Understanding the Politics of UK Sustainable Energy Transition: Governance and Outcomes

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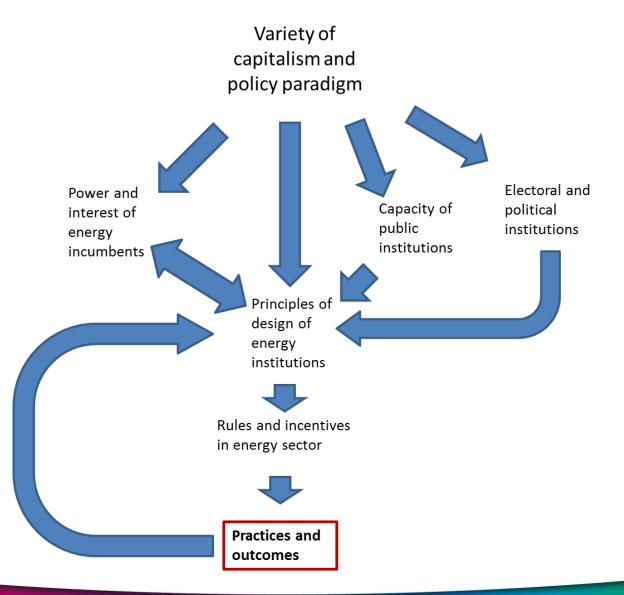




Background

- Initial IGov observations:
 - High rate of governance changes (legal targets) but less sustainable energy system or market change
 - Big 6 dominate market; high barriers to entry;
 renewable energy (4%) and efficiency slow to develop
 - Fossil fuels dominate (increased coal) and subsidies continue...
- Innovation and Governance: a series of complex interactions mediate between governance changes and sustainable energy outcomes

Explanation of Governance Change and Sustainability Outcomes



What governance changes are happening?

- Scale: quantity of governance changes is high
- Pace: high pace of governance change but 2°C target/latest IPCC = greater pace of emissions reductions
- Type: Scholars investigating large-scale transitions tend to assume one principal driver for change – but multiple drivers for change and solutions

- 2000: Utilities Act (NETA)
- 2000: Climate Change Levy (CCL)
- 2002: PIU Energy Review
- 2003: White Paper
- 2006: Energy Market Review
- 2006: Climate Change and Sustainable Energy Act
- 2007: Sign up to EU 20-20-20
- 2007: Energy White Paper
- 2008: Climate Change Act
- 2008: Energy Act
- 2009: Energy Act
- 2010: Energy Bill
- 2011: Energy Act
- 2012/3: Electricity Market Review
- 2013: Energy Act
- 2013/4: Retail Market Review

CHANGING UK ENERGY

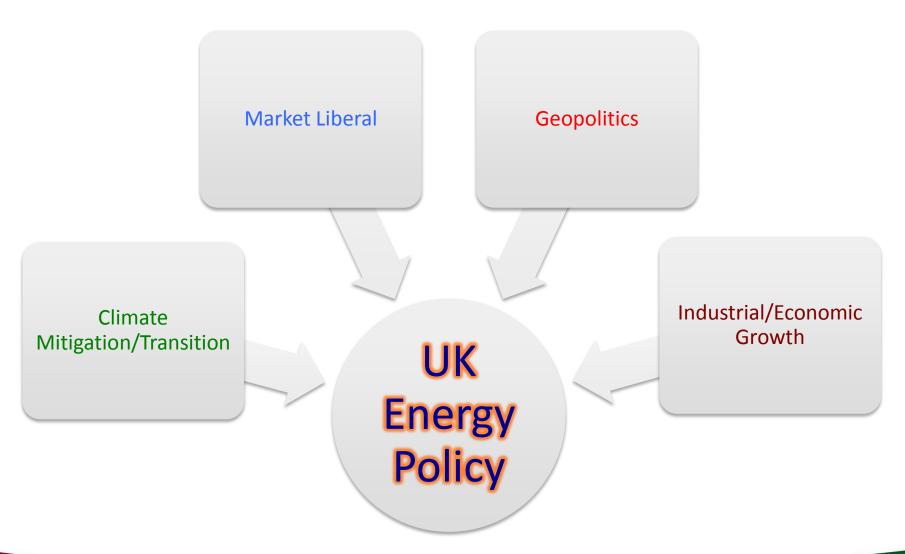
GOVERNANCE -

QUANTITY and PACE

Type of Change: Objectives and Institutions

- Objectives 1980s/1990s:
 - To privatise, liberalise and increase competition
 - Prevent energy companies from being a drain on public finances (wider neoliberal economic paradigm)
- Objectives 2003 +
 - Climate change mitigation (system transition) 2008
 Climate Change Act
 - Security of supply
 - Eradicate energy poverty (by 2016)
- New institutions: DECC and new mandates for Ofgem
- Higher degree of government intervention

Drivers of *Type* of Change: Differing Energy Assumptions



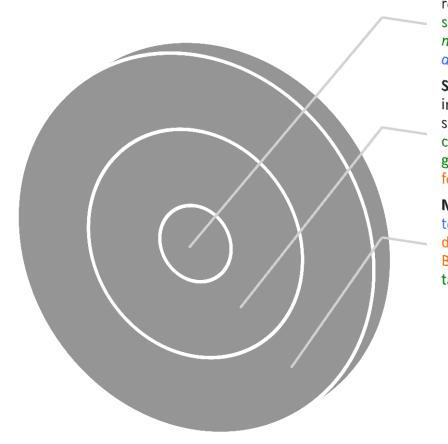
Complex Interactions I: Capacity for Devising (Effective) Transition Policy

- Legacy of 1990s passing of responsibility to markets and decisions re: supplier obligations
 - Private sector vital to operation of energy systems,
 markets as well as *implementing* policy (power)
- Institutions designed to maintain market framework
 - Not to intervene in and/or design new markets
 - Climate change mitigation and security not initial mandates
- Institutional (DECC) knowledge capacity:
 - Focus on generalist economic (neoliberal) and statistical expertise – not energy specific
 - Civil service staff moves lack of institutional memory
 - Knowledge of energy systems/markets in private sector payment, capture and power relations

Complex Interactions II: Tensions between policy objectives

- Various assumptions about positive interactions between energy policy objectives and instruments:
 - Demand reduction seen as panacea for meeting both poverty and climate objectives
- Energy poverty growing as are prices (66% elec/137% gas since 2001)
- Adverse political reaction to electricity/gas price rises = pull back on ECO commitment (extension)
- In practice sensitivity to affordability trumps climate policy...

Complex Interactions III: Tensions between Objectives and Approach



Climate: energy policy to reduce emissions: support renewables and nuclear, reduce demand, active role for state

Security: energy independence and security of SUPPLY: capacity market supports gas and coal; supply focused policy: shale

Markets: intervention as temporary; markets to deliver change – supports Big 6; no renewables target

Complex Interactions IV: Regulations and other Government Institutions

- Layer of energy rules and regulations that diminish effects of new sustainability policies:
 - Industry codes and standards and market arrangements (BETTA) reward scale and produce barriers to entry to new competitors
 - Vertical integration: impacts prices and competition
- UK energy policy must also inter-act with other UK Departments and policy objectives/ideas:
 - Treasury, fiscal austerity (Levy Control Framework and reducing DECC budgets)
 - DECC 2nd largest mandate/2nd smallest department

Some Solutions/Research Ideas

- More effective governance change requires
 - That energy companies share market data (trading, demand, customers)
 - A need to better recognise tensions and establish hierarchies between energy policy objectives (response to latest IPCC)
 - Re-assessment of BETTA and of vertical integration
 - A commitment to DECC and to ongoing and long-term energy policymaking