

# Exploring the Politics of Low Carbon Transitions

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New Thinking For Energy



# Background

- Living through series of crises and challenges to existing (pro-market) institutions: focus on climate change
- Transition to a low carbon energy system understood as a large part of the solution but limited progress
- Two primary assumptions:
  - Energy systems are both social and technical in nature
  - Energy policy important to the redesign of energy systems
- This paper seeks a better understanding of low carbon energy transition and the role of policy within it
- Understands transition policies as contingent upon other political institutions and structures

# Beyond Single Theoretical Paradigms

## Socio-technical Transitions (STT)

Technical systems (i.e. fossil fuel) as fulfilling important social needs

Technologies and infrastructures: social constructs within certain contexts

Inter-related areas: infrastructures, technology, the environment, user practices, corporates, institutions, **politics**

Transitions as large-scale transformation in which structure fundamentally changes

## New Institutionalism (sociological)

Provides explanations of how political institutions operate and change

Political institutions informed, among other things, by frameworks of ideas including about the policy area

Policy as constructed of various levels: objectives and instruments

Profound change can be incremental and/or punctuated by major structural shifts – explains how and why of change

# STT on Low Carbon Transition

- Systems have three levels: landscape, regime and niche
- **Regimes** as mainstream ways of realising social functions: rule sets blind actors to new developments
- Innovations take place at **niche** level - breakthrough to regime when changes in the landscape level destabilise regimes (i.e. new knowledge about climate change)
- Low carbon energy transition as **unprecedented**:
  - Major energy transitions took 150 years (time limited now)
  - Low carbon energy benefits less tangible than previous new services (different drivers)
  - **Niche** innovations need support (innovation chains)
- Policy as vital to transition: supporter, enabler, manager, director – institutions as sites for learning

# Where is the Politics of Energy?

- Presents visions of a low carbon energy future as accepted and as relatively uncontested whereas post decades of climate change moving up political agendas fossil fuels remain the dominant technical system
- Little consideration of how existing political (and other) institutions will give way and/or change
- Needs more articulation of why policy should change – i.e. ways in which existing energy regimes are failing
- Low carbon energy policies often proscribed without considering how they relate to wider political contexts

# Transition within Broader Paradigms

- Energy transition policies are informed by a range of other institutions and ideas – often subject to general rules of economic management
- i.e. Pro-market paradigm and the ‘compromise of liberal environmentalism’ (post 1980s):
  - Energy transition as an objective but often reliant upon market solutions/**instruments** to deliver
  - The private sector is now largely responsible for the delivery of energy services and investing in new energy
  - In some countries energy companies are also responsible for delivering climate policies
  - Rules and norms have so far tended to favour established companies and non-disruptive technologies (fossil fuels)

# Transition Policy within Energy Policy

- Energy policy has historically emphasised energy's public good characteristics:
  - As engine of growth; merit good; input to GDP
- Energy policy has as such been set towards achieving other **objectives**: security and social development
- Energy has been singled out for specific treatment:
  - Russian energy re-nationalisation not extended to other sectors; subsidisation of energy in developing countries; EU political support for pipeline infrastructure
- Even within market liberal economies certain goods and services have received support from state bodies (Crouch) and state actors have worked to create markets (Mazzucato) – in the national or collective interest

# Competing Narratives of Change

- Alternative ideas can underpin change by highlighting crisis, proving policy failure, and providing solutions
- New knowledge about climate change has indeed challenged existing market institutions but there are other drivers for change:
  - Growing fears about energy security (2000s) – in some countries this trumps climate objectives
  - Social equity: alleviation of energy poverty
- Climate objectives are constantly being balanced with other forces influencing energy policy change in ways that compromise and constrain transition
- i.e. security narrative prefers stability whilst climate framing supports the development of new technologies



# Conclusions

- Policy is vital to transition, not least to support new innovations, but the reality of the politics of transition is murky, complex and divided
- Understand complexity by exploring ways in which energy policy for transition is contingent upon other political institutions
- Change is happening but it draws on different policy paradigms with under-explored internal tensions
- Importance of maintaining the link between politics and technologies and infrastructures – change in one area is not enough