Institutional context and policy feedback effects in the politics of low-carbon transitions

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Policy feedback effects in path creation

• ‘Policies not only flow from prior institutions and politics; they also reshape institutions and politics, making some future developments more likely and hindering the possibilities for others’ (Skocpol 1979)

• Sustained consensus, i.e. political lock-in, requires increasing political returns (Pierson 2000)

• Major source of increasing returns in politics is positive policy feedback (e.g. Pierson 1993)
  – Creation and strengthening of interest groups, including via institutional change
  – Discursive effects that strengthen political identity
  – Mass feedback effects, including creation of new vested interests

• Increasing returns implies possibility of path dependence and divergence

• Importance of negative feedback effects (Béland 2010, Patashnik and Zelizer 2009)
Positive and negative feedback in renewables growth

Positive effects

• (Distributed) Ownership (‘Your own pig doesn’t smell’)  
• Employment in supply chain, export industry, innovation spillovers  
• Ideological identity?

Negative effects

• (Concentrated) Ownership  
• Financial costs of support  
• Landscape impacts  
• Ideological identity?
What determines feedback effects for renewable energy policy?

• **Policy design...**
  – FiTs (Germany, 1990-2014; Denmark 1984-2001) vs RO (UK 2001-2010)
  – Local content requirements (Spain vs UK)
  – Funded on bills (UK) vs funded via tax (Spain)

• **...and hence ideas**
  – ‘technology neutrality’/neoliberalism in UK

• **Institutional context**
  – Differential effects of FiTs in Denmark and Germany vs France
  – Organisation of distributed owners - *Danmarks Vindmølleforening* vs non-organised solar PV owners in UK
  – Strong welfare state and low inequality in Denmark vs ‘squeezed middle’ in UK
Role of ideas and institutional context

- Ideas (policy paradigms etc.)
- Policy design
- Economic and landscape effects
- Political effects

Institutional context
Renewable energy is different...(1)

• Many policy feedback examples involve the one-off creation of new large-scale institutions or reforms (pensions, health care, tax reform, airline deregulation) and the issue is whether they achieve lock-in
• Renewables support is typically small at first, then positive and negative feedback effects grow over time.
• Then there are two distinct but usually elided issues
  a) Maintaining existing support (i.e. resistance to retrospective policy changes)
  b) Maintaining further expansion (i.e. resistance to prospective changes)
• Do distributed ownership coalitions care about b).?
Renewable energy is different...(2)

Support policy

Cost reductions/technological developments

Political effects

Economic/landscape effects

Schmidt and Sewerin (2017)
Solar PV costs and subsidy booms

Source: Lütkenhorst and Pegels, A. (2012) *Germany’s green industrial policy* DIE
Denmark – path evolution

- Repowering with much larger turbines (average 50kW in 1990 => 1MW in 2012)
- Rising opposition to further onshore expansion, move offshore?
- But also a counter-movement to restore local ownership and smaller scale?
A research programme

• Many studies draw on this framework (e.g. Lauber and Jacobsson 2006; Meyers 2007; Laird and Stefes 2009; Toke 2010; Stokes 2013), but largely implicitly and consideration of effects is partial and selective
• Making the theory explicit (Lockwood 2015)
• Incorporation of cost/technology feedback loops
• Systematic comparative research on how institutional context conditions feedback effects
• Beyond renewable support programmes:
  – Legacy costs?
  – Feedback effects from integration of renewables
  – Feedback effects from EVs?
References

• Pierson, P. (1993) ‘When effect becomes cause: policy feedback and political change’ World Politics, 45, 4, pp. 595-628
Additional slides
Historical institutionalism as an approach to LCTs

• Strengths
  – Central to modern analysis of politics
  – Focus on state-society relationships useful for mass deployment phase of transitions
  – Comparative methodology
  – Some testable hypotheses (e.g. Mahoney and Thelen on gradual institutional change)

• Weaknesses
  – Insufficient attention to independent role of ideas
  – Doesn’t engage with materiality of technologies
Research agenda (Lockwood et al 2017)

• ‘Initial conditions’
  – Electoral systems: PR vs majoritarianism
  – Constitutional arrangements (federalism vs centralised state)
  – Role of energy regulators
  – Routes to long-term policy stability
  – Nature of incumbent interests and power
  – ‘Varieties of capitalism’?

• Institutional change
  – Positive feedback effects and lock-in
  – Unintended consequences
  – Feedback effects in path creation
  – Layering vs drift vs conversion vs displacement
A political puzzle....

<table>
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<tr>
<th></th>
<th>Cost of renewables support as % of GDP in 2010*</th>
<th>EU 2020 package target for renewable energy</th>
<th>National targets</th>
<th>Position on national renewables targets in EU 2030 package</th>
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<td>30%</td>
<td>Yes (2020, 2050)</td>
<td>30% binding target</td>
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* Source: OECD 2013