Engaging with energy transitions: setting the scene

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Outline

- Basic context
- The transition approach:
  - as a research agenda
  - as a way to frame the agenda in energy policy
- Germany/Canada comparisons
- Challenges for the day

Basic context

- Critical character of energy
- Essential fossil fuel dependence
- Massive needs in developing world
- Climate change: IEA -- to meet a 2 degree C target 2/3 of existing fossil reserves need to stay in ground by 2050.
- Some movement towards low carbon emission society but many difficulties

As a research agenda

- Understanding socio-technical transitions
- Stability and change, dominant designs, lock-in, innovation.
- Old technologies fight back, hybridization, niches
- Multi-level perspective
- Politics and policy critical

A transition approach

As a way to frame the agenda in energy policy

- Dynamic perspective
- Different scales of space and time
- Visioning, experiments, protected niches
- What is an ‘energy strategy’ for?
- Thinking in transition terms does not solve the problems but helps frame them. For example: a transition towards what: ‘clean’ energy, low carbon emission energy, non-fossil energy, renewable energy, decentralized energy system, etc.
- Sustainable energy

Germany/Canada comparisons

- Many similarities: liberal democracies, developed states, G8, trading nations, federal systems
- Important differences: fossil fuel exporter versus consumer, economic structure, continental relationships, constitutional peculiarities
- Germany: climate change and renewable energy leader. (But Canada was once an international climate policy pusher too)
- GHG emissions per capita; carbon intensity of electricity supply

Challenges for the day

- Compare Germany and Canada
- Can we learn from each other's experiences?
- Think about technologies, about politics and policy, but also about the kinds of energy futures we want.