

Polycentric Governance Approaches for a Low- Carbon Transition

Thomas Bauwens

Workshop - Energy Sustainability in the Current
Transition to Renewables

Ispra, 21 March 2018

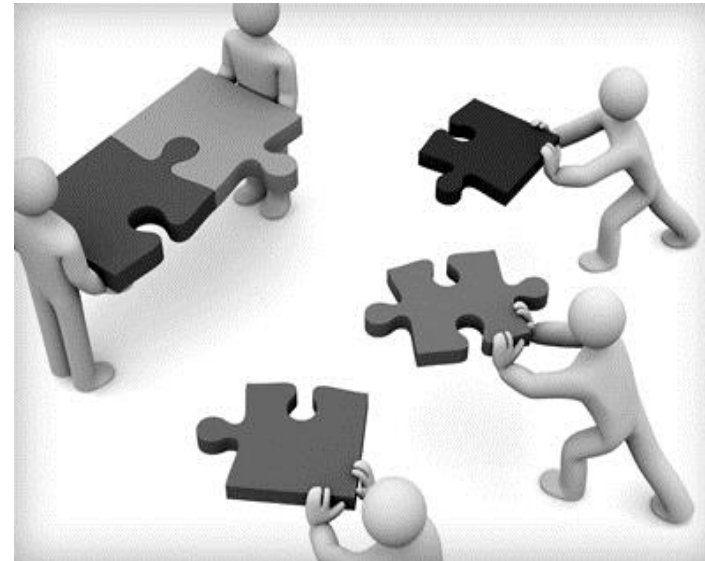
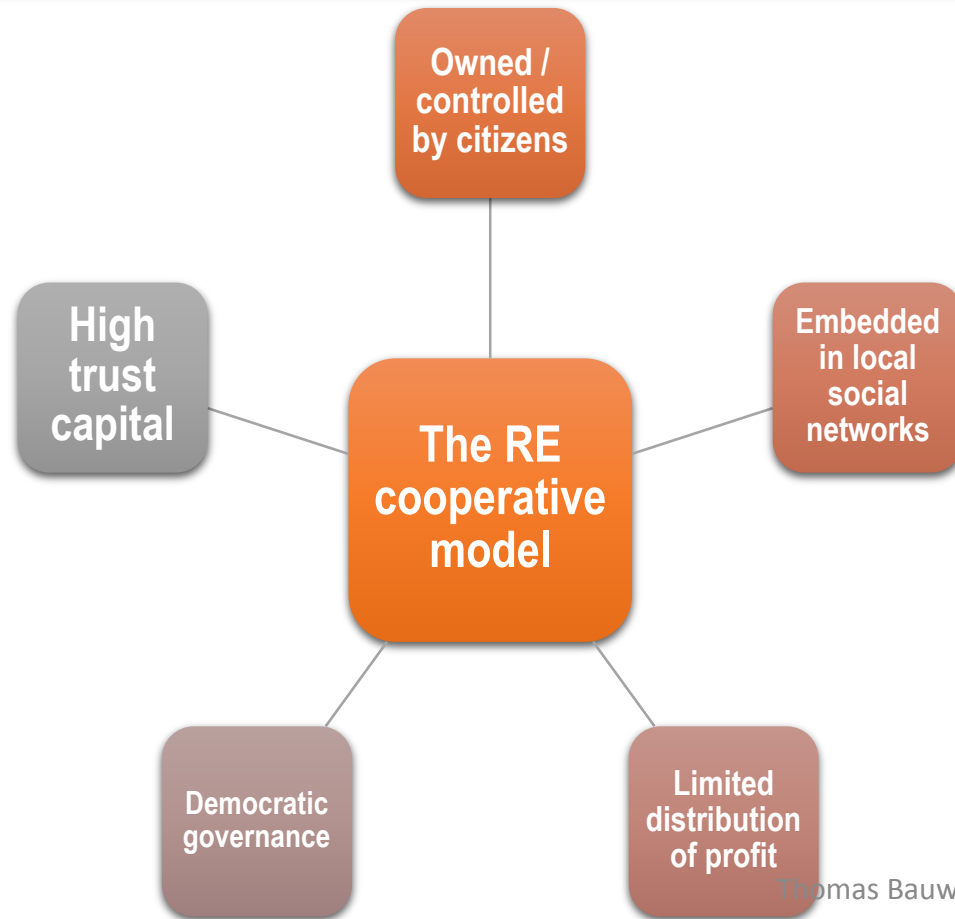
Socio-institutional constraints to a low-carbon transition

- Collective-action problems
- Lack of public trust in established energy actors
- Existence of strong vested interests in favor of the status quo



What is a renewable energy cooperative?

Community-based energy organizations: formal or informal citizen-led initiatives which propose collaborative solutions, typically on a local basis, to facilitate the development of sustainable energy technologies and practices



The roles of renewable energy cooperatives in a low-carbon transition



Vehicles for citizen investments

- Financial incentives
- Social incentives



Attitudes toward technologies

- Trust
- Fairness



Energy-related behavior changes

- Social norms
- Awareness raising

Polycentric governance

(V. Ostrom, Tieboud and Warren 1961)

5

- Multiplicity of autonomous decision units making that are formally independent of each other, but operate under an overarching set of shared rules
- Overlapping areas of responsibility
- Interact with one another (competition, cooperation, negotiation, contracts...)
- Regularized pattern of social order
- Example of scientific community
- Based on the idea of self-organization



Advantages of polycentric governance systems over centralized systems

Enhancement of institutional adaptation

- Potential to foster **innovations**: laboratory for institutional **experimentation**
- Local governments tend to copy successful policies from neighboring jurisdictions (Buettner 2001, Schaltegger & Kuttel 2002, Besley & Case 1995, Freeman 1985)

Informational benefits

- Better use of information by encouraging the use of **local knowledge** to devise rules

Enhanced trust between actors

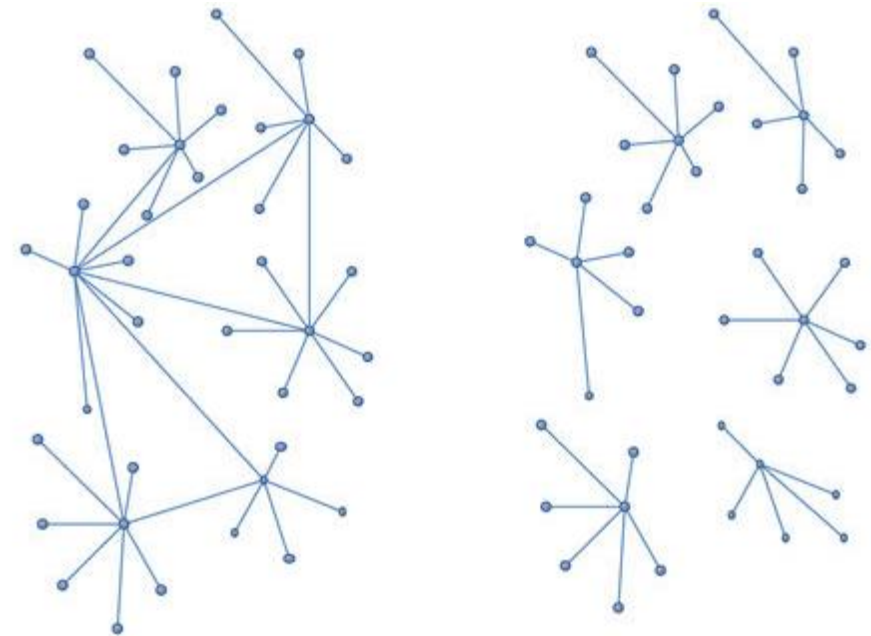
- Interactions between **local actors** contribute to create a climate of **trust**
- Trust: a crucial element in energy systems

Lower enforcement costs

- Stronger local perceptions of the legitimacy of rules

Polycentric governance vs. fully decentralized governance

- If lack of coordination between self-organized initiatives, the governance regime will not operate as a system
- Important role of *top-down* institutions
 - Coordination of decentralized units
 - Conflict resolutions
 - Exchange of information
 - Respect of common rules



Relations between governments and communities

States and local communities are not substitutes, but rather complements.

Hundreds of cases suggest that vibrant communities require a legal and governmental environment favorable to their functioning.

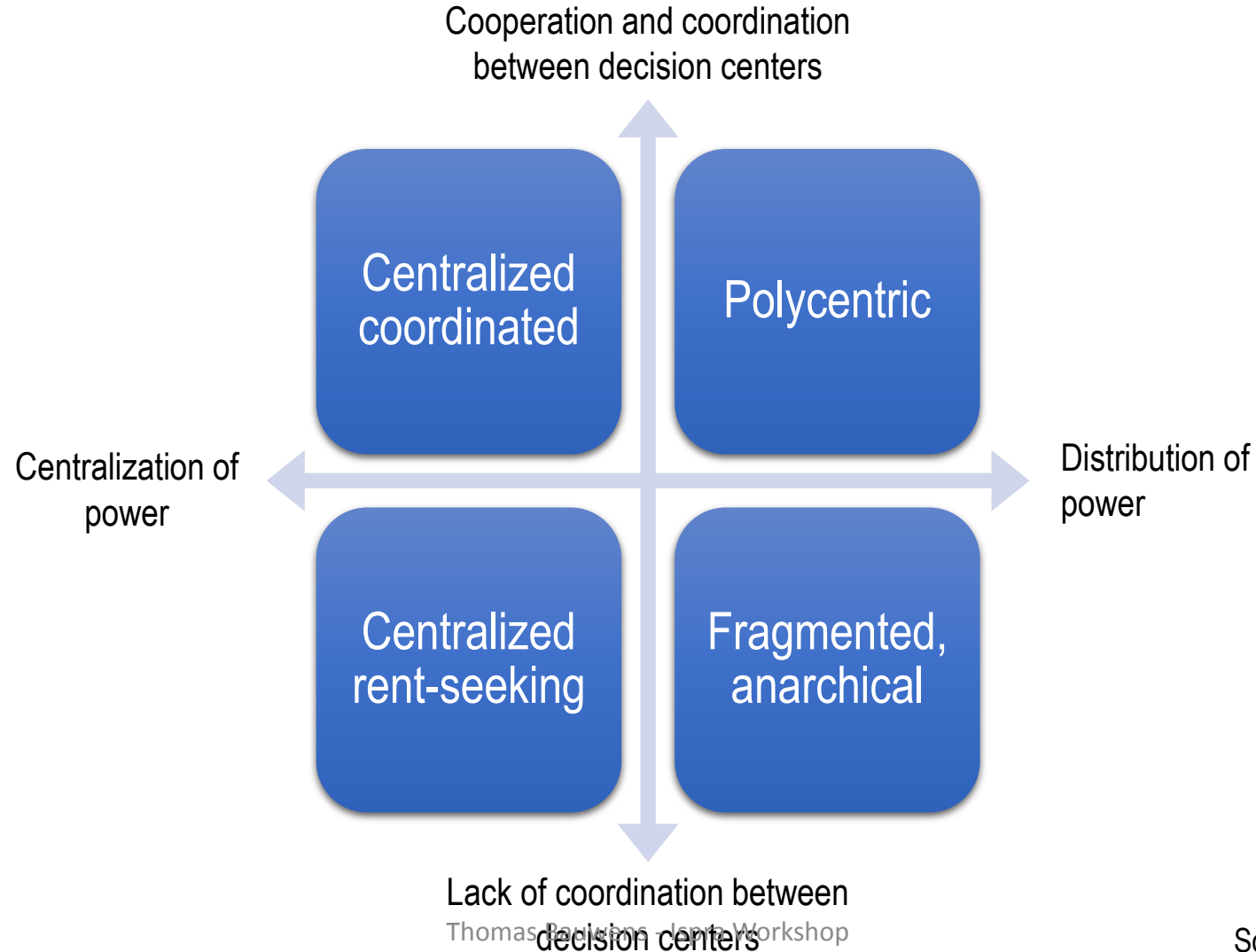
Harmonious and mutually favorable relations between communities and governments

➔ « institutional complementarities »

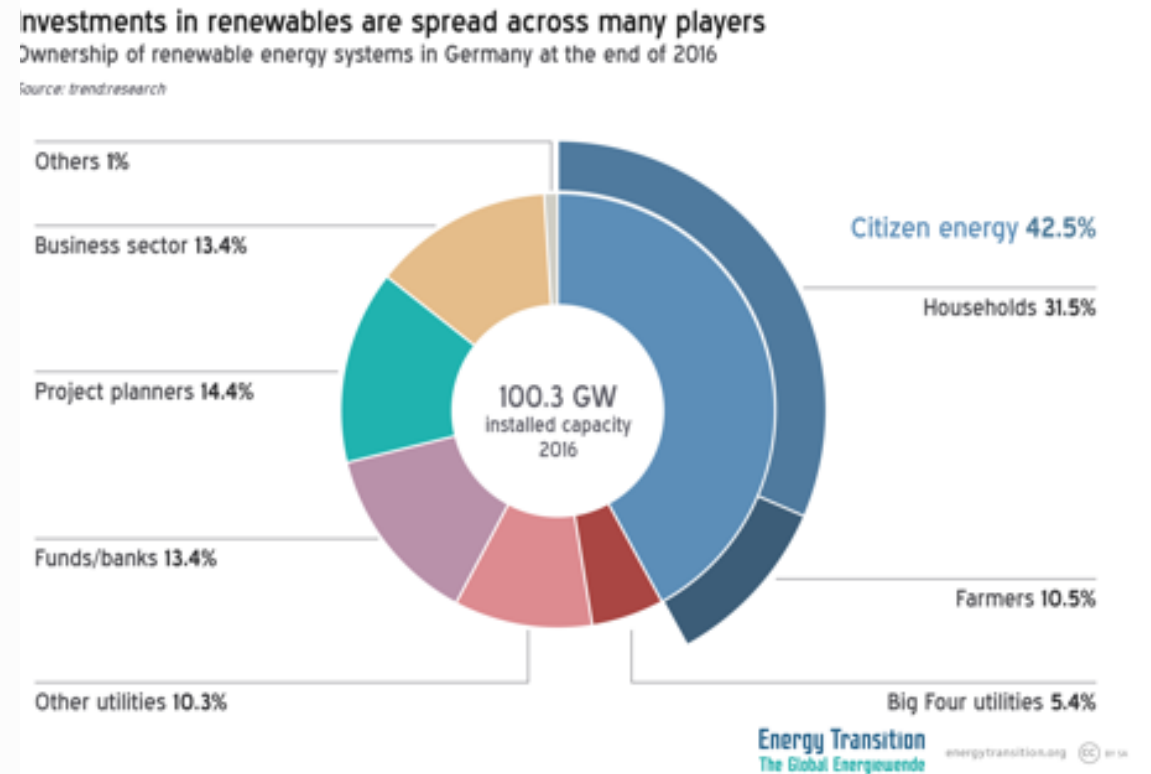
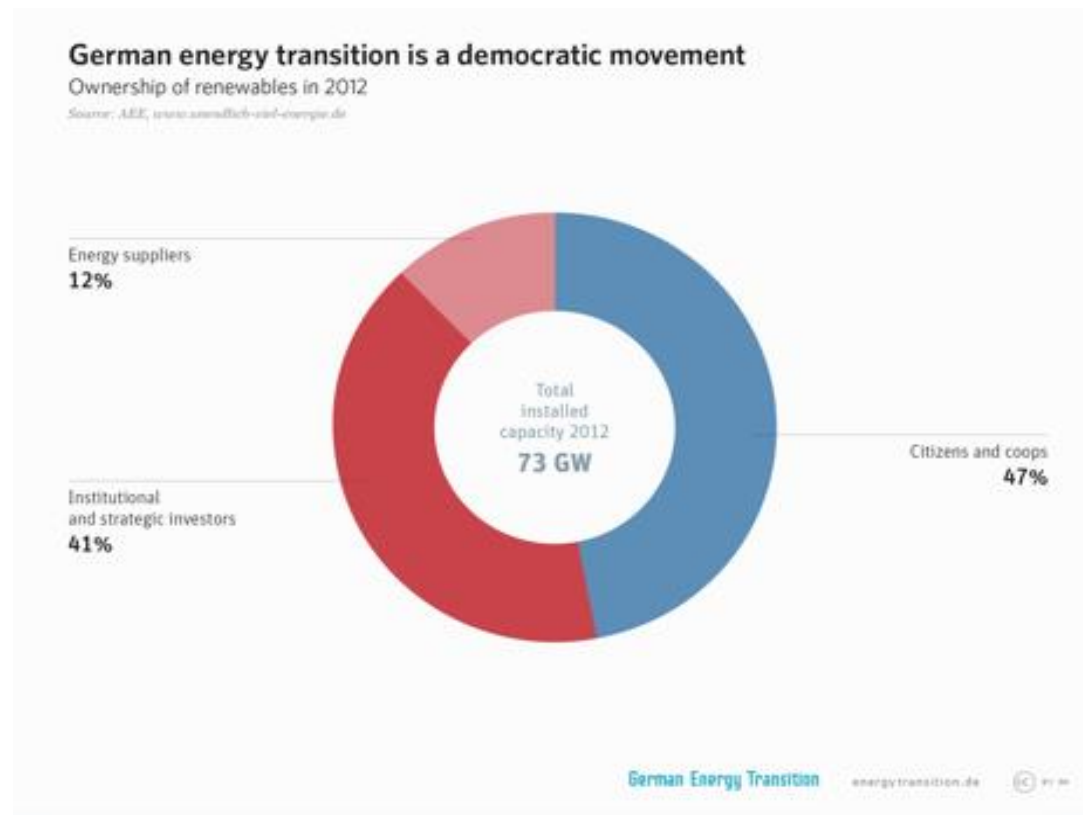
Destruction by the government of the self-organizing capacities of local communities

➔ « institutional crowding-out »

The concept of polycentric governance system



Evolution of citizen energy participation in Germany, 2012 & 2016



Thanks for your attention! Questions?



thomas.bauwens@epfl.ch



@ThomasBauwens1

Selected publications

- Bauwens, T. & Eyre, N. (2017). "Exploring the Links between Community-based Governance and Sustainable Energy Practices: Quantitative Evidence from Flanders", *Ecological Economics*, 137, pp. 163-172.
- Bauwens, T. (2016). "Explaining the Diversity of Motivations Behind Community Renewable Energy", *Energy Policy*, 93, 278-290.
- Bauwens, T., Gotchev, B. & Holstenkamp, L. (2016). "What Drives the Development of Community Energy in Europe? The Case of Wind Power Cooperatives", *Energy Research & Social Science*, 13, 136-47.