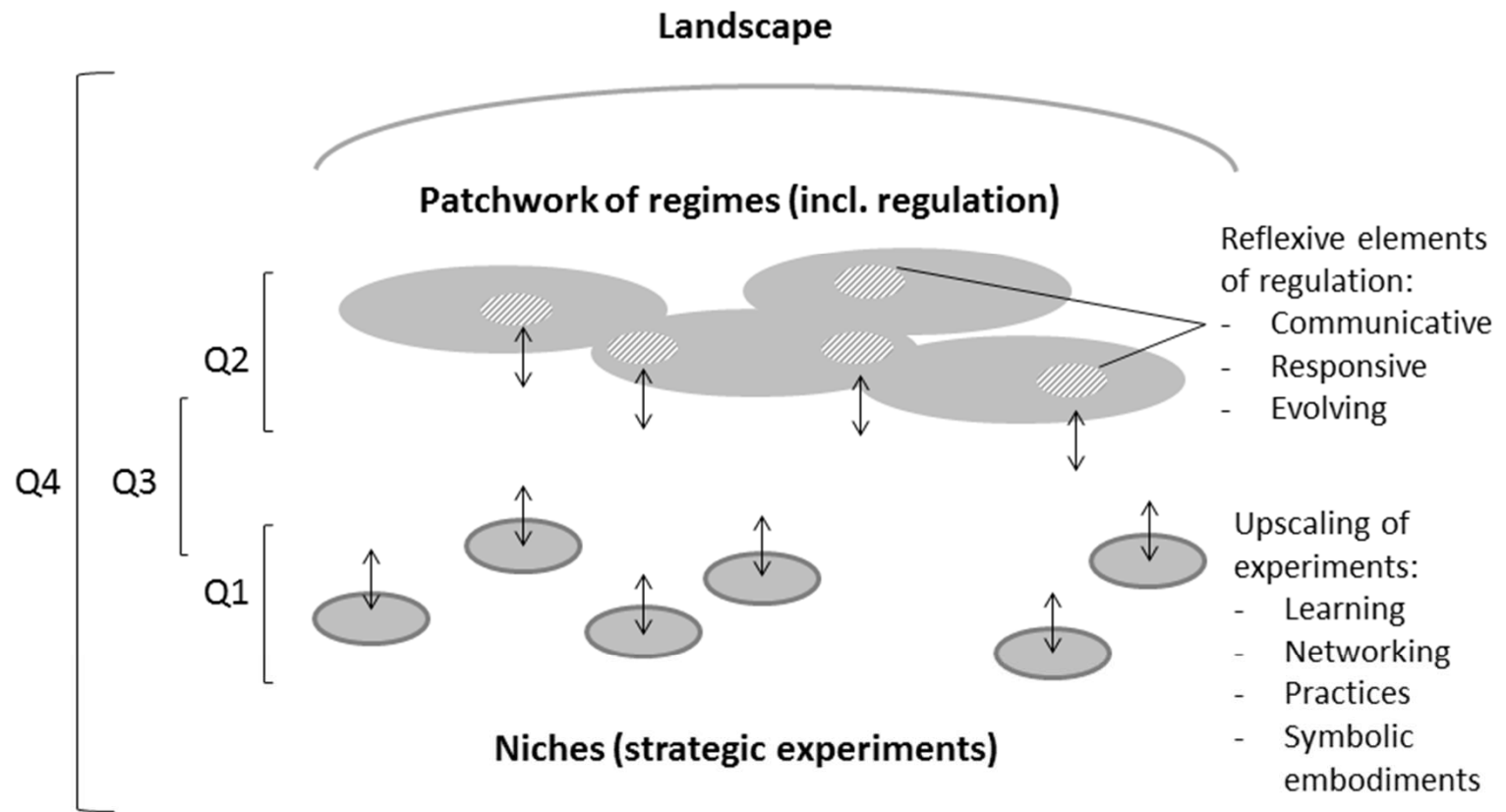


The research setting

Research objectives

- 1) Roles that **strategic experimentation** plays/could in transitions
- 2) Possible role of **reflexive regulation** in transitions
 - affected by legal structures, principles and processes.
- 3) **Relationships** between (reflexive) regulation and strategic experiments
 - governance towards a low-carbon society.
- 4) Contribute to **sustainability transitions theory**
 - structured analyses of **governance**

The framework of the research



Empirical material & methods

- Practical focus on **energy-related** regulation and experiments
- Material from **Finland, California and the UK**
- In practice:
 - Experiments: mapping and studying **cases, expert interviews** in Finland and the UK
 - Reflexive regulation: **comparing regulation** in Finland and California
 - Interaction: expert interviews and analysis of **regulatory processes** in Finland

Hypotheses & questions (1/2)


- **Strategic experimentation** can contribute to learning, to the birth of new networks, practices and symbolic embodiments of alternatives **boosting the policy process**.
 - What determines the success?
 - What kind of paths there can be to a “successful” outcome?
- A significant part of existing regulation is not – and cannot be – reflexive.
 - How can different forms of reflexivity in **suitable parts** of the regulatory regime increase the capacity of regulation to **enhance transitions** in long-term?
 - What broader regulatory features affect the function of the instrument?



Hypotheses & questions (2/2)

- The design and implementation of **regulations affect** the realization and effects of climate-relevant **experiments**.
 - Can strategic experiments change the regulatory regime?
- The study can contribute to the analytical capacities of the **transitions theory**.
 - To which extent it is possible to bridge the various theoretical domains?



A photograph of a balcony or outdoor area. In the foreground, there is a bright blue plastic chair. Behind it, a white planter box is filled with green foliage and several white flowers. To the right, a brown terracotta pot contains a plant with green leaves and white flowers. In the bottom right corner, a silver metal watering can is visible. The background shows a grey wall and some greenery.

Thanks!
Questions? Ideas?
annukka.berg@ymparisto.fi