“Successful” low-carbon energy transformation at the community level?

An energy justice perspective

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Photo credit: Erik Refner, NYT
Motivation

• Critically analyse two outstanding cases of local renewable energy transitions
• Apply an energy justice framework to highlight conflicts
• Learn about the role of notions of justice in future transitions and community energy projects
Energy Justice

Three dimension of energy justice:

• Distributional Justice
• Procedural Justice
• Justice by Recognition

=> Can be used to map and analyse conflicts and highlight violations of justice
Approach

- Process tracing
- Two (extreme) cases: Samsø (Denmark) and Feldheim (Germany)
- Community energy projects
- Field work and desk studies
Cases

Feldheim

- Village of around 200 inhabitants
- 55 wind turbines
- Solar park
- Biogas plant
- Locally owned electricity and heat grid
- Backup wood pellet system
- Biggest battery in Europe
- “New Energies Forum Feldheim”
- First energy autarkic settlement in Germany
Cases

Samsø

- Island of around 4300 inhabitants
- 11 onshore wind turbines
- 10 offshore wind turbines
- 4 district heating grids
- “Energy Academy Samø”
- World’s first 100% renewable energy powered island
Crisis

Economic crises formed the starting points for both energy transitions:

• Samsø’s slaughterhouse closed down in 1999
• Feldheim suffered from the economic disruptions of the German reunification in 1990
Procedural Justice: consultation

Feldheim:
• Project developer valued trust
• Open and direct flow of information
• Step-wise consultation process

Samsø:
• Community participation
• Working groups and district heating boards
• Generous timeframe
• Local champion SH
Procedural Justice: information flow

Feldheim:
• Village meetings
• Local translators

Samsø:
• Four channels: letters, local newspaper, community meetings and written petitions
Procedural Justice: decision making

Feldheim:
• Hands-off approach by the municipality
• Decisions taken by villagers
• Negotiations: project developer, village council, inhabitants
• “Organic” development of the case

Samsø:
• Top-down announcement of master plan
• Then community driven decision making
• Respect of higher admin. levels for processes
Distributive Justice: outcomes

Feldheim:
• Local jobs
• Heat and el. grids owned locally
• Biogas plant owned locally
• Financial benefits for people and municipality
• Investment into community owned goods

Samsø:
• Local jobs
• 90% of wind turbines are owned locally
• 3700 inhabitants have invested and benefit
• Important role of local cooperatives
Distributive Justice: distribution

Feldheim:
• Subject to intense negotiations
• Community found solutions which were considered “fair”
• Compensation first for affected households
• Investment into collective good

Samsø:
• Uneven distribution of benefits
• Benefits for the entire island (economic activity, tax, status)
Conclusion

• Crisis as “fertile ground”
• Consultation and information flow very important - building trust
• Role of local champions and institutions – “making, not breaking the rules”
• Strong social cohesion as beneficial factor
• Important role of support from higher levels
• Procedural fairness increases legitimacy of outcomes (and vice-versa)
• Successful local energy transitions take time


Related popular science output:

http://sciencenordic.com/power-people-how-make-low-carbon-energy-transition-work
Thank you slide

Thank you for your attention!
Any questions?

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