Political power and the development of the GB renewable heat incentive

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Introduction



- Setting the scene, why is heat important?
- Theoretical context
- Methods
- Results and conclusions
- What's next?





Why is heat so important?

- Globally, around half of all energy demand (IEA, 2014)
- A similar level in the UK (DECC, 2013)
- UK heavily reliant on gas
 - 2nd highest penetration of gas heating in the world
 - 85% of homes use gas







A transformation of the heating sector is required

- 80% carbon target implies full decarbonisation of heating sector (CCC, 2015, DECC, 2013)
- UK currently a net gas importer at 50% levels, likely to increase (DECC, 2015)



Socio-political power is an important aspect of system transformations

- 'Power' is recognised as being missing from much of the debate around transformations (e.g. Shove & Walker, 2010, Markard et al., 2016)
- Lukes (2005) explains that 'there is no agreement about how to define it, how to conceive it, how to study it and, if it can be measured, how to measure it [power]' (p61).
- By power, I simply refer to the ability of actors to affect policy and regulation in the heat sector.
- Employed an approach called 'Four dimension of power' (Haugaard and Ryan, 2012)





Research focus - The UK Renewable Heat Incentive

- A scheme to begin the transformation to sustainable heat
 - 12% renewable heat target for 2020
 - Non-domestic opened Nov 2011
 - 20 year tariffs
 - Technology and size specific
- Domestic April 2014
 - Technology specific
 - 'Deemed' heat use



Method

- Used the 'EAR' instrument (Arts, 1999)
- Fundamentally interviews with lobbyists, policy makers and document analysis
- Triangulation



Ego Perspective

Interviews with those trying to affect policy to see how they believe they have changed policy

Alter Perspective

Interviews with those who have a knowledge of being lobbied to understand where they believe lobbying has taken place

Data from all sources triangulated to look for similarities and differences





Key policy changes in the RHI

- Policy change 1: The power of the Renewable Energy Association to speed up the introduction of the RHI
- Policy change 2: Funding the RHI through general taxation
- Policy change 3: The maintenance of the RHI in the coalition Government
- Policy change 4: The mandarin and the near death of the RHI (2010-2011)
- Policy change 5: The over rewarding of biomass
- Policy change 6: Further support for biomass
- Policy change 7: Extra support for biomethane







Biomass is dominating the nondomestic scheme

Small biomass boiler (<200 k)	V) 9000
Medium biomass boiler (200- kW)	1000
Large biomass boiler (>1000 k	×₩000
■ Solar thermal (<200 kW)	6000
■ Small water or ground source pumps (< 100 kW)	5090
Large water or ground source heat pumps (>100 kW)	4000
Air Source Heat Pumps	3000
■ CHP	2000
Deep Geothermal	1000
Biogas	$0 \\ NO^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Ia^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Na^{V^{2}} Na^{V^{2}} Ia^{V^{2}} AO^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Na^{V^{2}} Na^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Ia^{V^{2}} Na^{V^{2}} Ia^{V^{2}} Ia^{V$
■ Biomethane	DECC, 2016

Methodological Issues

- Interviewees on both sides will have interests, nothing can be taken at face value
- Policy success doesn't indicate influence, luck and circumstance are important factors
- Second phase of research would strengthen methodology
 - Triangulation followed by:
 - Secondary interviews
 - Further more detailed document analysis





Conclusions

- UK heat policy is power laden
 - There have been numerous attempts to influence policy with impacts on the transformation
- Power is not just associated with lobbyists but also civil servants, politicians
- The role of knowledge/evidence is particularly important when considering power
- Socio-political power must be considered by policy makers



What's next?

- Write up thesis including other aspects
- Complete UKERC project 'Heat, Incumbency and Transformations'
 - 24 months
 - Focus on the heat sector and incumbent companies
- Build academic capacity around UK/global heat governance





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