Trusting the Energy System

Past, Present, Future

Patrick Sumpf, ITAS/KIT
Structure

1. Introduction: Trust Research
2. Architecture of Trust
3. Empirical Study: Approach
4. Exemplary Findings
5. Conclusions for the „Energiewende“
Trust Research

• **Trust in Persons, Organizations, Systems?**

  “In today’s complex society, we often trust systems more than people. It’s not so much that I trusted the plumber at my door as that I trusted the systems that produced him and protect me. I trusted the recommendation from my insurance company, the legal system that would protect me if he did rob my house, [...] and - most of all – the general societal systems that inform how we all treat each other in society. Similarly, I trusted the banking system, the corporate system, the system of police, the system of traffic laws, and the system of social norms that govern most behaviors. [...] I’m not really concerned about how specific people come to trust other specific people” (Schneier 2012, 6).

• **How do trustors “construct a fiction of reality that allows them to trust?”** (Möllering, 2006)? How is the energy system translated into their daily lives? What are the references people use when expectations toward energy provision are addressed?
## Architecture of Trust

<table>
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<tr>
<th>Possible Trustees</th>
<th>Possible Trustors</th>
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<td>Comments</td>
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<td>Roles and Programs;</td>
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<tr>
<th>Individual</th>
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<td>Programs</td>
<td>Values</td>
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<td>Organizations</td>
<td>Technology</td>
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<td>Systems</td>
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- Citizens
- Consumers
- Investors
- Stakeholders
- The German population
- Those Affected
- Public, Groups
- Producers
- Distributors
- Regulators, Policy makers
- Intra-firm States
- Finance Minister
- Chancellor
- Friend
- Neighbor
- Co-Worker
- Family Member
- Authority
- Supervision
- Sanctioning
- Scientists
- Experts
- Engineers
- Demand-Side Management
- Spatial Planning
- Smart Metering
- Emissions impact (Global and local)
- Costs (Affecting consumers/economy)
- Employment
- Security of Supply
- Profitability
- Efficiency
- Privacy
- Sustainability
- Transparency
- Bundesnetzagentur (BNetzA)
- Bundesamt für Sicherheit in der Informationstechnik (BSI)
- Local Provider
- Power company
- Government
- Climate alliance
- ICT Gateway
- The Grid
- Smartphone
- Nuclear Plant
- Electric Vehicle
- Smart Meter
- Complete (Energy) System
- Politics
- Economy
- The Public
- Mass Media
- Legal Procedures

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*Legend: addressable (important for sanctioning)*
Empirical Study: Approach

- Sample: N=30; Average Age: 39

**Gender**
- Women
- Men

**Residence**
- Rural
- Urban

**Education**
- Basic
- Intermediate
- Advanced

**Living Space**
- Lease
- Owner
Trust & Risk I

• **H1: The different facets of trust** can be linked to dominant risk perceptions that are either absorbed (trust), absent (confidence) or rejected (distrust).
"Which of the below mentioned events worries you the most?"
Trust Intermediation I

• **H2: Persons (e.g. friends, co-workers) and regional organizations (e.g. utilities) play a major role in reassuring trust/distrust in the energy system.**
Trust Intermediation II

Reliance on persons in social environment (friends, family, co-workers, neighbors)

Reliance on regional supply & organizations
Roles & Organizations I

• **H3:** To assure system functioning, organizations are less specifically addressed than roles concerned with supervision and system control.
Roles & Organizations II

- Others
- Politics/Markets
- Bundesnetzagentur
- "Federal agency for security of supply"
- Power companies
- Supervision authorities
- Engineers
- Experts/Scientists

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Conclusions for the „Energiewende“

• It is not necessary to gain trust among consumers – it is already high, maybe too high
• Expectations of future continuity among interviewees very strong
• „opinion leaders“ are likely to grow in importance
• Local utilities major access point to the energy system
Trusting the Energy System

Thanks for your attention!

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